World-class research, pioneering partnerships, renowned faculty, and graduate students who enjoy a rich blend of academics, research, culture, and fun. This is graduate study at the University of Central Florida in one of the most dynamic metropolitan areas in the United States - Orlando, Florida.

**What’s New**

The University of Central Florida is the university that seeks opportunities, creates opportunities, and brings them to fruition. The University’s culture of opportunity is driven by the diverse people it attracts, its Orlando environment, its history of entrepreneurship, and its youth, relevance, and energy.

Here you will find the latest updates about the new master, doctoral, and specialist programs, certificates, fellowships, and more. Check here and often to find out what’s new in the UCF College of Graduate Studies.

**Graduate Degree Programs**

**Two** new graduate programs were approved:

1. [Event Leadership MS](#)
2. [Biomedical Engineering PhD](#)

**Three** new graduate certificate programs were approved:

1. [Leadership in Workforce Development Graduate Certificate](#)
2. [Financial Management for the Hospitality and Tourism Industry Graduate Certificate](#)
3. [Leadership and Strategy in Hospitality and Tourism Graduate Certificate](#)

**Two** new graduate degree tracks were created in the following programs:

1. [Education PhD, Teaching, Learning, and Development Track](#)
2. [Big Data Analytics PhD, Statistics Track](#)

Other changes occurred in the following programs:

- Social Work MSW, Part-Time Advanced Standing Track has changed its name to Social Work MSW, Part-Time Advanced Standing Campus-Based Track.
- Social Work MSW, Full-Time Advanced Standing Track has changed its name to Social Work MSW, Full-Time Advanced Standing Campus-Based Track.
- Social Work MSW, Full-Time Traditional Track has changed its name to Social Work MSW, Full-Time Campus-Based Track.
- Social Work MSW, Part-Time Traditional Track has changed its name to Social Work MSW, Part-Time Campus-Based Track.
- Communication Sciences and Disorders MA, Foundations Track has changed its name to Communication Sciences and Disorders MA, Out of Field Track.
- Career and Technical Education MA has changed its name to Career and Workforce Education MA.
- Advanced Quantitative Methodologies in Educational and Human Sciences Graduate Certificate has changed its name to Advanced...
Important Information

This catalog contains a description of the various policies, graduate programs, degree requirements, course offerings, and related matters intended to be in effect at the University of Central Florida during the 2022-2023 academic year. However, any matter described in this catalog is subject to change. As a result, statements in this Graduate Catalog may not be regarded in the nature of binding obligations on the institution or the State of Florida, or as an irrevocable commitment from the University to the reader.
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Conservation Biology Graduate Certificate
Corporate Communication Graduate Certificate
Data Modeling Graduate Certificate
Digital Media MA
Feature Film Production MFA
Financial Mathematics Graduate Certificate
Forensic Science MS
Human Factors and Cognitive Psychology PhD
Industrial and Organizational Psychology MS
Industrial and Organizational Psychology PhD
Integrative and Conservation Biology PhD
Integrative and Conservation Biology PhD - Integrative and Conservation Biology PhD, Conservation Biology Track
Integrative and Conservation Biology PhD - Integrative and Conservation Biology PhD, Integrative Biology Track
Integrative Anthropological Sciences PhD
Intelligence and National Security Graduate Certificate
Interactive Entertainment MS
Mathematical Science Graduate Certificate
Mathematical Science MS
Mathematical Science MS - Mathematical Science MS, Financial Mathematics Track
Mathematical Science MS - Mathematical Science MS, Industrial Mathematics Track
Mathematics PhD
Mathematics PhD - Mathematics PhD, Financial Mathematics Track
Network Analysis and Applications Graduate Certificate
Physics MS
Physics MS - Physics MS, Planetary Sciences Track
Physics PhD
Physics PhD - Physics PhD, Planetary Sciences Track
Political Science MA
Research Smarts Graduate Certificate
SAS Data Mining Graduate Certificate
Security Studies PhD
Sociology, Applied MA
Sociology, Applied MA - Sociology, Applied MA, Domestic Violence Track
Sociology, Applied MA - Sociology, Applied MA, Medical Sociology Track
Sociology PhD
Statistics and Data Science MS
Statistics and Data Science MS - Statistics and Data Science MS, Data Science Track
Strategic Communication PhD
Survey Research Graduate Certificate
Rosen College of Hospitality Management
Destination Marketing and Management Graduate Certificate
Event Leadership MS
Event Management Graduate Certificate
Financial Management for the Hospitality and Tourism Industry Graduate Certificate
Hospitality and Tourism Management MS
Hospitality and Tourism Management MS - Hospitality and Tourism Management MS, MD Track
Hospitality and Tourism Technologies Graduate Certificate
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Courses
ACG - Accounting General
ADE - Adult Education
ADV - Advertising
AFA - African American Studies
AFH - African History

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2022-2023 Graduate Catalog
PUP - Public Policy
PUR - Public Relations
QMB - Quantitative Methods in Business
RED - Reading Education
REE - Real Estate
REL - Religion
SCE - Science Education
SDS - Student Development Services
SOP - Social Psychology
SOW - Social Work
SPA - Speech Pathology and Audiology
SPB - Sports Business
SPC - Speech Communication
SPM - Sports Management
SPN - Spanish Language
SPS - School Psychology
SPW - Spanish Literature (Writings)
SSE - Social Studies Education
STA - Statistics
SYA - Sociology Analysis
SYD - Sociology of Demography
SYG - Sociology, General
SYO - Sociology--Social Organizations
SYP - Sociology-Social Processes
TAX - Taxation
THE - Theatre
TPA - Theatre Production and Administration
TPP - Theatre Performance and Performance Training
TSL - Teaching Second Language
TTE - Transportation and Traffic Engineering
URP - Urban and Regional Planning
WST - Women's Studies
ZOO - Zoology

2022-2023 Graduate Catalog
About UCF

Overview
The University of Central Florida has come a long way since its inception in 1963. It is now a thriving, multi-campus university, with more than 71,500 students and more than 200 graduate degree programs. In addition to its physical growth, UCF has become a prominent player in graduate education nationwide, offering innovative corporate partnerships, world-renowned faculty, and cutting-edge research. "About UCF" describes the University and its mission. In addition, this section describes the people and offices that make up UCF—including university, college, and school administration.

Mission Statement
UCF is a public research university invested in unleashing the potential within every individual; enriching the human experience through inclusion, discovery, and innovation; and propelling broad-based prosperity for the many communities we serve.

UCF Story
A Leader in Economic Impact
UCF employs more than 12,000 faculty and staff members. The university impacts more than 112,000 additional jobs and adds $7.73 billion of value to the economy, according to a 2009-10 study by the Florida Board of Governors. More than 168,000 of our 335,500-plus alumni live in Orlando and the Central Florida region—each of them serving as a brand ambassador, boosting UCF’s national and global reputation.

Centers of Excellence
UCF's colleges include Arts and Humanities, Sciences, Burnett Honors, Business, Community Innovation and Education, Engineering and Computer Science, Graduate Studies, Health Professions and Sciences, Hospitality Management, Medicine, Nursing, Optics and Photonics and Undergraduate Studies.

The university's internationally renowned centers and institutes include:
- Advanced Materials Processing and Analysis Center
- Burnett School of Biomedical Sciences at the UCF College of Medicine
- Business Incubation Program
- Center for Research and Education in Optics and Lasers

2022-2023 Graduate Catalog
Faculty Clusters

UCF’s Faculty Cluster Initiative leverages our diverse talent, facilities, location and industry partnerships to foster the development of strong, interdisciplinary teams focused on solving today’s toughest scientific and societal challenges through teaching and research. Bringing together some of the brightest minds creates synergies among diverse disciplines to help generate research breakthroughs. Among the groups making the biggest gains are the Center for Research in Computer Vision, Florida Space Institute and Faculty Research Clusters. Comprised of faculty across disciplines, the nine clusters are focused on tackling thematic, global issues, including cybersecurity, coastal sustainability, and disability and aging.

- Biionix (Prosthetic Interfaces)
- Cyber Security and Privacy
- Disability, Aging and Technology
- Genomics and Bioinformatics
- Learning Science
- Renewable Energy and Chemical Transformation
- Resilient, Intelligent and Sustainable Energy Systems
- Sustainable Coastal Systems
- Violence Against Women

Pride in Accomplishments

The reputation of any educational institution is best reflected in the accomplishments of its students, faculty, and alumni—and for a university that’s now more than 50 years old, UCF has moved rapidly from promise to academic prominence.

Campus Accomplishments

UCF is an academic, partnership and research leader in numerous fields, such as optics and lasers, modeling and simulation, engineering and computer science, business, public administration, education, hospitality management, healthcare and video game design. In fact, in addition to being recognized as one of the best national universities in 2020 by Washington Monthly, UCF consistently appears in U.S. News and World Report’s best college rankings. Explore several of our academic programs that regularly rank among the top in the nation — and the world:

- No. 1 graduate game design program in North America in 2020, according to The Princeton Review and PC Gamer
- No. 2 emergency and crisis management graduate program in the nation in 2020, according to U.S. News & World Report
- No. 4 hospitality school in the world, according to CEOWORLD magazine
- No. 5 nonprofit management graduate program in the nation in 2020, according to U.S. News & World Report
- Ranked among the top 30 cybersecurity programs in the nation, according to cyberdegreesedu.org
- For the fourth year in a row, UCF has been recognized as one of the Most Innovative Schools by U.S. News & World Report (2020 Best Colleges).
- Forty UCF graduate programs were ranked among the best in the nation in their respective fields by U.S. News & World Report’s Best Graduate Schools of 2023. Among these are Homeland Security (3), Atomic/Molecular/Optical Physics (12) Nonprofit Management (13), Medical Schools, with the most graduates practicing in health professional shortage areas (16), Criminology (22), Public Management and Leadership (29), Public Finance and Budgeting (30), Industrial Engineering (36), Best Overall Public Administration School (39), Health Care Management (46), Materials Science and Engineering (49), Computer
- UCF ranks 25th among public U.S. universities and 60th in the world for public and private universities in securing patents.
- UCF Downtown, UCF Lake Nona Medical Center and UCF Lake Nona Cancer Center provided new spaces for students to learn while gaining real-world experience.
- UCF had 8 coveted National Science Foundation CAREER Grants in 2022 and 85 to date.
- UCF’s Florida Interactive Entertainment Academy was named the No. 1 graduate-level video game
design school in North America by The Princeton Review and PC Gamer magazine.

- The Rosen College of Hospitality Management is ranked No.1 in Florida and No. 2 in the world among hospitality schools by ShanghaiRanking Global Ranking of Academic Subjects

- **Graduate School Program Rankings US News**
  - #3 Homeland Security and Emergency Management (No. 3)
  - #12 Atomic/Molecular/Optical Physics (No. 5)
  - #13 Nonprofit Management (No. 9)
  - #16 Medical Schools, with the Most Graduates Practicing in Health Professional Shortage Areas (No. 11)
  - #22 Criminology (No. 20)
  - #29 Public Management and Leadership (No. 21)
  - #30 Public Finance and Budgeting (No. 24)
  - #36 Industrial Engineering (No. 26)
  - #39 Best Overall Public Administration School (No. 27)
  - #46 Health Care Management
  - #49 Materials Science and Engineering (No. 31)
  - #50 Computer Engineering (No. 29)
  - #52 Best Nursing Schools: Doctor of Nursing Practice (No. 39)
  - #53 Electrical Engineering (No. 30)
  - #55 Aerospace Engineering (No. 38)
  - #55 Speech-Language Pathology
  - #57 Physical Therapy
  - #58 Best Education Schools (No. 45)
  - #66 Environmental Engineering (No. 41)
  - #69 Civil Engineering (No. 48)
  - #69 Computer Science (No. 39)
  - #72 Statistics (No. 52)
  - #73 Best Engineering Schools (No. 43)
  - #75 Mechanical Engineering (No. 45)

- **Notable Research**

  Bright minds are solving the world’s greatest problems right here at UCF. It is one of the reasons we are positioned to become the world’s leading public metropolitan university. To achieve this vision, we continuously work to bring together thinkers, doers and creators who deliver high-quality education and leading-industry research that transforms lives. The impact of our innovative faculty research and teaching excellence extends far beyond our walls, unleashing a ripple effect that benefits our region, nation and world. From the interesting and heartwarming to the groundbreaking and life-changing, our research initiatives are helping change course for the future.

- Associate Professor of Medicine Alicja Copik and her team developed a way to stimulate and strengthen natural cancer-killing cells as a means of cancer treatment. In July 2020, the nanoparticle technology was licensed to Sanofi — a French pharmaceutical giant — in hopes of finding new blood-cancer treatments.

- UCF engineering and biology researchers teamed up to test how well staghorn coral skeletons withstand the forces of nature and humans, such as impacts from hurricanes and divers. The findings help inform efforts to successfully transplant nursery-reared coral into the wild.

- UCF researchers are building on their technology that could pave the way for hypersonic flight. Associate Professor Kareem Ahmed and his team’s experimental engine funnels a mixture of fuel and air at hypersonic speeds toward a perfectly angled ramp. The resulting combustion is extra efficient and creates a shock wave that is essentially frozen in place for a record-breaking three seconds, allowing its energy to be harnessed for unprecedented propulsion.

- **National Science Foundation Career Awards**

  - Salvador Almagro-Moreno, PhD
    Tracking Down Bacteria That Go Rogue
  - Samik Bhattacharya, PhD
    Sleek Manta Rays Inspire Engineer
  - Yanjie Fu, PhD
    Teaching Artificial Intelligence Street Smarts
Lorraine Leon, PhD  
*Tapping into Molecule Builders to Design New Materials*

Robert Steward Jr., PhD  
*Dissecting Cell Mechanics to Understand Disease*

**Impact in Teaching and Research**

- Humberto Campins, PhD  
  *UCF Physics Professor Named Jefferson Science Fellow*
- Kelly A. Miller, DMA  
  *FMEA’s College Music Educator of the Year*
- Ali Gordon, PhD  
  *Fellow of the American Society of Mechanical Engineers*
- Laurene Tetard, PhD  
  *Awarded $50k to help mitigate animal-borne diseases*
- Greg Welch, PhD  
  *Named to the National Academy of Inventors*
- Professor Mindi Anderson, inaugural director of UCF’s Healthcare Simulation graduate program in the College of Nursing, was named 2020 Educator of the Year by the International Society for Simulation in Healthcare.

**Highest Engineering Honor**

Professor Peter Delfyett, PhD received one of the highest honors bestowed upon scientists and engineers: Becoming a National Academy of Engineering Member. He is the first current UCF faculty member to be inducted into the NAE. Professor Delfyett continues to receive national recognition for his work in Optics and Photonics.

**Reach for the Stars Honorees**

Five UCF faculty members were recognized for their outstanding research and creative activity, which has had national and international impact.

1. **Adrienne Dove** - Assistant professor of physics and member of UCF’s Planetary Sciences research group. Dr. Dove studies the planetary surfaces of the moon, asteroids and other small objects in space, including how they behave and interact with the surrounding electric fields and charged particles from the sun.

2. **Helen J. Huang** - Assistant professor of mechanical and aerospace engineering. As a UCF researcher, Dr. Huang focuses her studies on the neuromechanics of human locomotion and adaptation, or how the brain and muscles work together so people are able to walk and keep from falling.

3. **Amber L. Southwell** - Assistant professor of neuroscience, Burnett School of Biomedical Sciences. Dr. Southwell, who joined UCF in January 2017, has dedicated most of her career to fighting Huntington disease. It is a rare, inherited disease that causes the progressive breakdown of nerve cells in the brain.

4. **Mel Stanfill** - Assistant professor of English, and program coordinator of Texts and Technology PhD. Dr. Stanfill leads novel research into the study of fan culture, which can range from people who put on costumes at Star Trek conventions to political fans who storm the capitol.

5. **Thomas Wahl** - Assistant professor of civil, environmental and construction engineering and member of UCF’s National Center for Integrated Coastal Research. Thomas Wahl’s research focuses on coastal systems, and in particular sea level rise, tidal changes, storm surges, waves and river discharge and how these forces interact to cause problems such as coastal erosion or flooding.

**2022 Pegasus Professor Awardees**

![Enrique Del Barco](image)

**Enrique Del Barco**  
Professor, Physics  
Associate Dean of Research, Facilities  
College of Sciences
Timothy Sellnow
Professor, Nicholson School of Communication and Media
Associate Director of Graduate Studies, Research and Creative Activity

Degrees of Distinction
The list of prominent alumni gets longer with each graduation ceremony. A sampler of notable alumni includes Jim Atchison, President and CEO, SeaWorld Parks and Entertainment; Michelle Akers, World Cup Soccer Athlete; Kevin Beary, former Sheriff, Orange County, Florida; Juanita Black, president, Mental Health Association of Central Florida; Fernando Calderiero, former NASA astronaut; Phil Dalhausser, Olympic Gold Medalist, volleyball; Ericka Dunlap, Miss America 2004; Alan Eustance, Google Senior Vice President of Engineering and Knowledge; Shaquem Griffin, Linebacker, Seattle Seahawks; Cheryl Hines, actress; R. Glenn Hubbard, Dean, Columbia University Graduate School of Business; George Kalogridis, president, Walt Disney World Resort; Mark Miller, country music singer/songwriter, Sawyer Brown band; William W. Parsons, Jr., former Director, NASA's John C. Stennis Space Center; Angel Ruiz, president and CEO, Ericsson North America; Nicole Stott, space shuttle astronaut; Daniel Tosh, standup comedian/television host, Blake Bortles, NFL Quarterback, Robert Damron, American Professional Golfer and Diplo, American DJ and record producer.

International Impact
UCF's growing cadre of international students adds both diversity and global connections to the Central Florida community.

More than 130 countries—most notably China, India, Brazil, Vietnam, Bangladesh, Venezuela, and Colombia—are represented in the student body, and faculty research is taking place in areas ranging from South America to the Arctic polar ice cap.

UCF has 200+ study and research agreements with institutions in over 60 countries—providing learning and research opportunities for students and faculty in countries ranging from the Udmurt Republic to South Africa. The university's Eastern Europe Linkage Institute alone maintains educational and research partnerships with 20 institutions in nine countries, including Russia, Ukraine, Slovakia, the Czech Republic, Bulgaria, Lithuania, Romania, Poland, and the United States. The student experience abroad does not stop in the classroom with opportunities available for students to travel internationally.

Strength in Diversity and Inclusiveness
Increasing diversity and inclusiveness is one of the central goals of UCF. The university is particularly proud of an aggressive minority recruitment plan, and minorities now account for 28.5% of the faculty.

The graduate student community includes Hispanic/Latino (20%), African-American (10.6%), and Asian/Pacific Islander (5%) students and represents 59 of Florida's 67 counties, all 50 states, and 97 countries.

Partnerships and Community Service
One of UCF's main objectives is to be America's partnership university. Hundreds of joint projects are in place with community organizations and government agencies at all levels and corporations—ranging from collaborative research in nanoscience to neighborhood nursing clinics.

Two major partnerships target the region’s most prominent business sectors. The Rosen College of Hospitality Management will increase the university's already significant commitment to the area's tourism and hospitality sector. High-tech interests are being well-served by the Florida High Tech Corridor partnership—an initiative of UCF, University of South Florida, and the University of Florida drive progress in the region.

Orlando and Beyond
In addition to its 1,415-acre main campus in Orlando, UCF has area campuses in Lake Nona, Southwest Orlando, and Downtown Orlando; centers in Altamonte Springs, Cocoa, Daytona Beach, Leesburg, Ocala, Palm Bay, Sanford/Lake Mary, South Lake, Valencia East, Valencia Osceola and Valencia West giving students throughout central Florida the chance to take classes, pursue degrees, and interact with faculty and staff.

Virtual Campus
UCF’s virtual campus UCF Online is leading the way in the integration of technology, teaching, and learning. Thirty-nine graduate degrees and tracks and 41 certificate programs are available online, in addition to many individual graduate-level courses. Essential student services, such as parking, course registration, and textbook purchases are also available online.

For more information on UCF’s online programs, visit [www.ucf.edu/online](http://www.ucf.edu/online).

**UCF Athletics**

- UCF student-athletes compiled a 3.38 GPA for the spring of 2022, and the second-highest semester GPA in program history extended the Knights’ streak to 29 consecutive semesters with a GPA of 3.0 or better.
- UCF’s football team ranked 16th academically out of 86 bowl-bound teams and had the highest ranking of any bowl-bound team from the state of Florida.
- The UCF track and field team swept the American Athletic Conference indoor and outdoor championships for the first time. The Knights also sent competitors to the NCAA Championship in five events.
- The UCF women’s basketball team had a historic season, matching the program record for wins in a season, finishing with a 26-4 record. The Knights won the American Athletic Conference regular season and tournament championships for the first time since joining the league and earned the program’s first NCAA Tournament victory in 2022.
- Of the 68 teams in the 2022 NCAA Women’s Basketball Tournament, UCF was one of 27 that achieved a 100 percent graduation rate according to The Institute for Diversity and Ethics in Sport (TIDES)’s Keeping Score When It Counts report, which is published by Richard Lapchick, TIDES director and chair of UCF’s DeVos Sport Business Management Program.
- The UCF softball team made history as the Knights not only hosted an NCAA regional for the first time in program history, but also won the regional to advance to the program’s first NCAA Super Regional.
- The UCF cheer team recorded its 23rd top five finish in the Cheer Division IA at the 2022 UCA College Cheerleading National Championships.

**Central Florida—A great place to be**

UCF is located 13 miles east of downtown Orlando, 45 miles from the Atlantic Ocean and Cape Canaveral, and 100 miles from Tampa and the Gulf of Mexico. The area boasts world-class shopping and dining, amusement parks, lakes, golf courses, jogging and biking trails, and nature preserves.

**UCF—A Time of Opportunity**

The time is now for UCF—one of the fastest-growing, metropolitan research universities in the country and a catalyst for economic development in central Florida. Significant in size, excellent in academics, and prominent in accomplishments, the University of Central Florida is one of Florida’s leading educational assets.

The University’s culture of opportunity is driven by the diverse people it attracts, its Orlando location, its history of entrepreneurship, and its youth, relevance, and energy.

**Facts**
### About UCF Graduate Students

**Total Grad Students = 9,839** (14% of total UCF students)

- 485 Medical Students
- 2,279 Doctoral Students (23% of total)
- 6,917 Masters Students (70% of total)

#### Part-Time
- 44.8% of Grad students
- 62.0% of Masters students

#### Full-Time
- 55.2% of Grad students
- 76.0% of Doctoral Students

2,888 Graduate Students are studying fully Online

- 39.7% of Graduate Students are male
- 60.3% of Graduate Students are female
- 11.1% of Graduate Students are international representing 112 different countries

Average age of Doctoral Students is 33

Average age of Masters Students is 31

UCF Graduate Students represent every state in the US

### 203 Degree Programs

#### 393 Programs, tracks, and certificates

### Ethnicity of Graduate Students

- Hispanic - 21%
- Black/African American - 11.1%
- Asian - 11.3%
- Multi-Racial - 3.6%
- Not Specified - 1.4%
- American Indian - <1%
- Native Hawaiian/Pacific - <1%

### Financial Support for Graduate Students

- **Assistantships** - Each year over 1,500 full-time enrolled graduate students are supported on assistantships.
- ** Fellowships** - Over 2 million dollars in graduate fellowship support is awarded to doctoral and master’s students each year.

- **Tuition Remission** - Qualifying university fellows and graduate students appointed on full-time assistantships (20 hours per week) receive full resident (in-state) tuition remission. Students appointed on half-time assistantship appointments (10 hours per week) receive remission of one-half of the resident (in-state) tuition. All qualifying nonresident university fellow and graduate assistants with appointments totaling 20 hours per week are charged a "differential out-of-state fee" of $0.00 rather than the out-of-state fee per credit hour during the terms of the qualifying fellowship or assistantship.

- **Health Insurance** - The College of Graduate Studies offers individual health insurance coverage to all qualifying university fellows and graduate assistantship students with appointments totaling 20 hours per week. Students who accept the coverage have the insurance premiums paid for by UCF.
Research Activities 2021

The research conducted at UCF fuels innovation and drives the local and state economy. We are an integral part of statewide efforts to attract, grow and retain talent that to create and enhance high technology companies in Florida. Our programs in engineering, optics, and photonics, and simulation and training, computer science and nanoscience are among the best in the nation. In 2021 UCF researchers generated $212.94 million in contracts and grants, the largest percentage of funds coming from the federal government, which has a vested interest in creating and advancing knowledge and fueling America's innovation pipeline.

Researchers are the strength behind the development of new technologies. UCF's technology transfer office and our incubation and entrepreneurship programs help turn those technologies into companies, which in turn put products on the market.

- Total Research Awards - $212.94 million
- Total Federal Awards - $128.78 million
- Total State Awards - $41.83 million
- Total Industry Awards - $42.33 million
- Patents - UCF holds more than 1,000 U.S. Patents

Key Awards Highlights

111 Invention Disclosures
118 Total US Patents Filed
64 US Patents Issued
29 Licenses & Options Executed
21 Products on the Market
30 Startups still Operational

Top Performers

Florida Space Institute = $44.09M
Engineering and Computer Science = $35.64M
College of Community Innovation and Education = $26.19M
College of Sciences = $25.97M
CREOL = $21.48M

Top Researchers

Ramon Lugo = $29.76M
Paula Kohler = $6.95M
Amy Ellis = $6.82M
Yan Fernandez = $4.6M
Felix Tan = 4.35M

State of Florida

Ron DeSantis, Governor
Richard Corcoran, Commissioner of Education
Nicole (Nikki) Fried, Commissioner of Agriculture
Brian Lamb, Chair - SUS Board of Governors
Ashley Moody, Attorney General
Jeanette Núñez, Lieutenant Governor
Jimmy Patronis, Chief Financial Officer
State of Florida Board of Governors

Brian Lamb, Chair

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<td>Alan Levine</td>
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<td>June 22, 2017 – January 6, 2024</td>
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<tr>
<td>Charles Lydecker</td>
<td>Member</td>
<td>June 14, 2019 – January 6, 2027</td>
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<tr>
<td>Craig Mateer</td>
<td>Member</td>
<td>March 11, 2022 – January 6, 2027</td>
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<td>Steven Scott</td>
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<td>March 29, 2019 – January 6, 2026</td>
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<tr>
<td>William Self</td>
<td>Member</td>
<td>August 1, 2020 – July 31, 2022</td>
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<tr>
<td>Eric Silagy</td>
<td>Vice Chair</td>
<td>March 29, 2019 – January 6, 2026</td>
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<tr>
<td>Kent Stermon</td>
<td>Member</td>
<td>March 29, 2019 – January 6, 2026</td>
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University of Central Florida Board of Trustees

Alex Martin, Chair

Harold Mills, Vice Chair

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<tr>
<th>Name</th>
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<td>Tiffany Altizer</td>
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<td>Beverly Seay</td>
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University of Central Florida Administration

2022-2023 Graduate Catalog
President of the University of Central Florida
Alexander N. Cartwright

President's Cabinet

Vice President for Compliance, Ethics, and Risk  Rhonda Bishop
Chief Analytics Officer  Paige Borden
Interim Vice President for Advancement, and Interim CEO, UCF Foundation Inc.  Karen Cochran
Vice President and General Counsel  Youndy Cook
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Vice President for Facilities and Business Operations  Jonathan Varnell

Office of the Provost and Vice President of Academic Affairs
Colleges

UCF has 11 Colleges that offer Graduate Education to our students. Click on the pictures for more details.
College of Arts and Humanities

College of Business Administration
College of Community Innovation and Education

College of Engineering and Computer Science
College of Graduate Studies

College of Health Professions and Sciences
College of Medicine

College of Nursing
College of Optics and Photonics

College of Sciences
Rosen College of Hospitality Management

College of Graduate Studies

Overview

Mission Statement

College of Graduate Studies Leadership

Graduate Council

College Graduate Associate Deans

Graduate Program Directors

Graduate Faculty and Graduate Faculty Scholars

Overview

The College of Graduate Studies provides leadership and vision for graduate education at the University of Central Florida. Program quality, graduate admissions, recruiting, enrollment management, student services, and records, financial support, policies, appeals, program development, and review, benchmarking, and completion of graduate degrees are important concerns of the College.

Working in conjunction with the Faculty Senate Committees and the college and graduate program coordinators, the College of Graduate Studies is responsible for developing university-wide graduate plans and policies, coordinating graduate activities, distributing tuition support and fellowships to the colleges, facilitating the adoption of new graduate programs, coordinating the recruitment of graduate
Applicants, and admitting graduate students to the university. Students apply to the university through the Office of Graduate Admissions. Admission decisions are made by the graduate program directors and the College of Graduate Studies.

The College of Graduate Studies houses several interdisciplinary graduate programs: Geographic Information Systems Graduate Certificate; Interdisciplinary Studies MA and MS; Modeling and Simulation PhD, MS and Graduate Certificate; and Nanotechnology MS.

Mission Statement

The UCF College of Graduate Studies provides leadership and services to create high-quality learning environments for graduate students.

About Our Mission

The UCF College of Graduate Studies is an advocate for graduate education, working to mobilize and manage the resources needed for enrollment and program growth. We track and analyze emerging trends and changes in graduate education, both nationally and with our peer institutions, and provide support and guidance for interdisciplinary and cooperative programs. We are mindful of the need to retain the academic values of the graduate programs while acting as a partner in the social and economic well-being of the community and state.

We collaborate with the faculty to develop policies and best practices that further the high academic standards and excellence of our graduate programs. We provide information and services that students need to enhance their experience with UCF and that faculty and staff need to effectively carry out their responsibilities to students. Cooperation with colleges, graduate programs, institutes and centers, administrative offices, and support services is emphasized to provide an excellent experience for our graduate students from inquiry to graduation.

Through its primary activities, programs, and services, the UCF College of Graduate Studies contributes to program development and growth, enrollment management and recruiting, enhanced infrastructure and technological support for our graduate students and programs, and quality student support services for a diverse and talented graduate student population.

College of Graduate Studies Leadership

Vice President for Research and Dean of the College of Graduate Studies
Elizabeth Klonoff

Senior Associate Dean
John Weishampel
Associate Dean
Barbara Fritzsche
Senior Assistant Dean
Jennifer Parham

Graduate Council

The Graduate Council is a standing committee of the Faculty Senate and reports to the Senate on graduate policy and curriculum matters. The Graduate Council deals with policy issues and standards for the university. New graduate program requests, changes to existing graduate programs, additions, deletions and modifications to graduate courses, and new policies or changes to existing graduate policies are initiated and reviewed by the Graduate Council. New graduate degree programs require final approval by the Board of Trustees, and approval for doctoral programs is required from the Florida Board of Governors. The Graduate Council has four committees that examine and formulate policies and procedures, hear petitions for variances from a graduate program or university requirements, review new graduate program requests, review changes to existing graduate programs, additions, deletions and modifications to graduate courses and provide input on graduate program reviews, among other matters. For specific duties and membership requirements of the committees and the Council please see Section VII of the Faculty Constitution at http://www.facultysenate.ucf.edu/constitution/index.asp.

College Graduate Associate Deans

College graduate associate deans are appointed by the respective college deans to work with the College of Graduate Studies. The primary responsibilities of the college graduate associate deans are to identify academic opportunities for graduate education in their colleges, plan for enrollment growth and the use of resources in the graduate programs, communicate the college vision of graduate education to faculty, staff, students, and the university, coordinate and represent college graduate concerns to others, conduct studies that ensure program quality and standards in the college and report this information to the university, assist with program reviews, and prepare an annual report to the College of Graduate Studies on college graduate activities.
College Graduate Associate Deans

<table>
<thead>
<tr>
<th>College</th>
<th>Associate Dean</th>
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<tr>
<td>College of Arts and Humanities</td>
<td>Dr. Anastasia Salter</td>
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<td>College of Business Administration</td>
<td>Dr. Sevil Sonmez</td>
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<td>College of Community Innovation and Education</td>
<td>Dr. Gene Paoline</td>
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<td>College of Engineering and Computer Science</td>
<td>Dr. Ali Gordon</td>
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<tr>
<td>College of Graduate Studies</td>
<td>Dr. John Weishampel</td>
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<tr>
<td>College of Health Professions and Sciences</td>
<td>Dr. Joel Cramer</td>
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<tr>
<td>College of Medicine</td>
<td>Dr. Saleh Naser</td>
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<td>Dr. Joellen Edwards</td>
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<td>Rosen College of Hospitality Management</td>
<td>Dr. Alan Fyall</td>
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<td>College of Optics and Photonics</td>
<td>Dr. Patrick LiKamWa</td>
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<tr>
<td>College of Sciences</td>
<td>Dr. Enrique del Barco</td>
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Graduate Program Directors

The graduate program directors are appointed by the respective department Chairs (or Directors of other units with graduate academic programs) to work with the college and university personnel on behalf of graduate education. Under the direction of the department chair, they are responsible for the graduate program's health and quality. They oversee the recruiting of graduate students and respond to inquiries; provide for student services such as mentoring, career development opportunities, and student orientations; plan for office space for graduate assistants; inform students and faculty of student completion rates; inform students and faculty of financial support available to graduate assistants; and ensure program standards in their department. Graduate program directors are the main contacts for each of the graduate programs.

Graduate Faculty and Graduate Faculty Scholars

University-Wide Qualifications for Participation in Graduate Education

Graduate education requires the participation of highly competent faculty who are willing to share their specialized skills and knowledge with graduate students. Graduate faculty teach graduate courses, serve as members of thesis and dissertation committees, and serve as faculty advisers for thesis and dissertation students and chairs of thesis and dissertation committees. The following guidelines outline the minimal credentials necessary for faculty to serve the many different roles they play in graduate education. Programs may set higher qualification standards or additional requirements. As the university is committed to encouraging, facilitating, and rewarding interdisciplinary, multi-disciplinary and cross-disciplinary educational and scholarly activities, the service of faculty and staff members in more than one department, school, center/institute, or college is encouraged as a way to further this objective.

Faculty engaged in graduate education must possess either a terminal academic degree in, or closely related to, the discipline in which they are teaching, or expertise in a field related to the topic of the thesis or dissertation if serving on a thesis or dissertation committee. Substitution for the terminal degree may be granted with documented relevant exceptional experience and scholarly or creative activity when recommended by the graduate program committee and approved by the department chair/unit director. No graduate student at UCF may teach UCF graduate courses as the instructor of record.

For the appointment of individuals in the process of obtaining a terminal degree, the College of Graduate Studies can certify that all requirements for a degree have been met.

Members of the Graduate Faculty cannot have personal or financial (including employment) arrangements that may pose a conflict of interest with a student on whose thesis or dissertation committee they serve.

This policy has five major sections:

- Section A defines the terms describing the roles played by faculty in graduate education.
- Section B establishes the role of the graduate program committees in the process of appointing Graduate Faculty and Graduate Faculty Scholars.
- Section C establishes the roles and qualifications for appointment as Graduate Faculty and Graduate Faculty Scholars.
- Section D establishes procedures for review, renewal, and termination of appointments to the Graduate Faculty.
- Section E establishes the responsibilities for the various members of the dissertation committees.

A.1: Faculty Roles in Graduate Education

Faculty involved in graduate education comprise members of the Graduate Faculty (Sections C.1-C.2) and Graduate Faculty Scholars (Section C.3). These faculty may be eligible to assume the following roles as part of their involvement in graduate education at UCF:

- Instructor of record for graduate-level courses (graduate teaching)
- Member of a thesis or dissertation committee
- Chair of a thesis or dissertation committee: In the vast majority of cases, the chair is the adviser of the scholarly activities of the
student. A chair of a thesis or dissertation committee also oversees all of the administrative functions of the committee. A Graduate Faculty Scholar is not eligible to serve as a chair of a thesis or dissertation committee.

- Co-chair of a thesis or dissertation committee: A co-chair is a member of a thesis or dissertation committee who shares with the chair the scholarly advisory activities of the student. In cases in which a Graduate Faculty Scholar oversees the day-to-day scholarly activities of the student, the Graduate Faculty Scholar may be appointed as a co-chair of the thesis or dissertation committee.

- Vice-chair of a thesis or dissertation committee: A vice-chair serves as a voice of experience in thesis and dissertation committees. A vice-chair must be appointed to committees in which the chair has no prior experience serving on thesis or dissertation committees. To be appointed as a vice-chair, the committee member must have prior experience serving on at least one thesis or dissertation committee that has successfully graduated a student.

Descriptions of the responsibilities of members and chairs of dissertation committees are detailed in Section E.

B.1: Graduate Program Committees

Each graduate program will be administered by a graduate program committee consisting of faculty members who participate in the program. An active graduate program committee is required for each graduate program in order to provide program oversight and to ensure that the qualifications of contributing individuals are appropriate for participation in graduate education. Graduate program committee members are appointed in accordance with established department/school procedures and the qualifications established in this document.

B.2: Qualifications for Serving on Graduate Program Committees

Tenured, tenure-earning or ranked faculty who are members of the Graduate Faculty may serve on graduate program committees. The graduate program director will be the chair of the graduate program committee.

C.1: The Graduate Faculty

Ranked professors (tenure, tenure-earning, clinical, research), engineers, instructors, lecturers, librarians, scientists, and scholars are eligible for appointment to the Graduate Faculty. Appointment to the Graduate Faculty begins with a nomination by the graduate program committee that is relevant to the graduate education duties of the individual faculty member. The nomination must then be approved by the department chair/unit director for review and appointment by the Dean of the College of Graduate Studies. Qualified graduate faculty members may be eligible to serve in more than one graduate program. Graduate faculty members who are outside of a student's program are eligible to serve as external members of a thesis or dissertation advisory committee.

Special graduate faculty nominations may be made to the Graduate Council at the discretion of the Dean of the College of Graduate Studies.

All graduate faculty are eligible to teach graduate courses, serve as members of thesis and dissertation committees, and serve as chairs or co-chairs of master's thesis committees.

C.2: Eligibility Criteria for Service as Chairs of Thesis and Dissertation Committees

All chairs and co-chairs must be approved by the graduate program committee of the student's program. Graduate program committees may specify additional guidelines for service as a chair or co-chair of thesis or dissertation committees.

Scholarly currency requirement to serve as a chair of a dissertation committee: For graduate faculty members to serve as a chair or co-chair of a dissertation committee, they must demonstrate significant current involvement in scholarly research or creative productivity. Scholarship and creative activity are evidenced and recognized through publications, presentations, performances, exhibits, awards, and competitions. Other considerations include a continuing fulfillment of professional obligations through, for example, manuscript review, journal editorship, and national advisory and review panels. The criteria for scholarly currency are to be established by each graduate program and approved by the department chair/unit director. The criteria must be submitted to the Dean of the College of Graduate Studies prior to nominations for graduate faculty appointments and updated for the reappointment process.

Required thesis or dissertation committee experience: Graduate faculty who have not served as a member of a thesis or dissertation committee to completion may serve as the chair of a thesis or dissertation committee, but must have a vice-chair appointed to the committee who has previously served as a member of a thesis or dissertation committee to completion.

C.3: Graduate Faculty Scholars

Other qualified individuals may serve as graduate faculty scholars in graduate faculty roles confined to specific, well-defined graduate faculty assignments. Graduate faculty scholars play important roles in graduate education at UCF, but their status as graduate faculty scholars is distinct from that of members of the Graduate Faculty.

The appointment of graduate faculty scholars begins with a nomination by the graduate program committee that is relevant to the graduate education duties of the individual. The nomination must then be approved by the department chair/unit director for review and appointment by the Dean of the College of Graduate Studies.

Graduate faculty scholars may be designated as "Teaching-Only" if their responsibilities will be restricted solely to teaching graduate courses.

Graduate faculty scholars may serve as members of the thesis or dissertation committees for the purpose of bringing specific disciplinary knowledge to the committee. In instances deemed appropriate by the graduate program committee, graduate faculty scholars may also serve as co-chairs or vice chairs of thesis and dissertation committees, but may not serve as chairs of these committees. Graduate faculty scholars serving on thesis and dissertation committees, either as members or co-chairs, must have documented evidence of exceptional...
relevant experience and/or scholarly or creative productivity, as determined by the graduate program committee.

It is expected that graduate faculty scholars will attend the various committee meetings associated with serving as a member of a thesis or dissertation committee.

D.1: Graduate Faculty Reappointments

Individual qualifications for reappointment as a graduate faculty member will be re-evaluated by the Program Review Committee of the Graduate Council. Reappointment evaluations will be conducted at the time of the periodic university program review, or sooner, as deemed appropriate by the program review committee or at the request of the Dean of the College of Graduate Studies. At that time, individuals must re-submit their current credentials to the Program Review Committee of the Graduate Council if they wish to have their appointment renewed. Qualifications will be based on accomplishments since the last program review and the criteria established by the nominating graduate program.

D.2: Non-periodic Graduate Faculty Review

In addition to the periodic review of faculty for reappointment as Graduate Faculty (as described in D.1), individuals may be reviewed at any time, for cause, such as not maintaining scholarly currency, not providing appropriate mentorship or high-quality education to students, or violations of process, policy, or law.

Serious concerns over a Graduate Faculty's actions should be brought to the attention of the Dean of the College of Graduate Studies. The Dean of the College of Graduate Studies will evaluate the initial concern and decide whether it warrants review by the Graduate Council Program Review and Awards Committee. If a review is warranted, the Dean of the College of Graduate Studies will charge the committee with investigating the situation and compiling a written report. During the investigation, the committee will review verbal and/or written statements by the faculty member and other relevant parties in addition to other sources of information necessary to make a recommendation. The written report will include a summary of the findings and a recommendation about the individual's Graduate Faculty status, with justification for the recommendation. The recommendation may be: 1) no change in Graduate Faculty status, 2) a probationary status in which Graduate Faculty activities are limited or closely monitored while the faculty member completes the required developmental activities, 3) suspension of Graduate Faculty status, or 4) revocation of Graduate Faculty status, with the latter two typically reserved for more egregious behaviors. The Dean of the College of Graduate Studies will review the report and, in consultation with the Dean of the academic college of the Graduate Faculty, make a decision about the individual's Graduate Faculty status. For cases of probationary status or suspension of Graduate Faculty status, this decision will include the specific terms of the probationary or suspension period, including its duration. The faculty member can appeal the decision with the Provost.

D.3: Reinstatement of Graduate Faculty Status

When Graduate Faculty status is not renewed (during the Periodic Faculty Reappointment process per D.1), a faculty member can request to the College Dean a one-time re-evaluation of his/her credentials. If the reappointment is not granted, then the faculty member must wait two years (or more) to request to be re-nominated. When Graduate Faculty status is revoked (based on the outcome of a Non-periodic Graduate Faculty Review per D.2), faculty members can request to the Dean of the College of Graduate Studies to be re-nominated for Graduate Faculty status two (or more) years after the decision to remove Graduate Faculty status. For reinstatement, documentation regarding the removal from Graduate Faculty status will be considered, along with the re-nomination request.

D.4: Guidelines for a Thesis or Dissertation Committee Member Who Leaves UCF

A thesis or dissertation committee member who leaves UCF may be eligible to continue serving on the committee as a graduate faculty scholar with the approval of the graduate program committee.

D.5: Guidelines for a Thesis or Dissertation Committee Chair Who Leaves UCF

In the event that a chair of a thesis or dissertation committee leaves UCF:

1. With the approval of the graduate program committee, a chair of a thesis or dissertation committee who leaves UCF may continue to serve as chair and supervise the thesis or dissertation for one calendar year after leaving.
2. If one calendar year has passed since the faculty member left UCF and the advisee has not yet completed the degree requirements, the departed faculty member may continue to serve as co-chair of the thesis or dissertation committee as a graduate faculty scholar, with approval of the graduate program committee; however, a new chair from the student’s department (or college, if a college-wide program) shall be designated.

D.6.1: Faculty Emeriti

Emeritus graduate faculty members may continue to participate in graduate education as a graduate faculty scholar, without the necessity of nomination. With the approval of the graduate program committee, they may continue to serve for a specified period of time as faculty advisers and chairs of thesis and dissertation committees established prior to emeritus status. Emeriti faculty may not chair additional thesis and dissertation committees but may continue to serve on thesis and dissertation committees as a member or co-chair for as long as they remain active with the institution.

D.6.2: Retired Faculty

In the event that a chair of a thesis or dissertation committee retires from UCF:

1. With the approval of the graduate program committee, a chair of a thesis or dissertation committee who retires from UCF may continue to serve as chair and supervise the thesis or dissertation for one calendar year after leaving.
2. If one calendar year has passed since the faculty member retired and the advisee has not yet completed the degree requirements,
the retired faculty member may continue to serve as co-chair of the thesis or dissertation committee as a graduate faculty scholar, with approval of the graduate program committee; however, a new chair from the student's department (or college, if a college-wide program) shall be designated.

**E.1: Responsibilities of Members of Dissertation Committees**

1. To meet at regular intervals at least once per year to: (i) discuss and approve the proposed dissertation research and the plans for carrying out the research; and (ii) to assess progress towards the dissertation and give the student a yearly letter of evaluation in addition to S/U grades awarded for 7980 courses.
2. To review iThenticate results from dissertation submittals.
3. To participate in the candidacy and/or dissertation prospectus examination.
4. To participate in the dissertation defense to assure: (i) that the dissertation is acceptable as original research and a contribution to the discipline; and (ii) that it meets the standards of the University.

**E.2: Responsibilities of the Chair (and co-Chair) of Dissertation Committees**

1. In cooperation with the program director, to review the program of study, the research, and all other degree requirements by meeting with the student early in the program and immediately after appointment as chair/co-chair.
2. To suggest to the student possible committee members who could serve on the dissertation committee.
3. To establish timelines for the research, set expectations, and evaluate the student progress based upon these.
4. To meet at regular intervals with the student to discuss the proposed dissertation research and the plans for carrying out research.
5. To review in a timely manner all written materials submitted by the student and offer suggested revisions.
6. To meet at least once per year with the student and the dissertation committee to assess progress toward the dissertation and give the student an annual review in addition to the S/U grades awarded for 7980 courses. The chair shall send the annual review to the program director after consultation with the dissertation committee.
7. To coordinate the ongoing efforts of the committee as its chair, and to participate fully in the responsibilities of the committee members as a member of the dissertation committee.
8. To chair the candidacy and/or dissertation prospectus examinations.
9. To be physically present and chair the dissertation defense, ensure its proper conduct as described above, and submit to the program director for the student's records all necessary grades, forms and other materials.
10. In disciplines where funding is essential to the success of the thesis or dissertation work, to acquire funds (and appropriate facilities) sufficient to support the research of the student.

**E.3: Responsibilities of the External Committee Member of a Dissertation Committee**

1. External committee membership will entail the full responsibilities of other committee membership as specified in section E.1 above, including being present at the final defense.
2. External committee members should bring specific disciplinary knowledge or research expertise to the committee.
3. External committee members may be appointed from outside of the university or outside of the college (if the committee is for a college-wide program). The external committee member may not be affiliated in any way with the department of the committee, such as through joint or secondary joint appointments.
4. Graduate faculty scholars are external members.

**E.4: Dissertation Committee Procedures**

1. For on-campus defenses, no fewer than four faculty members, including all members of the dissertation committee, shall be in attendance with the student during the dissertation defense, and at least half of the committee must be physically present.
2. Graduate programs may elect to offer the option of a virtual dissertation defense (student off-campus defense) upon approval of the graduate program director, the department, and the college. If the student defends virtually, at minimum the dissertation committee chair will be present at the campus location of the public defense. No fewer than four faculty members, including all members of the dissertation committee, shall be in attendance during the dissertation defense.
3. Only members of the dissertation committee may sign the dissertation, and a majority must approve the dissertation.

**F.1: Exceptions**

Exceptions may be made at the discretion of the Vice Provost and Dean of the College of Graduate Studies.

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**Admissions**
The UCF College of Graduate Studies coordinates the admission’s process with graduate program directors across the university to admit prospective students to graduate study. The College of Graduate Studies also admits students who are applying as nondegree-seeking students.

In order to enroll in graduate classes, students must have obtained a baccalaureate or higher degree, prior to the start of the term for which the student is admitted, from an accredited U.S. institution recognized by UCF or from a recognized foreign institution. Students without a baccalaureate or higher degree from an accredited U.S. institution recognized by UCF or a recognized foreign institution are not admitted to graduate degree programs, graduate certificate programs, or graduate non-degree status. The following links will provide important information for graduate applicants to UCF.

U.S. Citizens and Resident Aliens
International Students
Information for All Applicants
Residency

Admission to the University

All graduate students being admitted to the university must meet the minimum UCF admission requirements.

The admission process begins with the receipt of the Graduate Application for Admission along with all application requirements. In order to be considered for admission to a graduate program, the following information must be submitted and on file in the UCF College of Graduate Studies by the stated application deadline: application, residency, and any application requirements specified by the program. These documents become part of UCF's files and will not be returned to or copied for the applicant. All application requirements, aside from transcripts and test scores, must be submitted together with the online application. Transcripts and test scores must be official.

For specific graduate program information, refer to the appropriate program descriptions in the Graduate Programs section of this catalog. Program application deadlines are listed for each graduate program.

NOTE: All graduate programs require that all application requirements (application form, residency form, recommendations, essay/personal statement, resume) be submitted online simultaneously by the stated application deadline. Official test scores (if required) must be sent directly from ETS/Pearson Vue to the UCF College of Graduate Studies (institution code 5233 for GRE and TOEFL; institution code RZT-HT-58 for GMAT). Official transcripts should be sealed in an envelope by the registrar of the former institution and sent directly to the UCF College of Graduate Studies, P.O. Box 160112, Millican Hall 230, Orlando, FL 32816-0112.

Once the online application and all application requirements are received, the UCF College of Graduate Studies will send you an e-mail.
notifying you of its receipt. The actual processing of the application, however, is not initiated until the application fee and other application requirements are received in the UCF College of Graduate Studies. Please refer to the graduate program’s admissions information in order to become familiar with the procedures specific to each program.

When all application requirements are received by the stated deadline and processed by our office, the appropriate graduate program reviews it in order to make an admission recommendation. Acceptance into a graduate program will be granted by the UCF College of Graduate Studies.

Nondegree-seeking applicants will receive notice of acceptance to the university and registration information from the UCF College of Graduate Studies. Admission as a nondegree student does not constitute admission to a graduate program or graduate certificate program.

Readmission to the University

A regularly admitted student who has not been registered for three consecutive semesters must apply for readmission to the same graduate program through the UCF College of Graduate Studies. Readmission is also required if a student has been previously dismissed from a graduate program and wishes to gain entrance back into that same program. Students seeking readmission must complete the online application along with all application requirements. An application processing fee is required. Please refer to the Graduate Programs section to ensure that you have not missed the deadline for your program. Readmissions are not guaranteed.

Registration

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Online Registration
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Continuing Graduate Students
Enrollment of International Students
Nondegree-seeking Students
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Audit Registration
Senior Citizen Audit
State Employee Registration
UCF Employee Registration
Fee Payments
Residency

Fee Invoices
Mandatory Health Information
Name Changes
Address Changes
Transcript Requests
Enrollment Certifications
Withdrawal Policy and Academic Record Change
Requests
Financial Support
Student Responsibility to Inform Offices
Parking
Visitor Information Center

Overview
UCF's registration system allows students to enroll for the entire upcoming academic year (3 semesters). This improves a student's ability to plan for upcoming terms and allows students more opportunity to make any necessary adjustments to registration. It is important for students to register for courses they plan to complete and fulfill requirements within their degree plan. Students are not required to register for all three terms during their initial appointment but the upcoming academic year will be available. For additional information regarding Multiple Term Registration (MTR), please visit the Registrar's Office webpage.

During each academic semester, registration is held for all new, currently enrolled, degree-seeking, and nondegree-seeking students for the following term. Registration sessions consist of Registration and Late Registration (held during the first week of classes each term).

Multiple term registration begins following mid-term of the spring semester for the following summer, fall, and spring terms. Class listings are available only online through the Class Schedule Search at my.ucf.edu. The dates and times for each registration period are included in the Academic Calendar.

Note: Newly admitted students (degree or nondegree) must register for classes in their first term in order to become and remain active. New students that do not enroll in classes in their first term will have their file inactivated and all future registration dropped. Once their file is inactivated, they will need to re-apply by completing a new online application and submitting a new application processing fee.

Please note that the last day to Drop classes is now the last day to Add classes. Please visit the Student Handbook on the College of Graduate Studies Website for more information on registration and related topics.

**Online Registration**

Registration is available over the web using the myUCF system at my.ucf.edu and in the college advising offices.

**UCF NID (Network Identification Number)**

Students obtain the UCF NID Number on their first login to myUCF at my.ucf.edu. The initial login will use a default password. Following instructions, students choose a new password and reminder clue.

**Web Enrollment Guide**

The Web Enrollment Guide is published online once a year by the Registrar's Office. The Web Enrollment Guide provides the official "Academic Calendar" and describes the policies and procedures governing registration each term. The Web Enrollment Guide is available on the Registrar's Office website.

**Immunization Form**

All new first-term graduate students must have the UCF Immunization Health History Form completed before they are allowed to register at UCF. Holds placed on registration will be removed automatically once the Immunization Form is received and verified by Med+Proctor. Forms may be obtained on the UCF Student Health Services website.

**Continuing Graduate Students**

Continuing graduate students register through myUCF after their assigned appointment day and time. All continuing students should register early. For graduate students with fellowships or assistantships, failure to register early may result in delays in receiving assistantship paychecks and sometimes result in the loss of tuition waivers. Continuing graduate students registering for an internship, independent study, thesis or dissertation hours, or research report hours must fill out a Registration Agreement form obtained from their adviser or department office. The college graduate office will normally register students into these courses.

**Enrollment of International Students**

International students are required to seek advice from UCF Global to ensure that their enrollment status meets full-time status in compliance with federal immigration regulations. Students must obtain advice from UCF Global before dropping or withdrawing from courses that would affect their course load.

**Nondegree-seeking Students**

Before registering, all nondegree-seeking students should check with the departments where they want to take courses in to learn what is required for registration by that department. Certain classes are restricted, and it is best to find this out first. In the College of Community Innovation and Education, nondegree-seeking students can ONLY register for 5000- and 6000-level classes. In the College of Business Administration, nondegree-seeking students cannot register for graduate courses. The College of Engineering and Computer Science will
only allow nondegree-seeking students to register with special approval from the program director. Nondegree-seeking students who want to register for the College of Arts and Humanities, College of Health and Professions and Sciences, College of Optics and Photonics, College of Sciences or Rosen College of Hospitality Management courses should check with the individual graduate programs for more detailed information.

Nondegree-seeking students must be registered for 12 hours to be considered full-time. Nondegree-seeking students who already have certification elsewhere (i.e., from a College of Education in another state) are not eligible to receive financial aid. In general, nondegree-seeking students are not eligible for financial aid, assistantships, fellowships, or tuition support, although it is best to check with the Office of Student Financial Assistance for specific details.

Holds

A hold (negative service indicator) may be placed on a student's records, transcripts, grades, diplomas or registration due to financial or other obligations to the University. Satisfaction and clearance of the hold is required before a release can be given. Students may check for holds on the myUCF system at my.ucf.edu. To obtain an immediate release for Student Accounts financial holds, you may make your credit card or e-check payment online from your student account. After making a successful payment, contact Student Account Services with the remit ID to confirm your payment and have your hold released.

To release UCF College of Graduate Studies holds, the students must provide the outstanding application requirement(s) to complete their records.

Audit Registration

Audit students are those who desire to attend class(es) without receiving academic credit. Regular tuition and fees are assessed for audit registration. See "Tuition and Fees" for more information about the cost of auditing classes at UCF. Audit registration is on a space-available basis at the assigned time of Registration or at any time during Late Registration and Add/Drop when Late Registration fees will apply. Audit requests for students who register prior to this time will be denied. Students may not change to audit status after Late Registration and Add/Drop, but must remain in the course or withdraw through normal withdrawal procedures. New students must be accepted for admission. Audit forms, available on the Registrar's Office website and in the Registrar's and college advising offices, must be signed by the instructor and presented to the Registrar's Office at the time of registration.

Senior Citizen Audit

Senior citizens (60 years of age or older) who have been residents of the State of Florida for at least one year as of the first day of classes may enroll tuition-free as audit students (i.e., no academic credit) on a space-available basis. Forms to be completed include the "Residency Affidavit," the "Student Health History," and the "Senior Citizen Audit Application" and "Senior Citizen Audit Registration Form." These forms are available in the Registrar's Office (Millican Hall 161) or at the Registrar's Office website. It is necessary to complete the required forms during the last hours of registration as noted in the Academic Calendar. Direct student expenses after the completion of registration include the campus ID card, vehicle registration, and textbooks.

State Employee Registration

State of Florida employee enrollment into courses for which the employee will seek a tuition waiver will occur on a space-available only basis on the last day of registration each term at the time specified on the Academic Calendar. For waiver eligibility and application information, see the “Tuition Support” section.

UCF Employee Registration

UCF employee enrollment into courses for which the employee will seek a tuition waiver will occur on a space-available only basis on the last day of registration each term at the time specified on the Academic Calendar. For waiver eligibility and application information, see the “Tuition Support” section.

Fee Payments

All graduate students must pay their tuition and fees by the published fee payment deadline. If a department or college has not recorded tuition support by then, students must pay all tuition and fees. If a department or college has waived partial tuition and it is recorded, then students must pay the remainder of the tuition owed and all of the fees by the published deadline. It is important for graduate students to register early to provide the department or college enough time to record tuition support. Please visit the Student Account Services website for details on fee invoice and payment procedures.

Residency

For information about Florida Residency for Tuition Purposes and Residency Reclassification, visit the Cost page on the Graduate website.

Fee Invoices

The "Fee Invoice" is your verification of registration. You are not assured of being registered for any class until you print out your Fee Invoice/Schedule. Your fee invoice lists your fees and the classes in which you are registered. Please print a new invoice if you drop or add classes so that the invoice will reflect changes in your fees. Newly admitted students should review their Fee Invoice carefully. If a “non-resident” rate is added to your bill and you believe this is in error, please contact the UCF College of Graduate Studies as soon as possible.

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For information on Florida Residency for Tuition Purposes please visit the "Financial Information" section of this catalog. If you wish to pay your fees by credit card, press the "ePay fees" button, which will take you to the UCF online credit card payment system. Be sure to have your current address on file (see "Address and Email Changes" below).

You may print your "Fee Invoice" through myUCF at my.ucf.edu under the Student Accounts menu or at UCF Kiosks.

Mandatory Health Information

For a student to register, the University of Central Florida requires:

- All incoming students born AFTER 1956 to present documented proof of vaccinations for measles (Rubeola), rubella (German measles), Hepatitis B and Meningococcal Meningitis.
- All students (REGARDLESS OF AGE) are required to submit the UCF Immunization Health History form. Students who are in a program offered solely online (will never come to UCF or an area campus) are only required to submit the UCF health history form with signed waivers.

Students are not allowed to register without proper health information documentation. Please refer to the UCF Immunizations website for specific details of requirements and acceptable documentation. If you have questions, contact the Immunizations Department, UCF Health Services, phone: (407) 823-2701 (option 4); email: immunizations@ucf.edu. Office hours for the UCF Health Services vary. Please visit the UCF Student Health Services website for additional information.

Name Changes

To change the legal name maintained on the student's official UCF record, the student must submit a completed "Change of Name" form and supporting documentation to the appropriate UCF office. Attach to the form a copy of a legal name change document (e.g., marriage certificate, divorce decree, etc.). Undergraduate students must submit the form to the Registrar's Office (Millican Hall 161). Graduate students must submit the form to the UCF College of Graduate Studies (Millican Hall 230). Current UCF employees and students who have been UCF employees within twelve months of the date the name change is requested must submit the form to the Human Resources Office (12565 Research Parkway). The "Change of Name" form is available from the Registrar's Office website or in Millican Hall 161.

Address Changes

To communicate in a more expedient manner, UCF uses e-mail as the primary means of notifying students of important university business and information dealing with registration, deadlines, financial assistance, scholarships, tuition, and fees, etc., as described in the Student Responsibility for University Communication in this catalog.

If the student's address changes, it is the student's responsibility to make the appropriate changes to the address through myUCF at my.ucf.edu. Address changes can also be made by submitting a Change of Address form to the:

UCF College of Graduate Studies
University of Central Florida
P.O. Box 160112
Millican Hall 230
Orlando, FL
32816-0112

or

fax to (407) 823-6442

Transcript Requests

For UCf students applying to UCF graduate programs: You do not need to request transcripts of your UCF coursework. The UCF College of Graduate Studies will request those transcripts internally.

Requests for official UCF transcripts are made through the Registrar's Office (in person, by mail, or by fax). "Transcript Request Forms" are also available on the Registrar’s Office website. A student's academic record can be released only upon written authorization signed by the student. Telephone and e-mail requests are not accepted. Transcripts cannot be released if the student is on hold due to a financial obligation to the university. Transcript requests must include the student's signature, full name, identification number, and the name and complete address of the person(s) or organizations to whom transcripts are to be sent. If final grades or degree statement are needed, indicate that the transcript request is to be held until all requested data are posted.

A $10 per transcript charge is assessed for each transcript request. Payment for official transcripts is required at the time of the request and may be satisfied by cash, check or money order (made payable to UCF), credit card, or UCF Card. Requests received by mail must be accompanied by a check, money order, or credit card information (i.e., card type, card number, 3-digit Security Number, expiration date, and the name to which the card is registered.) Cash payments can be accepted only by the Cashier's Office during that office's regular business hours. The UCF Card payment option is available only at the main Orlando campus and must be made in person at the Registrar's Office (MH 161). Mail written requests for transcripts to Registrar's Office, Attn: Transcripts, P.O. Box 160114, Orlando, FL 32816-0114. For fax request information and payment procedures, refer to the Registrar's Office website or call (407) 823-3100. Transcripts may be sent electronically to other Florida public institutions. Transcripts not claimed with 30 days of printing will be discarded and must be reordered.

2022-2023 Graduate Catalog
A $10 per reordered transcript fee must be submitted with the reorder request. Grades are available from myUCF.

## Enrollment Certifications

Students may obtain their enrollment online through myUCF. Enrollment certification is free to currently enrolled students. Parents, employers, background checking firms, and other third-party agencies may request enrollment and degree verifications online at [http://www.degreechk.com/](http://www.degreechk.com/). A fee will be assessed for all such requests. UCF has contracted with Credentials, Inc. to provide current enrollment, degree, and past attendance verifications online 24 hours a day, seven days a week. Credentials, Inc. Customer Service is available at 1-847-446-1027, ext. 104 between 7:00 a.m. and 7:00 p.m. CST/CDT Monday through Friday.

### Enrollment Status for Fall and Spring Terms

<table>
<thead>
<tr>
<th>Status</th>
<th>Credit Hours</th>
<th>Status</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>6, 7, 8, 9, 10, or 11</td>
<td>Half</td>
<td>4.5**, 5, 6, 7, or 8</td>
</tr>
<tr>
<td>LTHT*</td>
<td>less than 6</td>
<td>LTHT*</td>
<td>less than 4.5</td>
</tr>
</tbody>
</table>

* LTHT = Less Than Half Time

** 4.5 hours applies only to College of Business Administration credit hours.

For students receiving university fellowships, assistantships, and tuition support, see Full-time Enrollment Requirements in the General Graduate Policies section of this catalog.

All Federal loan recipients must enroll at least half-time for each term that a loan is requested (that is, 4.5+ hours in fall/spring; 3+ hours in summer, regardless of classification). The in-school grace and deferment period of the loan remains as long as the student has enrolled at least halftime. Nondegree-seeking students have different requirements and should contact the Office of Student Financial Assistance for specific information.

Students on family insurance policies that require full-time status must take at least 9 hours per semester in the fall and spring terms (6 hours in the summer term) to be considered full time. Students classified as nondegree-seeking must enroll in at least 12 hours of coursework in order to be considered full time.

### VA Educational Benefits

For degree and nondegree-seeking students, the VA benefits pay levels for credit hour enrollment are:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Fall and Spring Terms 9</td>
<td>Summer Term 6</td>
</tr>
<tr>
<td>Fall and Spring Terms 7 or 8</td>
<td>Summer Term 4 or 5</td>
</tr>
<tr>
<td>Fall and Spring Terms 6* (4.5**)</td>
<td>Summer Term 3*</td>
</tr>
</tbody>
</table>

* Tuition and Fee payments apply below these credit hours.

** Applies to College of Business Administration credit hours.

## Withdrawal Policy and Academic Record Change Requests
Withdrawals

Withdrawal for each term begins after "Late Registration and Add/Drop" ends. Students may withdraw from a class and receive the notation of "W" until the date noted in the Academic Calendar. A student may withdraw from courses using myUCF at https://my.ucf.edu, or by visiting the Registrar's Office (Millican Hall 161), certain college advising offices, or a Regional Campus records office. Students may withdraw by fax at (407) 823-5652. Faxed requests must be received by 5:00 p.m. on the last day to withdraw and must include the student's identification number, the course(s) to be dropped, and the student's signature. Students also may send a written request to the Registrar's Office by mail (to P.O. Box 160114, Orlando, FL 32816-0114). This letter must be time-stamped or postmarked before the published withdrawal deadline and must include the student's identification number, the course(s) to be dropped, and the student's signature. Students seeking to withdraw in person must sign the request and must provide photo identification. The official date of withdrawal is the date the university receives the withdrawal request. Requests received by mail are processed using the postmark as the official date of withdrawal.

Withdrawal from classes may have financial aid, NCAA eligibility, or international Visa consequences. Students should seek appropriate advisement prior to withdrawing from a class.

A student is not automatically withdrawn from a class for not attending, nor can an instructor withdraw a student from a class. Upon request, the instructor will provide the student with an assessment of the student's performance in the course prior to the last day of withdrawal.

If a graduate student withdraws from a course while an alleged academically dishonest act is under consideration, and the case is not subsequently resolved in favor of the student, the university reserves the right to assign the appropriate grade for the course.

Late Withdrawals

Withdrawals are not permitted after the deadline except in extraordinary circumstances such as being the primary caretaker of an immediate family member who become seriously ill or injured. Late withdrawal must be requested during the semester in which the withdrawal is sought and as soon as the extraordinary circumstances arise. Unsatisfactory academic performance is not an acceptable reason for withdrawal after the deadline. Graduate students seeking to petition for a late withdrawal should consult the College of Graduate Studies (MH 230). At the time of the request, the College of Graduate Studies will ascertain from the instructor whether the student was passing or failing the course. If the student was passing, a "WP" will be recorded on the student's permanent record; if failing, a "WF" will be entered. Late withdrawals are for all courses taken in the semester. Students who request a late withdrawal from selective classes must provide a compelling reason and documentation (e.g., my son's radiation treatment was at 9:00 a.m. every day, so I only had to stop attending my 9:00 a.m. class).

Medical Withdrawals

Graduate students who seek a withdrawal because they are ill must apply for a medical withdrawal. A medical withdrawal is considered if the student is unable to complete the semester due to a serious mental or physical medical condition. A medical withdrawal applies to all classes taken that semester. Students who request a medical withdrawal from selective classes must provide a compelling reason and documentation.

The student's medical provider(s) will need to provide appropriate medical documentation using the form provide by the College of Graduate Studies. The medical provider must confirm that the illness was such a severity or duration to preclude the completion of the course(s). The medical condition should have arisen during the given semester from which the withdrawal is sought. If the student was aware of the medical condition prior to the beginning of the semester, he/she must provide medical documentation demonstrating that there was a change in the condition during the semester that resulted in an inability to meet course requirements.

If a medical withdrawal is approved, a "WM" will be recorded for each course. A "WM" grade has no effect on your GPA. Graduate students who receive a medical withdrawal may be placed on hold until the university can determine that the student is ready to return.

A medical withdrawal should be submitted as soon as is possible when the medical condition arises. If the student's medical condition does not permit the student to submit the withdrawal request during the semester in which the medical withdrawal is sought, the student has up to six months following the end of the semester to submit for approval and to qualify for a tuition refund.

Late Drops

Graduate students with circumstances determined by the university to be exceptional and beyond their control may apply for a cancellation of enrollment and the elimination of fee liability. Exceptional circumstances include, but are not limited to, the death of an immediate family member, involuntary call to military service, or an administrative error created by the university. A late drop is for all classes taken that semester. Graduate students must submit a petition and all supporting documentation for a late drop of courses to the College of Graduate Studies (Millican Hall 230; (407) 823-2766) within six months of the end of the semester for which the late drop is sought. If approved, a late drop will result in a full refund of tuition and the complete removal of the courses from the academic record.

Late Adds

A late add is considered when a student is unable to add a course(s) by the add deadline as outlined in the Academic Calendar. It is reserved for an unavoidable delay in adding a class or an administrative error in the registration process or advising. A late add can be requested by either a student or a program representative on behalf of a student. A late add is not approved beyond the second week of classes unless there are well-documented extenuating circumstances and instructor approval.

Financial Support

Graduate students who will be supported on assistantships should contact their hiring department to ensure that their assistantship agreement and other hiring documents are completed. Paychecks are delayed when these arrangements are not made prior to the...
beginning of the semester. All graduate students who are receiving university fellowships should register as early as possible so that payment arrangements can be made by the UCF College of Graduate Studies.

**Student Responsibility to Inform Offices**

All graduate students who have financial aid, or who need financial support in order to attend UCF, should be sure to inform all appropriate offices of all changes in financial status. Remember to inform the departmental office, the Office of Student Financial Assistance, and the UCF College of Graduate Studies of all changes related to enrollment, graduate status, or financial support.

**Parking**

All vehicles parked on campus, including evening students' vehicles, must be registered with the Parking Services Office and display the appropriate permit or decal. Parking Services offers assistance to motorists, including battery jump-starts and unlocking car doors. For more information see the Parking Services website.

**Visitor Information Center**

Please visit the Visitor and Parking Information Center for campus information, maps, parking permits and directions. The Visitor and Parking Information Center is located at the corner of Central Florida Boulevard and Gemini Boulevard South. To park on campus without a decal, purchase a daily permit at the Visitor and Parking Information Center or from the mobile app. Daily permits are valid only in student lots. Meters are also available in selected locations.

**Financial Information**

Graduate education provides personal enrichment and a deeper understanding of some aspects of the world around us. It is also an important investment in the future of a community. It is an investment on the part of the student that opens the door to new careers and greater opportunities for advancement to higher paying jobs. It is also an investment on the part of the university and the community as a whole in the training of the next generation of workers, leaders, educators, innovators, and contributing citizens. Besides the time investment, a graduate student has financial expenses that include tuition and education-related fees, instructional supplies, and living expenses. UCF strives to offer the opportunities provided by graduate education at a very reasonable cost.

For a significant portion of the graduate student population at UCF, the process of learning and being trained for disciplines that require graduate-level education includes participating in the research, teaching, and community-building missions of the UCF. This partnership between graduate students and the University is recognized by both the University and the State of Florida by means of graduate funding in the form of fellowships, tuition remission, and research and teaching assistantships. Many of the assistantship appointments represent professional opportunities as well as a means of financial support.

To qualify for fellowships, tuition remission, or assistantships, graduate students are expected to be enrolled full-time in a degree program. Assistantship appointments require the student to be engaged in paid appointments that promote UCF's mission. The details of these requirements are described in the Financial Support Requirements, as well as in the fellowships, assistantships, tuition support, and health insurance pages in the Financial Information section of this catalog.
Financial Support Requirements
Graduate Fellowships
Graduate Assistantships
Graduate Tuition Support
Paid Health Insurance Coverage
Student Financial Assistance
Tax Obligations
Tuition and Fees Costs and Residency

UCF Online

Courses

UCF Online Programs and Students

Online Graduate Certificates

Online Graduate Degree Programs

Courses

UCF offers more than 1,000 online courses to all students every semester. The online course materials and methods have been developed by UCF faculty members to maximize the learner’s achievement of course and program objectives and to provide students with convenient and flexible learning opportunities.

Support for all students in online courses is available at https://cdl.ucf.edu/support/student/. Online courses are identified in the Class Schedule Search available at my.ucf.edu. In the Additional Search Criteria section, use the drop-down list next to Mode of Instruction to search by online class modalities.

UCF’s fully online instruction modes are Web-Based (W) and Video (V). More information on all UCF instruction modes and important course attributes is available at https://cdl.ucf.edu/support/student/modalities/.

UCF Online Programs and Students
UCF offers dozens of programs that can be completed entirely with online courses. Almost all programs have in-person course options but UCF Online provides an option for students who are interested in taking online courses exclusively. Students who choose UCF Online may not enroll in classes with scheduled in-person meetings. This includes classes coded P (in-person instruction), RS, and M (Mixed-mode/reduced seat time).

Students enrolled as a UCF Online student are exempt from some campus-based fees and are restricted from the corresponding campus-based services such as the Recreation and Wellness Center and Student Health Services. UCF Online students do have access to all academic and support services such as financial aid, advising, library services, and career services. UCF Online students also have the support of a dedicated staff of success coaches specifically trained and enabled to meet the needs of students without regular access to UCF’s physical campuses. See [www.ucf.edu/online](http://www.ucf.edu/online) for more information.

### Online Graduate Certificates

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Format</th>
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<tbody>
<tr>
<td>Applied Photonics Graduate Certificate</td>
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<tr>
<td>Autism Spectrum Disorders Graduate Certificate</td>
<td>ONLINE</td>
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<tr>
<td>College Teaching and Leadership Graduate Certificate</td>
<td>ONLINE</td>
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<tr>
<td>Conflict Resolution and Analysis Graduate Certificate</td>
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<td>Corrections Leadership Graduate Certificate</td>
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<td>Crime Analysis Graduate Certificate</td>
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<td>Data Analytics Graduate Certificate</td>
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<td>Data Modeling Graduate Certificate</td>
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<td>Certificate</td>
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<td>Destination Marketing and Management Graduate Certificate</td>
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<td>e-Learning Design, Development, and Delivery Graduate Certificate</td>
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<td>Event Management Graduate Certificate</td>
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<td>Financial Mathematics Graduate Certificate</td>
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<td>Fundraising Graduate Certificate</td>
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<td>Gender Studies Graduate Certificate</td>
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<td>Gifted Education Graduate Certificate</td>
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<td>Guidance Control and Dynamics Graduate Certificate</td>
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<td>Health Care Simulation Graduate Certificate</td>
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<td>Healthcare Systems Engineering Graduate Certificate</td>
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<td>Hospitality and Tourism Technologies Graduate Certificate</td>
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<td>Initial Teacher Professional Preparation Graduate Certificate</td>
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<td>Instructional Design Graduate Certificate</td>
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<td>Instructional Design for Simulations Graduate Certificate</td>
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<td>Instructional/Educational Technology Graduate Certificate</td>
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<td>Juvenile Justice Leadership Graduate Certificate</td>
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<td>Local Director of Career and Technical Education Graduate Certificate</td>
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<td>Mathematical Science Graduate Certificate</td>
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<td>Nonprofit Management Graduate Certificate</td>
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<tr>
<td>Graduate Certificate</td>
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<tr>
<td>Nursing Education Graduate Certificate</td>
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<td>Optical Imaging Systems Graduate Certificate</td>
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<td>Police Leadership Graduate Certificate</td>
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<td>Prekindergarten Disabilities Graduate Certificate</td>
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<td>Professional Writing Graduate Certificate</td>
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<td>Project Engineering Graduate Certificate</td>
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<td>Public Administration Graduate Certificate</td>
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<td>Quality Assurance Graduate Certificate</td>
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<td>Research Administration Graduate Certificate</td>
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<td>Special Education Graduate Certificate</td>
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<td>Systems Engineering Graduate Certificate</td>
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<td>Theoretical and Applied Ethics Graduate Certificate</td>
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<th>Online Graduate Degree Programs</th>
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<tbody>
<tr>
<td>Aerospace Engineering MSAE</td>
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<tr>
<td>Applied Learning and Instructions MA</td>
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<tr>
<td>Career and Workforce Education MA</td>
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<tr>
<td>Civil Engineering MS</td>
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<tr>
<td>Civil Engineering MSCE</td>
</tr>
<tr>
<td>Criminal Justice MS</td>
</tr>
<tr>
<td>Digital Forensics MS*</td>
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<tr>
<td>Educational Leadership MA</td>
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<tr>
<td>Elementary Education MEd</td>
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<td>Emergency and Crisis Management MECM</td>
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<table>
<thead>
<tr>
<th>Program Name</th>
<th>Delivery Mode</th>
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<tr>
<td>Engineering Management MSEM*</td>
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<td>English MA</td>
<td>ONLINE</td>
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<tr>
<td>Environmental Engineering MS</td>
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<td>Environmental Engineering MSEnvE</td>
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<tr>
<td>Event Leadership MS</td>
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<tr>
<td>Exceptional Student Education MEd</td>
<td>ONLINE</td>
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<tr>
<td>FinTech MS</td>
<td>ONLINE</td>
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<tr>
<td>Forensic Science MS</td>
<td>ONLINE</td>
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<tr>
<td>Health Administration MHA</td>
<td>ONLINE</td>
</tr>
<tr>
<td>Health Care Informatics MS, Professional Science Master's</td>
<td>ONLINE</td>
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<tr>
<td>Hospitality and Tourism Management MS</td>
<td>ONLINE</td>
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<tr>
<td>Industrial Engineering MS*</td>
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<tr>
<td>Industrial Engineering MS - Healthcare Systems Engineering</td>
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<tr>
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<td>ONLINE</td>
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<tr>
<td>Instructional Design and Technology MA, Educational Technology Track</td>
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<td>Instructional Design and Technology MA, e-Learning Track</td>
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<tr>
<td>Instructional Design and Technology MA, Instructional Systems Track</td>
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<tr>
<td>Materials Science and Engineering MSMSE*</td>
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<tr>
<td>Mechanical Engineering MSME</td>
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<tr>
<td>Nonprofit Management MNM</td>
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<td>Nursing MSN</td>
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Nursing Practice DNP
Nursing PhD
Optics and Photonics MS
Public Administration MPA
Reading Education MEd
Research Administration MRA
Social Work MSW

Systems Engineering, MSSE
Teacher Education MAT
Travel Technology and Analytics MS

*Note: There may be some courses in the degree and certificate programs above that require limited on-campus attendance for examinations or other activities.

The University of Central Florida has been approved to participate in National Council for State Authorization Reciprocity Agreements. The reciprocity agreements allow for the open delivery of academic credit-earning activities in participating states, including academic field experiences such as internships or practicums. More information available at registrar.ucf.edu/restrictions.

Contact
UCF Online
(855) 903-8576
Web Address: www.ucf.edu/online/

Accreditation

Overview
Graduate Admission Requirement
Recognized Institution
Other Accreditations

Overview
The University of Central Florida is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award degrees at the associate, baccalaureate, master’s, educational specialist, and doctoral levels. Degree-granting institutions also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of UCF may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC’s website (www.sacscoc.org).

More information about UCF’s SACSCOC accreditation may be found at apq.ucf.edu/institutional-accreditation
For the purposes of this catalog, “accredited institutions recognized by UCF” means those institutions accredited by one of the following seven U.S. associations:

- Middle States Commission on Higher Education (MSCHE)
- New England Association of Schools and Colleges, Commission on Institutions of Higher Education (NECHE)
- North Central Association of Colleges and Schools, Higher Learning Commission (HLC)
- Northwest Commission on Colleges and Universities (NWCU)
- Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
- Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges (ACCJC)
- Western Association of Schools and Colleges, Senior College and University Commission (WSCUC)

**Graduate Admission Requirement**

In order to enroll in graduate classes, students must have obtained a baccalaureate or higher degree, prior to the start of the term for which the student is admitted, from an institution accredited by one of the above accrediting agencies or from a recognized foreign institution. Students without a baccalaureate or higher degree from an appropriately accredited institution (or equivalent) are not admitted to graduate degree programs, graduate certificate programs, or graduate nondegree status.

**Recognized Institution**

A "recognized institution" in a country outside of the United States is an institution that is recognized by that nation's Ministry of Education or similar authority, as a postsecondary, academic degree granting institution.

**Other Accreditations**

In addition to the accreditation agencies recognized by UCF, there are a number of scientific, professional, and academic bodies conferring accreditation in specific disciplines. Several UCF graduate programs are accredited or are similarly recognized by one or more of the following agencies:

- Accreditation Committee of the Human Factors and Ergonomics Society (HFES)
- American Psychological Association Commission on Accreditation (APA-CoA)
- American Speech-Language-Hearing Association (ASHA)
- The Association to Advance Collegiate Schools of Business (AACSB International)
- Commission on Accreditation of Athletic Training Education (CAATE)
- Commission on Accreditation for Health Informatics and Information Management (CAHIIM)
- Commission on Accreditation in Physical Therapy Education (CAPTE)
- Commission on Accreditation of Healthcare Management Education (CAHME)
- Commission on Collegiate Nursing Education (CCNE)
- Council for Accreditation of Counseling and Related Educational Programs (CACREP)
- Council on Social Work Education (CSWE)
- Liaison Committee on Medical Education (LCME)
- National Association of School Psychologists (NASP)
- National Association of Schools of Music (NASM)
- National Association of Schools of Theatre (NAST)
- Network of Schools of Public Policy, Affairs and Administration (NASPAA)
- Planning Accreditation Board (PAB)

**Archived Catalogs**

- [2021-2022](#)
- [2020-2021](#)
- [2019-2020](#)
- [2018-2019](#)
- [2017-2018](#)
- [2016-2017](#)
- [2015-2016](#)

The UCF Library maintains an archive of Graduate Catalogs. For previous Graduate Catalogs, search the UCF
Policies

1. General University Policies

Classroom Responsibility

Students are responsible for maintaining classroom decorum appropriate to the educational environment. When the conduct of a student or group of students varies from acceptable standards and becomes disruptive to normal classroom procedures, the instructor has the authority to remove the offending party from the room and refer the student to the Office of Student Conduct (SRC 155) for disciplinary action.

Credit Hour

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or the equivalent amount of work over a different amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) of this definition for academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Golden Rule

The Golden Rule is the university's policy regarding non-academic discipline of students and limited academic grievance procedures for graduate (grade appeals in individual courses, not including thesis and dissertation courses) and undergraduate students. Information concerning The Golden Rule can be found at www.goldenrule.sdes.ucf.edu. Section 11, Student Academic Behavior, addresses appeals of graduate program actions or decisions.

Non-Discrimination Statement

The University of Central Florida does not unlawfully discriminate in any of its education or employment programs and activities on the basis of an individual's race, color, ethnicity, national origin, religion (or non-religion), age, genetic information, sex (including pregnancy and parental status), gender identity or expression, sexual orientation, marital status, physical or mental disability (including learning and intellectual disabilities), political affiliations, prior conviction of a crime, protected veteran's status or membership in any other protected classes as set forth in state or federal law. The University prohibits discrimination based on these protected classes, which includes the prohibition of discriminatory harassment, sexual assault, sexual exploitation, relationship violence, stalking, sexual or gender-based harassment, and retaliation against a person for the good faith reporting of any of these forms of conduct or participation in or party to any investigation or proceeding related to a report of these forms of conduct.

Discriminatory harassment consists of verbal, physical, electronic or other conduct based upon an individual's protected class as set forth above that interferes with that individual's educational or employment opportunities, participation in a University program or activity, or receipt of legitimately-requested services under either Hostile Environment Harassment or Quid Pro Quo Harassment. Hostile Environment Harassment is discriminatory harassment that is so severe, persistent or pervasive that it unreasonably interferes with, limits, deprives, or alters the conditions of education (e.g., admission, academic standing, grades, assignment); employment (e.g., hiring, advancement, assignment); or participation in a University program or activity (e.g., campus housing), when viewed from both a subjective and objective perspective. Quid Pro Quo Harassment is discriminatory harassment where submission to or rejection of unwelcome conduct is used, explicitly or implicitly, as the basis for decisions affecting an individual's education; employment; or participation in a University program or activity.

Sexual harassment is any unwelcome sexual advance, request for sexual favors, or other unwanted conduct of a sexual nature, whether verbal, non-verbal, graphic, physical or otherwise, when the conditions for Hostile Environment Harassment or Quid Pro Quo Harassment are present. Gender-based harassment includes harassment based on gender, sexual orientation, gender identity, or gender expression, which may include acts of aggression, intimidation, or hostility, whether verbal or non-verbal, graphic, physical, or otherwise, even if the acts do not involve conduct of a sexual nature, when the conditions for Hostile Environment Harassment or Quid Pro Quo Harassment are present. Sexual assault consists of sexual contact and/or sexual intercourse that occurs without consent. Sexual exploitation is purposely or knowingly doing or attempting to do any of the following: recording or photographing private sexual activity and/or a person's intimate parts (including genitalia, groin, breasts or buttocks) without consent; disseminating or posting images of private sexual activity and/or a person's intimate parts (including genitalia, groin, breasts or buttocks) without consent; allowing third parties to observe private sexual activity from a hidden location (e.g., closet) or through electronic means (e.g., Skype or live streaming of images); subjecting another person to human trafficking; or exposing another person to a sexually transmitted infection or virus without the other's knowledge. Relationship violence includes any act of violence or threatened act of violence that occurs between individuals who are involved or have been involved in a sexual, dating, spousal, domestic, or other intimate relationship. Stalking occurs when a person engages in a course of conduct directed at a specific person under circumstances that
would cause a reasonable person to fear for the persons safety or the safety of others, or to experience substantial emotional distress.

A student or employee determined by the University to have committed an act of discrimination as described above is subject to disciplinary action, up to and including permanent separation from the University. Third Parties who commit these acts may have their relationships with the University terminated and/or their privileges of being on University premises withdrawn.

Most University faculty and staff (including professors, lecturers, instructors, academic advisors, trainers, coaches, and resident assistants) are not confidential employees and are required to immediately report to the University's Title IX Coordinator, Matt Ricke, phone (407) 823-1336 all relevant details (obtained directly or indirectly) about an incident of sexual assault, relationship violence and/or stalking that involves any student. Confidential employees (including Health Services employees, Counseling and Mental Health Services employees, Ombuds Office employees, Student Legal Services employees and Victim Services employees) are not required to make these reports and will not disclose information without the permission of the student (subject to limited exceptions). More information about UCF's resources and reporting options for individuals who have experienced sexual harassment (including sexual violence) and related policies can be found at https://letsbeclear.ucf.edu/.

Employees, students, contractors, vendors, visitors, guests or third parties may obtain further information on this policy, including grievance procedures, from the Office of Institutional Equity (OIE). Nancy Myers, OIE Director, is responsible for the University's response to all forms of discrimination based on a protected class, and Matt Ricke is the Title IX Coordinator who is responsible for the University's response to reports of sex discrimination. For more information about OIE, please visit the OIE website or call (407) 823-1336.

Records

Student records submitted to the university become the property of the university and cannot be returned to or copied for the student or released to a third party. Student records are digitally scanned.

Family Educational Rights and Privacy Act (FERPA)

The procedures for protecting the confidentiality of student records are based on state regulations and the federal Family Educational Rights and Privacy Act of 1974. FERPA affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's education records within 30 days of the day the University receives a written request for access. Students should submit to the University Registrar, dean, head of the academic department, or other appropriate officials, written requests that identify the record(s) they desire to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed;
2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading. The student may ask the University to amend a record that he or she believes is inaccurate or misleading. The student should write the University official responsible for the record, clearly identify the part of the record to be changed, and specify why the current record is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of their right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing;
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing their tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill their professional responsibility; and
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by a State University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington DC, 20202-4605.

Directory Info

FERPA authorizes the University to classify certain information concerning students as directory information, which means that it may be released to anyone upon request. In accordance with Florida Statutes Section 228.093, the University is required to release student directory information to independent vendors upon request. Directory information at UCF includes:

- name,
- current mailing address,
- telephone number,
- date of birth,
- major field of study,
- dates of attendance,
- enrollment status,
- degrees and awards received,
- participation in officially registered activities and sports, and
- athletes height and weight.

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All other student information will be released in accordance with FERPA; in most cases, this requires the student's prior written and signed consent. The University extends to students the opportunity to withhold any or all information, including directory information. Students can do this online at [https://my.ucf.edu > Student Self Service > Student Center > Personal Information > FERPA/Directory Restriction or complete the Directory Disclosure/Release Authorization form available at the Registrars Office (Millican Hall 161) or at [https://registrar.ucf.edu/], requesting that this information be withheld. The Golden Rule outlines the University procedures for confidentiality. For additional information describing FERPA policy, go to the Department of Education Family Policy Compliance Office website.

Higher Education Act

Lists, descriptions, and sources of information required for disclosure under the Higher Education Act may be obtained from the Registrars Office (Millican Hall 161) or from the Registrars website ([Higher Education Act](https://www.eeo.ucf.edu)).

Religious Observances

It is the policy of the University of Central Florida to reasonably accommodate the religious observances, practices, and beliefs of individuals in regard to admissions, class attendance, and the scheduling of examinations and work assignments. A student who desires to observe a religious holy day of their religious faith will notify all of their instructors and be excused from classes to observe the religious holy day.

The student will be held responsible for any material covered during the excused absence but will be permitted a reasonable amount of time to complete any work missed. Where practicable, major examinations, major assignments, and university ceremonies will not be scheduled on a major religious holy day.

Students who are absent from academic or social activities because of religious observances will not be penalized. A student who believes that they have been unreasonably denied an educational benefit due to their religious belief or practices may seek redress under the Student Grievance Procedure, located in [The Golden Rule](https://www.eeo.ucf.edu).

Sexual Harassment Policy

The University of Central Florida values diversity in the campus community. Accordingly, discrimination on the basis of race, sex, national origin, religion, age, disability, marital status, parental status, veterans status, sexual orientation, or genetic information is prohibited.

Sexual harassment, a form of sex discrimination, is defined as unwelcome sexual advances, requests for sexual favors, or verbal or physical conduct of a sexual nature including any of these three situations.

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or enrollment.
2. Submission to or rejection of such conduct by an individual is used as the basis for employment or enrollment decisions affecting such individual.
3. Such conduct has the purpose or effect of substantially interfering with an individual's work performance or enrollment, or creating an intimidating, hostile, or offensive working or academic environment.

Sexual harassment is strictly prohibited. Occurrences will be dealt with in accordance with the guidelines above and university rules. Employees, students, or applicants for employment or admission may obtain further information on this policy, including grievance procedures, from the OIE Coordinator. The Director of the Office of Institutional Equity Programs is the campus Equity Coordinator responsible for concerns in all areas of discrimination. The office is located on the main campus, in Barbara Ying CMMS Building 81, Suite 101. The phone number is (407) 823-1336. Policies and guidelines are available online at [http://www.eeo.ucf.edu](http://www.eeo.ucf.edu).

Student Conduct

Students are subject to federal and state laws and local ordinances as well as regulations prescribed by the University of Central Florida and the Florida Board of Governors. The breach or violation of any of these laws or regulations may result in disciplinary action. Behavioral breaches of state law, UCF requirements, or program expectations are grounds for dismissal from the program of study and the university. Detailed conduct regulations and procedures are presented in [The Golden Rule](https://www.eeo.ucf.edu).

A person applying for admission to UCF who has declared an adjudication of a violation of conduct policies at a previous college or university or a violation of the law that resulted in probation, community service, a jail sentence, or the revocation or suspension of their driver's license (including traffic violations that resulted in a fine of $200 or more) will have circumstances of the case reviewed by the Office of Student Conduct (Ferrell Commons, room 227) to consider eligibility for admission.

University Closings

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In the event of some extraordinary event (such as a natural disaster or prolonged power outage), the President shall determine whether it is necessary to cancel classes and approve administrative leave for employees in affected areas. Department chairs, in consultation with their faculty and with the college dean, shall determine the effect on final examinations and other academic matters.

University Notices

This catalog contains a description of the various policies, academic programs, degree requirements, course offerings, and related matters intended to be in effect at the University of Central Florida during the 2021/2022 academic year. However, any matter described in this catalog is subject to change. As a result, statements in this Graduate Catalog may not be regarded in the nature of binding obligations on the institution or the State of Florida, or as an irrevocable commitment from the University to the reader.

Drug-Free Workplace/Drug-Free Schools Policy Statement

Standards of conduct and disciplinary sanctions will be imposed for the unlawful possession, misuse or distribution of illicit drugs and alcohol by UCF students and employees on UCF property or as part of any of its activities. The unlawful manufacture, distribution, dispensation, possession, possession or misuse of a controlled substance, prescription medication or the unlawful possession and use of alcohol is harmful and prohibited in and on UCF owned and controlled property or as part of any of its activities. Any UCF employee or student determined to have violated this policy shall be subject to disciplinary action for misconduct, an action which may include termination/expulsion and referral for prosecution. No employee/student is to report to work/class or attend any university activity while under the influence of illegal drugs or alcohol. Violation of these policies by an employee/student will be the reason for evaluation/treatment for drug/alcohol disorder and/or for disciplinary action up to and including termination/expulsion and/or referral for prosecution consistent with local, state and federal law.

Academic Behavior Standards

The University of Central Florida is committed to a policy of honesty in academic affairs. Examples of conduct for which students may be subject to academic and/or disciplinary penalties including expulsion are:

- **Cheating**, whereby non-permissible written, visual, or oral assistance including that obtained from another student is utilized on examinations, course assignments, or projects. The unauthorized possession or use of examination or course related material may also constitute cheating.
- **Plagiarism**, whereby another's work is deliberately used or appropriated without any indication of the source, thereby attempting to convey the impression that such work is the student's own. Any student failing to properly credit ideas or materials taken from another has plagiarized.
- **Unauthorized assistance**, which is communication to another through written, visual, or oral means where the presentation of material has not been studied or learned, but rather was obtained solely through someone else's efforts and used as part of an examination, course assignment or project. The unauthorized possession or use of examination or course related material may also constitute cheating.
- **Commercial Use of Academic Material**, which is selling notes, handouts, etc. without authorization or using them for any commercial purpose without the express written permission of the university and the Instructor is a violation of this rule.

**NOTE:** A student who has assisted another in any of the aforementioned breach of standards shall be considered equally culpable. In cases of cheating or plagiarism, the instructor may take appropriate academic action ranging from loss of credit for a specific assignment, examination, or project to removal from the course with a grade of "F". Additionally, the instructor may request disciplinary action through the Office of Student Rights and Responsibilities as outlined in The Golden Rule.

Student Use of Technology

The University of Central Florida expects all students to have ready access to a personal computer and software appropriate to his or her field of study. Students can meet this expectation by purchasing or leasing a computer, sharing a computer with family or roommates, or using a UCF computer lab.

All UCF students should expect to use a personal computer in many university activities, including course work, accessing library information, registering for classes, and e-mailing correspondence to instructors or fellow students. In addition, many UCF courses require the use of the Internet.

The University of Central Florida has developed one of the nations most advanced campus technology environments, and all UCF students are provided free e-mail accounts and Internet access. Students wishing to acquire a personal computer are strongly advised to consider a laptop equipped with a wireless networking card. Recommended configurations can be found on the universitys website at www.cstore.ucf.edu.

Student Responsibility for University Communication

UCF uses email as the official means of notifying students of important university business and academic information concerning registration, deadlines, financial assistance, scholarships, student accounts (including tuition and fees), academic progress and programs, and many other critical items for satisfactory completion of a UCF degree program. The university sends all business-related and academic messages to a students Knights Email address to ensure that there is one repository for that information. Every student must register for, and maintain a Knights Email account at https://extranet.cst.ucf.edu/kmailselfsvc and check it regularly to avoid missing important and critical information from the university. Any difficulty with establishing an account or with accessing an established account must be resolved through the UCF Computer Services Service Desk so that a student receives all important messages.

Additionally, each student must have an up-to-date emergency e-mail address and cell phone number by which to be reached in case of a crisis on campus. This emergency contact information will be used only for emergency purposes. Also, both permanent and local...
mailing addresses must be on the record, so that any physical documents that must be mailed can be delivered.

It is critical that students maintain and regularly check their Knights Email account for official announcements and notifications. Communications sent to the Knights Email address on record will be deemed adequate notice for all university communication, include issues related to academics, finances, registration, parking, and all other matters. The University does not accept responsibility if official communication fails to reach a student who has not registered for, or maintained and checked on a regular basis, their Knights Email account. Please ensure that this information is current and that any changes in contact information are made online through the myUCF portal at https://my.ucf.edu/.

Complaint Policy

The University of Central Florida supports the right of students to file grievances, lodge complaints, and make appeals in a safe environment free of fear, retaliation, or other adverse consequence. The university has a number of offices and committees that are responsible for implementing the institution's established procedures for addressing written academic and non-academic student complaints.

In most cases, the recommended strategy for complaints of any nature is to ask the concerned individual to first contact the person or office most directly connected to the issue, unless there are compelling reasons not to do so. If the concerned individual does not want to contact a faculty or staff member directly, he or she begins with the next highest level of authority, which typically is the department chair or director. If the problem or complaint is unresolved or the individual is not satisfied with the resolution, they may file a written grievance or appeal. Specific procedures are included in specific sections of this catalog and the Golden Rule.

2. General Graduate Policies

Academic Common Market Scholars

The University of Central Florida is a participating institution in the Academic Common Market (ACM) program with other southern universities sharing unique academic programs on the undergraduate and graduate level. However, the University of Central Florida only participates at the graduate level.

The Academic Common Market offers students the opportunity to enter degree programs that are not available in their home state, while still being eligible to pay in-state tuition rates. Students taking part in this program must be admitted by a participating university (notifying that university of their planned attendance as an ACM Scholar) and will need to obtain a letter of certification from their respective ACM state coordinator.

The first step is to contact your respective state coordinator for information on how to apply for the Academic Common Market. Contact information for state coordinators can be found on the following website: http://home.sreb.org/acm/states.aspx.

After making contact with your state coordinator, if you are eligible for the ACM, you can apply to the University of Central Florida online through the website at https://applynow.graduate.ucf.edu/apply/. When filling out the Florida Residency Classification section, select the option that states "I am a Florida Resident for tuition purposes" and fills out the entire section. Before saving the page, you will need to add an explanation for your Florida residency. Please select the letter "N", which states "I am a Southern Regional Education Board's Academic Common Market graduate student".

Upon submission of your application and your program's required admissions criteria, you will receive a decision from the program in which you have applied. If accepted, you can present that information to your state coordinator, who will then be able to provide UCF with a certification letter. With that letter, UCF will then be able to offer you Florida residency for tuition purposes.

The participating universities are located in the following states:

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<th>Alabama</th>
<th>Louisiana</th>
<th>Tennessee</th>
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<tr>
<td>Arkansas</td>
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<tr>
<td>Kentucky</td>
<td>South Carolina</td>
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*Only Florida, North Carolina, and Texas participate at the graduate level.

For more information, please contact the UCF College of Graduate Studies at (407) 823-2766 (Millican Hall 230, P.O. Box 160112, Orlando, FL 32816-0112). Additional information on the Academic Common Market, including contact information for state coordinators and all available academic programs, can be found on the Southern Regional Education Board (SREB) website, www.sreb.org.

Academic Grievance Procedure

The UCF College of Graduate Studies allows for petitions of university requirements and their academic matters. Academic matters are
Academic Progress and Performance

When Graduate Status GPA falls below a 3.0, the following occurs:

1. Impacted students will receive notice from the College of Graduate Studies.
2. The probationary status will be imprinted on the student’s advising transcript and will remain for each successive semester while on probation. This information remains as a permanent record on the transcript.
3. Students will have a maximum of 18 graduate credit hours of graded A-F course work from their Graduate Plan of Study to increase their Graduate Status GPA to 3.0 or higher.

Students who believe they have been treated unfairly may initiate a grievance. The procedure provides several levels of review, and at each level of review, the participants are further removed and have a broader outlook than where the grievance originated. Procedures for initiating an academic grievance can be found at The Golden Rule www.goldenrule.sdes.ucf.edu/ (see section 11).

Petitions of Graduation Requirements Procedures

Students have the responsibility to familiarize themselves with policies and procedures of the university, college, and program. Students are responsible for knowing the degree requirements and for following the policies that govern the academic program. However, when unusual instances arise, making it appropriate for students to request exceptions of existing graduate academic policies for graduate students, graduate students may petition the appropriate unit for an exception to this requirement. The university is always looking for the compelling reason that an exception is warranted, so this needs to be carefully described in any petition. The procedures are:

1. The graduate student completes a Graduate Petition Form and submits it to the graduate program director, specifying the requirement (either a program or university requirement) and the exception desired. The graduate student needs to provide a compelling reason for an exception to be made.
2. The graduate program director may ask the program graduate committee to examine and provide advice about the petition to the graduate program director. The graduate program director will then make a recommendation about the exception to the unit head. The unit head will then make a final recommendation.
3. The petition will then be sent to the College of Graduate Studies for a final decision. The Vice Provost and Dean of the College of Graduate Studies may ask the Appeals Committee of the Graduate Council of the Faculty Senate to examine the information provided in the petition at their next scheduled meeting and make a recommendation concerning the petition to the Vice Provost and Dean.
4. The Vice Provost and Dean of the College of Graduate Studies may consider the input of the Appeals Committee of the Graduate Council and will make a final decision about the petition for the university.

Academic Progress and Performance

Review of Academic Progress

The primary responsibility for monitoring academic performance standards rests with the degree or certificate program. However, the academic college and the UCF College of Graduate Studies will monitor a student's progress and may dismiss any student if performance standards or academic progress as specified by the program, college, or university are not maintained. Satisfactory academic performance in a program includes maintaining at least a 3.0 graduate status GPA (defined below) in all graduate work taken since admission into the program. Satisfactory performance also involves maintaining the standards of academic progress and professional integrity expected in a particular discipline or program.

Graduate Status GPA

A graduate status GPA will be calculated based on the graduate courses taken at UCF since admission into each degree or certificate program. The graduate status GPA is used to monitor the student's progress in the program. The university requires that students must maintain a graduate status GPA of at least 3.0 or higher in order to maintain regular graduate student status, receive financial assistance, and qualify for graduation. This GPA requirement cannot be waived.

In addition, a graduate status GPA will be calculated for nondegree students based on graduate courses taken at UCF while in nondegree status. However, nondegree students' academic standing will not be monitored as it relates to the probationary status or dismissal as outlined below.

Please note that the graduate status GPA does not carry forward from one program to another or from nondegree status into a degree or certificate program.

Probationary Status and Dismissal - Students in a Degree or Certificate Program

In order to earn a graduate degree or graduate certificate at the University of Central Florida, students must have a minimum 3.0 Graduate Status GPA. To ensure that graduate students adhere to this requirement, the College of Graduate Studies conducts GPA audits at the end of each semester. Any student not achieving this mark will be placed on Academic Probationary Status. This is a formal designation. Students may also be placed on Academic Probation or Dismissed for S/U graded courses, but the College of Graduate Studies will not conduct audits of S/U grades. See Maximum Hours of Unsatisfactory Grades for these performance requirements and Review of Academic Performance and Student Conduct for other grounds for probation or dismissal.
4. Students who have fewer than 18 credit hours of course work left in their Graduate Plan of Study will only have the number of remaining credit hours toward degree completion to attain the 3.0 Graduate Status GPA.

5. Students who cannot mathematically attain a 3.0 Graduate Status GPA, either through the 18 credit hours of course work or through the remaining credit hours to degree completion, will be formally dismissed without the probationary period. Exceptions can be made for students who start their final semester of coursework with a 3.0 (or higher) Graduate Status GPA, but fall below a 3.0 when grades post at the end of the final semester of coursework. In this case, the student will be put on probation and may enroll in up to 6 credit hours of electives from their graduate program's approved list of electives. If the student cannot remedy the GPA in the 6 hours, the student will be dismissed.

6. At the end of each semester, the College of Graduate Studies will continue to monitor each student on probation. If further audits reveal that it is mathematically impossible to attain the 3.0, students on probation will be dismissed from the program.

7. Once the 3.0 Graduate Status GPA is met, the student will automatically be removed from Academic Probationary Status and be notified by appropriate communication from the College of Graduate Studies.

8. Students who are placed on probation with Incomplete (I) grades on their record or who earn I grades while on probation are expected to complete their work to satisfy the course requirements as soon as is possible. Once the grade has changed to an A-F letter grade, Graduate Status GPA will be recalculated retroactively to the semester in which the I grade was earned. This updated Graduate Status GPA may cause a student to be dismissed (if it is no longer mathematically possible to earn a 3.0 in the probationary period) or removed from probation (if the 3.0 is now achieved).

9. Incomplete grades can also cause a student who was not on probation to be placed on probation retroactively to the semester of the I grade (when the updated Graduate Status GPA is now lower than a 3.0). All grades following that semester will now be part of the probationary period.

10. International students placed on Academic Probationary Status will be sent to UCF Global for advisement regarding the immigration status implications of this action.

11. Students enrolled in multiple graduate programs may be placed on probation for all graduate programs, depending on their initial admit term to each program. When a student's initial admit term is the same for multiple programs, then the student who falls below a 3.0 will be placed on probation for all programs. If the student's initial admit term is different for each graduate program, the probation is determined for each program, based on the Graduate Status GPA since the initial admit term for each program. In this case, the student may be placed on probation for one or more programs, depending on that calculation. The College of Graduate Studies will inform students about their standing in each program.

Students placed on probation are required to meet with their graduate program director to create a Probation Plan. This plan will state the maximum number of hours that the student can remain on probation (if there are fewer than 18 hours left of graded courses in the student's Graduate Plan of Study) and may include specific direction on courses to be taken and the timing of those courses. In addition, the plan may include other conditions as necessary for the continued enrollment of the student in the program such as retaking courses, taking remedial course work in specified areas, or completing special projects to better prepare the student for success in the program. Failure to meet any of the conditions of the Probation Plan may result in dismissal without any further appeal. The plans are signed by the student and the graduate program director and submitted to the College of Graduate Studies for review and approval. The primary responsibility for monitoring the progress of the student in meeting the terms of the Probation Plan rests with the degree or certificate program, although the appropriate academic college and the College of Graduate Studies may also monitor the plans for compliance.

After dismissal for low GPA, the student may re-apply to the graduate program from which he/she was dismissed after one year of non-enrollment in that program. The student must submit a completely new application (application fee, letters of reference if applicable, AND a statement describing why the student thinks he/she is more capable now to successfully complete the program). If the program admits the student, the student will continue to have the original dismissal denoted on the transcript and will continue with the same graduate status GPA that the student held prior to dismissal. Also, the student is admitted on restricted status. The restriction is that the student must bring their cumulative Graduate Status GPA up to at least a 3.0 in the next 9 hours of enrollment. Graduate programs may not readmit students in cases where it is not mathematically possible to achieve a 3.0 Graduate Status GPA in the next 9 hours of enrollment.

Previously dismissed students accepted into a new program will have a new Graduate Status GPA (see Graduate Status GPA section above).

NOTE: Individual graduate programs may have more stringent grade requirements than described above. Students must abide by the academic performance standards of their graduate program.

Maximum Hours of Unsatisfactory Grades

"C" grades (C, C+, C-), as well as D, D+, D-, F and U grades, are all considered unsatisfactory grades.

A student may apply a maximum total of six semester credit hours of "C" grades, or the "C" grade credits associated with at most two classes, whichever is greater, to satisfy degree program requirements.

Exceeding six semester credit hours of unsatisfactory grades is grounds for dismissal for all degree-seeking and nondegree students. A course in which a student has received an unsatisfactory grade may be repeated, however, both grades will be used in computing the GPA. There is no forgiveness policy for any course taken while in graduate status.

Incomplete Grades

A grade of "I" (incomplete) is assigned by the instructor when a student is unable to complete a course due to extenuating circumstances, and when all requirements can clearly be completed in a short period of time following the close of regular classes. In all circumstances where the "I" grade is received, the student and faculty member must complete an agreement form that specifies how and when the incomplete grade will be made up. This agreement form is submitted with the instructor grade rolls at the end of the semester, and a copy of this agreement is given to the Graduate College for further follow-up. For those students on financial assistance such as loans, the incomplete "I" must be made up by the agreement date. Failure to complete course requirements by that date may, at the discretion of the instructor, result in the assignment of an "F" grade, or a "U" grade for thesis, dissertation, or research report hours. It is the student's responsibility to arrange with the instructor for the changing of the "I" grade.
Grades of "I" must be resolved within one calendar year or prior to graduation, whichever comes first. Incompletes in regular course work left unresolved will be changed to "F" if not changed in the allowed time period, and this time period may be sooner for those receiving financial assistance. The exception to this in enrollment in the thesis (XXX 6971) and dissertation (XXX 7980) hours where the incomplete grade will be allowed to continue until graduation. UCF fellowship students cannot receive fellowship funds while holding incomplete grades and have thirty days from the issuance of the Incomplete to remedy it in order to continue to receive fellowship funds.

**Assistantship Opportunities**

As part of a program's professional development plan for students, full-time graduate students may be offered the opportunity to gain experience as a Graduate Teaching Assistant (or Associate or Grader; GTA), Graduate Research Assistant (or Associate; GRA), or Graduate Assistant. Please visit the Financial Information section in the catalog for more information.

Assignments to these professional development activities are intended to supplement the student's academic program of study in order to give the student professional experiences that will enhance the student's development and prepare them for post-graduation employment. While these activities provide the opportunity for students to be graduate assistants, their overriding purpose is to help develop the skills, abilities, and professionalism of the student.

All graduate assistants (GTAs and GRAs) must be assigned to at least a half-time appointment (0.25 FTE assignment, approximately equivalent to 10 hours per week). However, the standard assignment for graduate assistants is a full-time appointment (0.5 FTE assignment approximately equivalent to 20 hours per week). Students who desire more than a full-time appointment during fall and spring semesters must complete a Supplemental Assignment Form. The UCF College of Graduate Studies will only grant exceptions to this policy in rare circumstances and for compelling reasons related to the student's professional development. Exceptions are granted only rarely during the first year of a student's program of study. Decisions are based on the student's academic record, the appointment FTE, the relationship of the assignments to the student's program of study, support from the graduate program director, and related factors.

**Student FICA exemption**

Graduate assistants who are enrolled at least part-time (5 hours in fall, 5 hours in spring, or 3 hours in summer) will be exempt from FICA/Medicare taxes during pay periods that overlap with the academic term and during breaks of less than five weeks. Breaks longer than five weeks where graduate students are on a graduate assistant appointment but not enrolled will result in withholding FICA/Medicare taxes.

**Catalog Year**

Degree requirements, regulations, and policy for the institution and every academic program are provided in the annual UCF Graduate catalog. The catalog year at UCF is the Fall, Spring, and Summer terms each year. The catalog year prescribes academic, internship, clinical, and/or other professional/accreditation requirements students must fulfill in order to earn that degree or certificate. The catalog year is assigned to the student's first term of enrollment in a graduate degree or certificate program. Students will adhere to that catalog year as long as continuous enrollment is maintained within that degree or certificate. Students who have been readmitted to a program are reassigned to the catalog year associated with the first term of enrollment at readmission.

When changes occur to degree or certificate requirements, they will appear in the next catalog year. In discussion with their program and by request to the College of Graduate Studies, students may switch their catalog year to the new degree requirements. When changing the catalog year, students must comply with all degree requirements listed in the newer university catalog. Students are not permitted to revert to an older catalog.

**Catalog Year - Graduate Program Handbook**

In addition to the requirements listed in the catalog, each graduate program has a handbook, which specifies details about graduate program policies, procedures, and behavioral expectations. All students are expected to comply with all current handbook policies. Violations of program handbook policy can result in probation or dismissal from the graduate program. Handbooks may be updated every year. When the handbook is changed, all current students should be notified by their graduate program to read and comply with the new policies, procedures, and/or expectations.

**Continuous Enrollment**

Students engaged in thesis or dissertation work must be continuously enrolled every term. Doctoral students who have begun taking dissertation hours and Master's students who have completed their required course work and are completing their thesis requirement are required to be continuously enrolled (including summer) until the thesis or dissertation is completed. For details, see the Master's and Doctoral enrollment policies under Thesis and Dissertation Requirements section. Students with extenuating circumstances that will prevent them from enrolling continuously may submit a Leave of Absence Form. See the Special Leave of Absence section for details.
Continuous Enrollment and Active Student Status

Students must be enrolled for at least one semester of every three consecutive semesters in order to maintain active student status. Students who do not meet this enrollment requirement breach continuous enrollment and will be removed from active student status. These students must reapply for admission. Readmission is not guaranteed.

Students with extenuating circumstances that will compel them to be unenrolled for three consecutive semesters or more may complete a Leave of Absence Form to petition to remain in active student status. This form must be submitted no later than the end of the add/drop period of the third semester of non-enrollment. See the Special Leave of Absence section for details.

1. Because of current U.S. government regulations, international students must be enrolled every fall and spring semester. For students in this category, a Leave of Absence is only available for documented medical reasons.
2. A student who is discontinued for breach of continuous enrollment will lose the option of fulfilling the degree requirements originally listed in his/her official program of study already on file and will instead be subject to the degree requirements listed in the graduate catalog in effect at the time the student is readmitted to the program.

Course Category Definitions

(Please see specific policies under Master’s degree and Doctoral degree program requirements for the proper use of hours that can be applied to degrees.)

In an effort to establish a balance among the essential components of graduate degrees, the 2008-2009 Policy Committee of the Graduate Council categorized the wide variety of graduate courses offered at UCF into the three essential components of graduate education: formal course work, research and independent scholarly work, and disciplinary training. While many courses offer a combination of these elements of graduate education, most can be classified as predominantly addressing one of these components. The following definitions were established to help establish a common vocabulary for this categorization.

- **Courses** - All enrollment hours with an official class number.
- **Core/Required courses** - Courses that cover a certain body of knowledge that is central to a program of study. These courses must be taken to fulfill degree requirements, and may only be substituted by equivalent coursework.
- **Elective courses** - Courses that cover a certain body of knowledge that is important, but optional for a program of study.

**Formal Course Work**

- **Formal courses** - Existing UCF courses that involve standard class instruction of a defined body of disciplinary knowledge. These courses involve interactions between a formal course instructor and the students that make up the class and can be traditional, face-to-face courses, web courses, and media-enhanced courses. Such classes include both core/required courses as well as elective courses, seminar courses and independent study courses (XXX 6908), but are distinguished from the various categories of individualized research and scholarly courses.
- **Independent Study (XXX 6908)** - A course of study created outside of the standard-format formal courses offered by the university. Independent Study must have a formally defined core of knowledge to be learned by the student(s). The core of knowledge to be learned by the student(s) must be specified in written form and approved by the student(s), the instructor, and the program coordinator prior to enrollment in Independent Study.

**Research and Independent Scholarly Work**

- **Directed Research (XXX 6918, XXX 5917)** - Graduate-level research/scholarly work. Research hours are taken at the graduate level. These can include laboratory rotations in addition to standard research and scholarly endeavors directed toward completion of a project.
- **Doctoral Research (XXX 7919)** - Doctoral-level research/scholarly work. Research hours at the doctoral level taken prior to passing candidacy. These can include laboratory rotations, preparation for candidacy exams, or standard research and scholarly endeavors directed toward completion of a project or dissertation.
- **Doctoral Dissertation (XXX 7980)** - Research or scholarly hours taken after advancement to candidacy and directed toward completion of a dissertation.
- **Thesis (XXX 6971, XXX 6973)** - Research hours directed toward completion of a thesis.
- **Research Report (XXX 6909)**

Satisfactory (S) or unsatisfactory (U) grades are used to reflect student progress in these research and scholarly work courses. Other grades may not be assigned in these courses. Should a student in a given term be given an incomplete (I), then this grade should be changed to an S or U upon completion of the work. Students who do not maintain satisfactory progress in their research, as determined by their thesis or dissertation advisory committee, may be placed on probation or dismissed should unsatisfactory progress continue.

**Disciplinary Training**

- **Internships (XXX 6946)** - Courses that provide training experiences for students in their discipline. It is not a formal course, but maybe a required element of some programs.
- **Practica and Clinical Practice (XXX 5944 or XXX 6946)**

Graduate programs must select the grading scale for these disciplinary training courses to be either on an "A-F" or Satisfactory (S)/Unsatisfactory (U) scale, but not both in any one section.
Course Requirements

Course Levels of Graduate Work 7000-Level Courses

Courses for doctoral students. Master’s and nondegree students may enroll in 7000-level courses with permission from the program.

6000-Level Courses

Courses for graduate students. Nondegree students should check with the colleges about their ability to enroll in 6000-level courses. Students in accelerated undergraduate/graduate programs should check with their academic adviser before registering for 6000-level courses. Undergraduate registration in 6000-level courses is allowed only in special situations with prior approval by the college. Undergraduate students must be within nine hours of graduation, have a minimum 3.0 GPA, and not register for more than a total of twelve hours in that term. See also the catalog section on Senior Scholars.

5000-Level Courses

Courses for graduate students. Nondegree students and seniors may enroll in 5000-level courses with permission from the program.

Zero Credit Courses

Zero credit hour courses, by definition, have no impact on the overall program hours and should not be used to add fundamental discipline content. A zero credit hour course must not exceed the expected time commitment associated with one credit hour, that is, the amount of work that reasonably approximates not less than one hour of classroom or direct faculty instruction and a minimum of two hours out of class student work each week for approximately fifteen weeks for one semester and/or the equivalent amount of work over a different amount of time (SACSCOC Credit Hours Policy Statement). A zero credit hour course can include laboratory work, internships, practica, studio work, and other academic work.

Split-Level Classes

Although generally discouraged, UCF allows departments to offer split-level undergraduate and/or graduate classes. In such cases, two courses approved for different levels of instruction (e.g., a 4000- and 5000-level course) are offered together in the same room, at the same time, and with the same instructor, but under two different course numbers. In limited cases, classes taught in split-level format may comprise undergraduate and graduate level courses. In general, split-level classes are restricted to situations where the enrollment in one of the courses would be insufficient to allow the course to be offered on a stand-alone basis. When such split-level classes are scheduled, the following conditions must be maintained:

- Both the graduate and the undergraduate courses must have been approved previously through the established university process for approving courses so that there are two separate and complete syllabi for each course, and the syllabi clearly demonstrate more advanced subject matter and expectations for the graduate course than the undergraduate course. The graduate course documents submitted for approval must indicate that the course will be offered in a split-level format.
- Graduate split-level classes must only be assigned to faculty members who meet the university-wide minimum qualifications for teaching graduate-level courses.
- Courses may not be combined into a split-level class if the course numbers of the two courses are more than one level apart. For example, 4000- and 5000-level courses may only be combined into a split-level class; 4000-level courses may not be combined with 6000-level courses.
- Students may not take both the undergraduate and graduate levels of a split-level course for credit, except in the case of performance and seminar classes, which can be taken for credit multiple times. Graduate students must take the graduate level of a split-level course for it to count toward fulfilling graduate program requirements.
- The graduate and undergraduate courses must have distinct requirements and performance expectations. Graduate students must have course requirements or assignments that require more in-depth analysis and understanding of the topics, provide broader coverage of the content area, demonstrate higher knowledge and skills, and/or show greater independence of thought and application of concepts than what is typically required of undergraduate students. The level and amount of learning by graduate students must be equivalent to what is typically expected in 5000-level or higher courses. The different requirements and expectations must be spelled out clearly in the course syllabi for the respective courses.
- Documentation of split-level class offerings must be maintained in the dean’s office of the academic college, in expectation of future audits. Copies of both syllabi must be provided to the Undergraduate and Graduate Deans for all classes offered in a split-level format.

Language Requirements

Foreign language requirements shall be at the option of the individual departments or appropriate units consistent with their college regulations.

Credit by Examination or Waiver

Students who believe they have mastered the content of a graduate-level course should present a portfolio to the graduate program director documenting the learning experience. If the committee, after examining the portfolio, believes the student has mastered the content presented in a graduate-level course, the student should be allowed to demonstrate that mastery through examination. Examination credit may be used to satisfy program course requirements, but not credit hour requirements.

Correspondence Courses

Correspondence courses are not acceptable toward a graduate program of study; however, credit-bearing extension or continuing education courses may be accepted. The acceptance of courses from unaccredited agencies or institutions threatens the integrity and value of the graduate degrees awarded by UCF. Graduate-level coursework demands the mastery of skills, theories, and concepts at a much higher level than undergraduate-level coursework. Therefore, the university will not allow students to transfer coursework from professional societies, independent agencies, employees, or companies unless they are ACE (American Council on Education) certified.

2022-2023 Graduate Catalog
Dual Degree Shared Credit Policy

The following policies apply to course credits that are counted toward fulfilling the requirements in two-degree programs (dual degree shared credit). These policies do not extend to certificate programs. Policies governing credits shared between two certificate programs or between degree programs and certificate programs can be found under either the Graduate Certificate Program Policies or the Transfer of Credit Policy.

The following policies serve to supplement and extend the shared credit policies that can be found in the Transfer of Credit section.

General Limit to Use of Credits for More Than One Degree

No credit hours may be counted for more than two degree programs.

Accelerated Bachelor's/Master's Programs

- Accelerated Bachelor's/Master's programs have a limit of 9 SCH shared credit for graduate degrees requiring up to 36 credit...
hours. For graduate degrees requiring more than 36 credit hours, accelerated Bachelor's/Master's programs have a limit of 12 SCH shared credit. Proposals for accelerated Bachelor's/Master's programs must include a strong curricular rationale that can support the streamlining of credit requirements in the two degrees.

- Shared credit is limited to formal course work, exclusive of independent study. Grades below a B- are not acceptable to fulfill Master's degree requirements if taken while in undergraduate status.
- Only outstanding students may enter accelerated Bachelor's/Master's programs (explicit requirements may be specified by the graduate program). All students in these programs must have met the undergraduate general education requirements.
- Students must apply and be formally admitted to the master's program following receipt of the bachelor's degree.
- Accelerated Bachelor's/Master's programs must be approved by the Graduate Council Curriculum Committee. Such programs must not unduly delay the completion of the bachelor's degree nor limit the breadth of the student's undergraduate experience.

Dual Degree Programs Definition

Dual degree programs lead to two different degree citations on the transcript and two separate diplomas. These may combine master's programs, doctoral programs, and professional degree programs. The purpose of a dual degree program is to allow students to undertake complementary programs of graduate study simultaneously through streamlined curricular arrangements that allow dual credit for a specified set of courses.

Approval

Proposals for all dual degree programs must include a strong curricular rationale that can support the streamlining of credit requirements in the two degrees. Internal, multi-institutional dual degree programs (prescribed curriculum designed for multiple students), and cotutelles (multi-institutional research and educational opportunities designed for single students) must be approved by the Graduate Council Program Review and Awards Committee.

Shared Credit Limit

A minimum of 50% of required credit hours must be unique to each degree and cannot be used for dual credit. Departments and programs may impose more stringent shared credit limits, but may not exceed the university limit.

Student Admission

Students may be admitted directly to a dual degree program. Upon admission, the College of Graduate Studies will place an indicator on the student's record to activate the second program of the dual degree option prior to the completion of 18 SCH in the first program. No admissions requirements established by the College of Graduate Studies or by either individual program may be waived. For example, if one dual degree program requires acceptable scores for the GRE and the other does not require it, the applicant must take the standardized exam to be considered for admission to both degrees. International students must contact UCF Global prior to applying to a dual degree program. Students that apply to the regular program without the dual degree option and later become interested in the dual degree option must contact the dual degree program director prior to completing 18 SCH in the regular program.

Academic Requirements

Formal proposals for dual degree programs must include:

1. a clear rationale for specifying whether a joint or distinct documents can satisfy the thesis/dissertation or capstone requirements for each of the component programs;
2. a clear rationale for specifying whether joint or distinct examinations can satisfy the requirements for each of the component programs; and
3. specifications concerning the composition of the advisory committee, with representation from both programs.

All students must have two co-advisors, with one from each program.

Should a student fail to make satisfactory academic progress and be placed on probation, the student should consult with both advisors about the future course of action. Please refer to the section on Academic Progress and Performance for options fore students who are dismissed as a result of unsatisfactory academic performance. Please note that students dismissed from a dual degree program may only pursue retention and readmission options with one of the degree programs and may not be retained in or readmitted into the dual degree program.

Student Financial Support

Formal proposals for dual degree programs must include a clear structure for the financial arrangements for supported students.

Other Policies

- All standard policies apply.
- The graduate status GPA minimum must be met for both programs.
- Students enrolled in dual degree programs must have both degrees conferred simultaneously. No dual degrees will be awarded retroactively.
- Dual degree proposals must include statements concerning the handling of grievances, intellectual property issues, and the assigning of teaching "credit" and fees.

Enrollment

Students must be enrolled in order to take exams, to conduct research or to use any university resources and to graduate. Students who have completed all degree requirements may enroll in IDS 6999 during their semester of graduation.

2022-2023 Graduate Catalog
Enrollment in Multiple Graduate Programs

- Students are allowed to enroll in multiple master’s and doctoral degree programs.
- Approval of the program(s) where the student is currently enrolled is not required for application to or enrollment in additional program(s).
- The College of Graduate Studies shall inform the program(s) of current enrollment when a student is accepted for enrollment in a new program.
- Students will be held responsible for showing academic progress in each program in which they are enrolled.

Full-time Enrollment Requirements

A full-time degree-seeking graduate student must take at least 9 credit hours in the fall and spring semesters. A half-time load is defined as enrolled in at least 4.5 credit hours in fall and spring terms. During the summer term, full-time is 6 credit hours and half-time is 3 credit hours. There are two exceptions to this policy:

1. For master’s students pursuing a thesis option, full-time enrollment is defined as 3 hours per semester [including summers, of only thesis hours (XXX 6971)], after completion of all coursework and until successful completion and defense of the thesis. Students enrolled in thesis hours simultaneously with coursework hours must be enrolled in a combined nine credit hours to be considered full time for the fall and spring semesters, or six credit hours to be enrolled full time in the summer semester.
2. For doctoral students who have passed the candidacy exam and are registered for doctoral dissertation (XXX 7980) hours only, full-time is 3 hours per semester, including summers, until successful completion and defense of the dissertation.

Special Considerations

One exception to this policy is for students pursuing the Clinical Psychology PhD program that requires a 12-month, full-time pre-doctoral internship (CLP 6949) in which registration for one hour per semester (for a total of three semesters) is also defined as full-time.

All international students on F or J visas must maintain full-time, degree-seeking status regardless of financial support received from the university. F and J visa holders should contact the UCF Global to ensure that their enrollment conforms to the full-time definition for their visa status. International students should not change their course schedule or drop classes without advisement from the UCF Global. All international students who enroll in less than 9 hours per term must submit to UCF Global a Reduced Course Load Form that explains the nature of the reduced hours and must obtain approval from UCF Global (see [https://global.ucf.edu](https://global.ucf.edu) for Reduced Course Load Form). This requirement also applies to international students who are enrolled in less than 9 hours per term in thesis or dissertation hours.

Students who receive financial support from outside UCF and who have loan obligations are responsible for enrolling in the number of credit hours that meet the full-time or half-time criteria specified by the funding source. Enrollment certification is provided by the Registrar’s Office based upon the UCF definition of full-time graduate status.

Students who do not satisfy these full-time enrollment requirements may have to start repaying student loans and will not qualify for graduate assistantships, fellowships or tuition support. Students receiving financial aid should refer to the Program Eligibility Charts on the Office of Student Financial Assistance website under “Receiving Aid” to determine their specific enrollment requirements.

Students receiving veteran’s benefits should contact Veteran’s Affairs for additional information about course loads.

Nondegree seeking students must be enrolled in 12 credit hours or more to be considered in full-time status.

Grade System

The university uses an alphabetic system to identify student grades and other actions regarding student progress or class attendance. This system, with a grade point equivalent per semester hour, is as follows:
<table>
<thead>
<tr>
<th>Grades</th>
<th>Grade Points per Semester Hour of Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.75</td>
</tr>
<tr>
<td>B+</td>
<td>3.25</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.75</td>
</tr>
<tr>
<td>C+</td>
<td>2.25</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.75</td>
</tr>
<tr>
<td>D+</td>
<td>1.25</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>0.75</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit*</td>
</tr>
</tbody>
</table>

* Available only in CHM 1032, CHM 2045C, CHS 1440, ENC 1101, ENC 1102, MAC 1105H, MAC 1105, MAC 1114, MAC 1140, MAC 2147, MAC 2233, MAC 2241, MAC 2253, MAC 2281, MAC 2281H, MAC 2311, MAC 2311H, and STA 2014C. In these classes, NC replaces the use of D+, D, and D-.

**Other Actions**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>N</td>
<td>No grade reported by the instructor</td>
</tr>
<tr>
<td>R*</td>
<td>(followed by grade) Repeated course (Grade Forgiveness)</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory (with credit)/Satisfactory Progress (Research, Thesis, or Dissertation)</td>
</tr>
<tr>
<td>T*</td>
<td>(followed by grade) Subsequently repeated (no credit)</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory (no credit)</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
</tr>
<tr>
<td>WF</td>
<td>Withdrawn Failing</td>
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<tr>
<td>WH</td>
<td>Health Form Withdrawal</td>
</tr>
<tr>
<td>WM</td>
<td>Medical Withdrawal</td>
</tr>
<tr>
<td>WP</td>
<td>Withdrawn Passing</td>
</tr>
<tr>
<td>X</td>
<td>Audit (no credit)</td>
</tr>
</tbody>
</table>

* "R" and "T" actions only apply to undergraduates.

The designation of "N" will be temporarily assigned by the Registrar's Office only in the case when a grade has not been submitted by the faculty by the grades due deadline. The designator will be replaced by the earned letter grade at the earliest opportunity in the semester that immediately follows. The "N" designator may not be assigned by faculty.

Grade changes other than medical withdrawals will be considered only during the semester immediately following the one in which the grade was assigned, except that grades assigned during the spring semester may be changed during either the following summer term or fall semester. A change in grade must be approved by the dean of the college or school. If an academic action such as dismissal or probation has been taken by the university before a grade change, the action will remain in effect regardless of the grade change. A grade will not be changed after a degree has been conferred.

**Late Withdrawal**

Withdrawals are not permitted after the deadline except in extraordinary circumstances such as being the primary caretaker of an immediate family member who becomes seriously ill or injured after the withdrawal deadline. Late withdrawal must be requested during the semester in which the withdrawal is sought and as soon as the extraordinary circumstance arises. Documentation is required, showing that the extraordinary circumstance occurred after the withdrawal deadline. Unsatisfactory academic performance is not an acceptable reason for withdrawal after the deadline. Graduate students seeking to petition for a late withdrawal should consult the College of Graduate Studies (MH 230 or 407-823-2766). Late withdrawals are typically for all courses taken in the semester. Students who request a late withdrawal from selective classes must provide a compelling reason and documentation (e.g., my son's radiation treatment was at 9:00 am everyday, so I only had to stop attending my 9:00 am class).

**Limited Nondegree Students Enrolling in Graduate Classes**

All students who wish to enroll as limited nondegree students at the graduate level will be accepted as nondegree-seeking students at the graduate level. Students wishing to enroll should complete the online graduate application, pay the application fee, provide
transcripts from previous institutions, and complete residency forms.

The UCF College of Graduate Studies will make available the nondegree graduate application form to those faculty who are meeting classes for the first time at an off-campus site or regional campus; those faculty should collect the appropriate information and forms. These materials should be returned directly to the UCF College of Graduate Studies, where they will be processed and students will be registered.

Students will be placed on hold for the following semester’s registration, awaiting the transcript from a previous institution that verifies the bachelor’s degree.

Ownership of Intellectual Property

The "Patent and Invention Policy" for graduate students is included here in its entirety. Departments and colleges should discuss this policy with graduate students at orientations.

PREMISE: UCF has three fundamental responsibilities with regard to graduate student research. They are to: (1) support an academic environment that stimulates the spirit of inquiry, (2) develop the intellectual property stemming from research, and (3) disseminate the intellectual property to the general public. In most cases, UCF owns the intellectual property developed using university resources. The graduate student as the inventor will according to this policy share in the proceeds of the invention.

1. University Authority and Responsibilities: Florida Statute Section 1004.23 authorizes the University to take any action necessary to secure letters of patents, copyrights, and trademarks on any work products and to enforce its rights therein. This policy applies to graduate students who are considered University personnel.

2. Definitions: For the purposes of this policy the following definitions shall apply:
   a. Work includes any copyrightable material (other than journal articles) such as printed material, computer software or databases, audio or visual materials, circuit diagrams, mask works, architectural and engineering drawings, lectures, musical or dramatic compositions, choreographic works, pictorial or graphic works, and sculptural works.
   b. An Invention includes any discovery, invention, process, the composition of matter, article of manufacture, know-how, design, model, technological development, strain, variety, culture of any organism, or a portion, modification, translation, or improvement of these items, and any mark used in connection with these items.
   c. Instructional Technology Material includes motion pictures, film strips, photographic and other similar visual materials, live video and audio transmissions, computer programs, computer-assisted instructional coursework, programmed exhibits, and combinations of the above materials, which were prepared or produced in whole or part by a graduate student, and which are used to assist or enhance instruction.
   d. University Support includes the use of University funds, personnel, facilities, equipment, materials, or technological information, and includes such support provided by other public or private organizations when it is arranged, administered, and/or controlled by the University.
   e. Student-generated Effort means that the ideas come from the graduate student alone outside the field or discipline for which the graduate student is employed by the University, the work was not made with the use of University support, and the University is not held responsible for any opinions expressed in the effort.
   f. Research means the inquiry or examination in some field of knowledge undertaken to establish facts or principles that are true. Research, as used in this policy, does not include work done in an internship or coop setting where new knowledge in a field is not actively sought, but rather a setting that offers a real-life experience for the graduate student.

3. Work(s)
   a. Student-generated Effort - A work made solely by the graduate student, outside the field or discipline for which the graduate student is employed by the University, is the property of the graduate student, who has the right to determine the disposition of such work and the revenue derived from such work.
   b. University-supported Efforts - If the work was not made solely in the course of student-generated efforts, the work is the property of the University, and the graduate student shall share in the proceeds therefrom.
   c. Disclosure -
      i. Upon creation of a work that is potentially patentable, and prior to any publication, the graduate student shall disclose to the Office of Research any work made in the course of University-supported efforts, together with an outline of the project and the conditions under which it was done.
      ii. The Office of Research shall gather information to assess the relative equities of the graduate student and the university in the work.
      iii. Within 120 days after such disclosure, the Office of Research will inform the graduate student whether the university seeks an interest in the work.
      iv. The graduate student and the university shall not commit any act which would tend to defeat the university’s or graduate student’s interest in the work and shall take any necessary steps to protect such interests.

4. Invention(s)
   a. Student-generated Efforts - All inventions made outside the field or discipline in which the graduate student is employed by the university and for which no university support has been used are the property of the graduate student.
   b. University-supported Efforts - An invention made in the field or discipline in which the graduate student is employed by the university, or receiving university support, is the property of the university and the graduate student shall share in the proceeds therefrom.
   c. Disclosure
      i. A graduate student as inventor or co-inventor shall fully and completely disclose to the Office of Research and Commercialization all inventions which the inventor(s) may develop or discover while a graduate student of the University, together with an outline of the conditions under which it was done. With respect to inventions made during the course of approved outside employment, the graduate student as inventor or co-inventor may delay
such disclosure, when necessary to protect the outside employers interest, until the decision has been made by the outside employer whether to seek a patent.

ii. The Office of Research and Commercialization shall inform the graduate student as an inventor as well as all other inventors within 120 days of disclosure as to whether the University wishes to assert an ownership interest in the intellectual property.

iii. The division of proceeds generated by the licensing or assignment of an invention shall be according to the established royalty division set forth in the patent policy of the University of Central Florida Research Foundation.

iv. The graduate student as inventor(s) and the University shall not commit any act which would tend to defeat the University's or inventor's interest in the invention and shall take any necessary steps to protect such interests.

5. Release of Rights - At any stage of making the patent applications, or in the commercial application of an invention, if it has not otherwise assigned to a third party the right to pursue its interests, the Office of Research, may elect to withdraw from further involvement in the protection or commercial application of the invention. At the request of the graduate student in such case, the University shall transfer the invention rights to the inventor(s), in which case the invention shall be the inventor(s)' property, and none of the costs incurred by the University or on its behalf shall be assessed against the inventor in whole or in part.

6. University Policy
   a. The University has a policy addressing the division of proceeds between graduate students and faculty when the research is done and results in a dissertation. (University Regulations, 6C7-2.029 Copyrights, and Patents). The University also has a policy addressing the division of proceeds between UCF inventor(s) and the University (see University Regulations, 6C7-2.029). It is also contained in the Patents and Copyrights Policy of the UCF Research Foundation. This same division of royalties will apply in the disbursement of royalty income to graduate students as inventor(s) unless this has been negotiated in a separate contractual agreement.
   b. All sponsored research done by graduate students enrolled at the University for and with companies must have a contractual agreement with UCF negotiated at the start of that research. Graduate students must be informed at the start of the research about any contractual agreements that would concern the future publication of their research work.
   c. Dissertation or thesis dissemination can be delayed because of patent or proprietary information concerns of a sponsor. This can occur when a prior contractual agreement has been entered into that includes provisions for a research sponsor’s review between the sponsor and University. (See Proprietary and Confidential Information policy.)

Program of Study

A Program of Study is a listing of coursework agreed to by the student and the degree program specifying course degree requirements. A specific Program of Study, which may vary from student to student, must be formulated jointly by the student and the appropriate committee or adviser in the program area and approved by the college. A Program of Study form can be obtained from the graduate program director. This form should be prepared and signed by the adviser and student, then given to the graduate program director for review and filing in the student's permanent file. It must comply with the student's relevant catalog.

Programs of Study for students seeking a master's or specialist degree should be on file with the College of Graduate Studies by the end of the student’s second major term (based on full-time enrollment) and must be on file by the end of the term prior to the term of expected graduation. Programs of Study for students seeking a doctoral degree should be on file with the College of Graduate Studies by the end of the third major term of enrollment (based on full-time enrollment) and must be on file prior to the change to candidacy status.

All graduate programs of study must include independent learning as part of course and other assignments. This may be accomplished by research papers and reports, evidence of reflective learning in individual portfolios, creation of original works, and/or demonstration of integration of knowledge as part of coursework in a capstone course and other requirements for the degree.

The student and their advisory committee may make changes in the program of study at any time with the approval of the graduate program director. However, once established, the program of study cannot be altered solely due to the poor academic performance of the student.

Proprietary and Confidential Information

It is the intent of the University to foster the professional development of its faculty and students. In particular, the proprietary and patent policies serve to protect the interests of UCF graduate students so that they can engage in research that will ultimately be published. In no circumstances should the University knowingly enter into an agreement with outside agencies that would prevent the ultimate publication of the graduate student's work, like a thesis or dissertation or other means. These policies also help to clarify protections for intellectual property contained in theses/dissertations for students who engage in employment outside the University.

If thesis or dissertation work is supported by a contractual agreement with an outside agency, and provision was made in the agreement to delay disclosure of the study's results for the purpose of filing a patent or copyright, then this section describes procedures for handling the thesis/dissertation.

1. Only for those theses and dissertations where a prior written agreement was made between UCF and an outside agency or where the University wishes to pursue a copyright/patent may publication of the thesis/dissertation be delayed, or in exceptional circumstances as determined by the University on a case by case basis. Review and delay of disclosure of the
thesis/dissertation may take up to 6 months.
2. The review by the outside agency or by the University for the purpose of copyright or patent will follow the oral defense of the document. If it appears that the review process will delay certification of the degree or if the delay of disclosure is exercised, the certification process will be completed but the thesis or dissertation will not be released for up to 6 months.
3. No graduate degree will be awarded when the thesis or dissertation, after a reasonable interval, is not available to the public. If the material is sensitive, classified, or will be patented, the thesis or dissertation will not be released for up to 6 months.
4. Contractual agreements that contain provisions for review and delay of disclosure shall be reviewed by the Office of Research. Exceptional cases may include a delay of disclosure for more than six months and/or review prior to the oral defense.
5. The student and the student’s Adviser shall be informed of the possibility of the delay of disclosure at the time of the appointment of the Adviser.

Readmission

To file for readmission, students must complete a new application, submit the application fee, and update their residency information and health history (if applicable). Students should apply for readmission if they were previously admitted and enrolled in a graduate program but have been absent for three consecutive semesters.

Special Leave of Absence

Students who anticipate that they may not be able to enroll continuously due to external circumstances should apply for a Special Leave of Absence. Specifically, students who are taking courses should apply for a Special Leave of Absence when they cannot enroll in more than two consecutive semesters. Students who are in thesis/dissertation hours should apply for a Special Leave of Absence when they cannot enroll in every semester (including summer).

To qualify for a Special Leave of Absence, the student must demonstrate good cause (e.g., illness, family issues, financial difficulties, personal circumstances, recent maternity/paternity, employment issues). The specific reason for the Leave of Absence request must be indicated by the student on the Leave of Absence Form. Due to current U.S. government regulations, international students must be enrolled every fall and spring semester. For students in this category, a Special Leave of Absence is only available for documented medical reasons.

A Special Leave of Absence will be granted only after approval from the Graduate Program Director for the student’s program of study and the College of Graduate Studies (and UCF Global for international students, when applicable).

For students taking classes, the Special Leave of Absence Form must be submitted no later than the end of the add/drop period of the third semester of non-enrollment. For thesis/dissertation students, the Special Leave of Absence Form must be submitted no later than the end of the add/drop period of the term of non-enrollment.

When applying for a Special Leave of Absence, students may request up to 6 consecutive semesters of non-enrollment. Time spent in a Special Leave of Absence (granted Summer 2018 or later) can add a maximum of 3 terms (1 academic year) to the total time limitation for the degree (see the policy regarding Time Limitation for Degree Completion in the master’s, specialist, and doctoral policies). Specifically:

<table>
<thead>
<tr>
<th>Special Leave of Absence Structure</th>
<th>Time Added to Degree Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 term of SLoA</td>
<td>1 term added to time to degree completion</td>
</tr>
<tr>
<td>2 terms of SLoA</td>
<td>2 terms added to time to degree completion</td>
</tr>
<tr>
<td>3+ terms of SLoA</td>
<td>3 terms added to time to degree completion</td>
</tr>
</tbody>
</table>

Special Leave of Absences approved prior to summer 2018 will fall under the old version of the policy. Students who fall under the old version of the policy can petition the 7-year Policy if extreme circumstances of Special Leave of Absence cause a delay beyond 7 years to completion.

If a student fails to enroll in the semester following the last term in the approved Special Leave of Absence, the student will have failed to maintain continuous enrollment and must apply for readmission to the university.

Student Admissions Classifications

Students may be admitted into graduate status in the categories defined below. Classifications within a graduate status may be viewed in the Admissions section of the catalog.

Degree-seeking Students

A degree-seeking student is a student who has been formally admitted into a master’s, specialist, or doctoral program.

Graduate Certificate Students
Students who have applied to and been accepted into a graduate certificate program are classified as graduate certificate students. Graduate certificate students who subsequently apply to and are accepted into a graduate degree program may, at the discretion of the program adviser, transfer the credit hours from one earned graduate certificate program into a graduate degree program.

Nondegree Students

Students are classified in nondegree status if they have not applied to and been accepted into a graduate degree or certificate program. Some students in this status are completing application requirements for a graduate program. Courses taken prior to acceptance to a degree program may be used to fulfill degree program requirements as transfer credits only with the approval of the program director. There are strict transfer credit limits - please see the transfer credit policy and consult with the specific program director.

Student Responsibility to Keep Informed

It is the student’s responsibility to keep informed of all rules, regulations, and procedures required for graduate studies. Graduate program regulations will not be waived or exceptions granted because students plead ignorance of the regulations or claim failure of the adviser to keep them informed.

Transfer of Credit

Receipt of a graduate degree from UCF indicates that a student has completed most of their graduate training through classroom, research, and practical experiences at UCF and that the graduate training they received reflects current knowledge in the field. Graduate program directors have the responsibility to ensure graduate program quality by reviewing transfer credit requests, including courses taken at external institutions or at UCF prior to admission in the graduate program. Transfer credit requests are made to the Graduate Program Director. There are strict transfer credit limits - please see the transfer credit policy and consult with the specific program director.

Student Responsibility for University Communication

UCF uses email as the official means of notifying students of important university business and academic information concerning registration, deadlines, financial assistance, scholarships, student accounts (including tuition and fees), academic progress and problems, and many other critical items for satisfactory completion of a UCF degree program. The university sends all business-related and academic messages to a student’s Knights Email address to ensure that there is one repository for that information. Every student must register for, and maintain a Knights Email account at https://extranet.cst.ucf.edu/kmailselfsvc and check it regularly to avoid missing important and critical information from the university. Any difficulty with establishing an account or with accessing an established account must be resolved through the UCF Computer Services Service Desk so that a student receives all important messages.

Additionally, each student must have an up-to-date emergency e-mail address and cell phone number by which to be reached in case of a crisis on campus. This emergency contact information will be used only for emergency purposes. Also, both permanent and local mailing addresses must be on the record, so that any physical documents that must be mailed can be delivered.

It is critical that students maintain and regularly check their Knights Email account for official announcements and notifications. Communications sent to the Knights Email address on record will be deemed adequate notice for all university communication, including issues related to academics, finances, registration, parking, and all other matters. The University does not accept responsibility if official communication fails to reach a student who has not registered for, or maintained and checked on a regular basis, their Knights Email account. Please ensure that this information is current and that any changes in contact information are made online through the myUCF portal at https://my.ucf.edu/.
at the issuing institution, government agency, or by a translator certified by the American Translators Association (https://atanet.org/).

4. Courses older than 7 years cannot be transferred unless they have been reviewed and approved by a formal committee comprised of graduate faculty in the program. Program-level approvals must be accompanied by statements demonstrating the currency of the course content in the context of the student’s experience. The course must then be approved by the dean or dean’s designee of the relevant college. Approval documentation must be attached with the transfer request to the College of Graduate Studies. All other transfer policies apply. Approved courses are valid if the student maintains continuous enrollment in the graduate program. If the student is readmitted after discontinuation or dismissal, the student must initiate a new transfer request for courses older than 7 years.

5. There are 4 exceptions to this policy as written:
   1. Unless part of an approved dual degree program, a maximum of 9 hours may be used to fulfill the requirements of 2 master’s degrees. In no case can hours be used to fulfill the requirements of more than 2 degrees.
   2. Unless part of an approved accelerated program, a maximum of 9 hours may be used by a student taking graduate courses while in undergraduate status at UCF.
   3. When doctoral programs require a master's degree for admission, credits from the required, earned master's degree may not be used as transfer credits.
   4. To minimize disruption to the student’s research and progress to degree, graduate students recruited to transfer to UCF when their faculty supervisor is being hired by UCF from another institution may transfer up to 66.7% of the total degree requirements if all other transfer requirements are met. In this case, the student’s transfer must be requested by the faculty supervisor being hired by UCF (rather than initiated by the student). This exception still requires the student to complete the following at UCF: a minimum of 9 hours of graded coursework, the requirements for Doctoral Candidacy, and a minimum of 15 hours of dissertation.

Traveling Scholars

The Traveling Scholar status enables a UCF graduate student to take advantage of special resources available on another campus that are not available at UCF (for example, special course offerings, research opportunities, unique laboratories, and library collections). Provided the appropriate approval described below is obtained, Traveling Scholar credits are guaranteed to be accepted as earned UCF credits, as long as the grades obtained are "B-" or higher.

A Traveling Scholar must be recommended by his or her own graduate adviser, who will initiate a visiting arrangement with the appropriate faculty member of the host institution. After agreement by the student’s adviser and the faculty member at the host institution, graduate deans at both institutions will be fully informed by the adviser and have the authority to approve or deny the academic arrangement. A student will register at the host institution and will pay tuition and/or registration fees according to fee schedules established at that institution. The Traveling Scholar Form must be completed by the student and approved by the UCF College of Graduate Studies before any coursework can be taken.

Each university retains its full right to accept or reject any student who wishes to study under its auspices. A Traveling Scholar will normally be limited to one term for a total of six credit hours taken as a traveling scholar at another institution.

A Traveling Scholar is not entitled to displacement allowance, mileage, or per diem payments. The home university, however, may at its option continue its financial support of the traveling scholar in the form of a fellowship or graduate assistantship with any work obligation to be discharged either at the home or at the host institution.

To obtain credit for approved Traveling Scholar courses, the student must request an official transcript be sent from the host institution to the UCF College of Graduate Studies [Millican Hall 230, P.O. Box 160112, Orlando, FL 32816-0112; Phone (407) 823-2766], and the graduate program director must complete the Transfer Request Form so that the credits can be entered into the student database. Credits earned at another institution while in Traveling Scholar status will be considered internal transfer credits and do not count toward the student’s graduate status GPA. These hours may count toward UCF residency requirements if prior approval is obtained. Graduate students are not allowed to be traveling scholars in their final, or graduation, term except by prior approval of the UCF College of Graduate Studies.

An international graduate student who is registered at another educational institution besides UCF as a Traveling Scholar or as a transient student is required to complete a Reduced Course Load Form to satisfy SEVIS requirements of being enrolled full-time. International graduate assistants employed at UCF must be enrolled full-time at UCF.

University Admission Standards

The university seeks to enroll students of the highest quality. In addition, the university encourages applications from a diverse population and values diversity in our graduate programs. Admissions recommendations are made by the academic programs on the basis of a wide variety of information submitted as part of the students application package. Admissions committees consider factors such as students academic qualifications, research and work experiences, professional goals and skills, match with program objectives and professional qualifications, the number of openings available in the program, and the resources available to support the student. An applicants character, integrity, and general fitness to practice a particular profession may also be considered in the admission process. Admission is limited and, in most programs, not all qualified students can be admitted. While UCF supports students obtaining multiple UCF degrees at different levels or in different programs, students who have received a degree in a UCF graduate program are not eligible for admission to the same program, even if it has tracks that have substantively different curricula.
In general, graduate admission to the university requires that students must have obtained (prior to the start of the term for which the student is admitted) the equivalent of a baccalaureate degree from an accredited institution recognized by UCF or from a recognized foreign institution. Students without the equivalent of a baccalaureate degree from an accredited institution recognized by UCF or a recognized foreign institution are not admitted to graduate degree programs, graduate certificate programs, or graduate non-degree status. All applicants for graduate admission must submit official transcripts for all academic work. In addition to the above, all admitted students must submit evidence to document their attainment of the following minimum requirements.

**Minimum UCF Requirement**

1. This regulation applies to all students who seek to be admitted to graduate programs at the University of Central Florida.
2. Each admitted student to a graduate degree program or to a post-baccalaureate professional program must meet the following minimum requirements:
   a. Earned a bachelor's degree or equivalent from a U.S. institution of higher education accredited by one of the following accrediting bodies or its equivalent from a foreign institution:
      i. Accrediting Commission for Community and Junior Colleges (ACCJC)
      ii. New England Commission of Higher Education (NECHE)
      iii. Higher Learning Commission (HLC)
      iv. Middle States Commission on Higher Education (MSCHE)
      v. Northwest Commission on Colleges and Universities (NWCCU)
      vi. Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
      vii. WASC Senior College and University Commission AND
   b. Earned a 3.0 GPA (or equivalent) or better in all work attempted while registered as an undergraduate student working for a baccalaureate degree, OR
   c. Earned a 3.0 GPA (or equivalent) or better in all work attempted while registered as an upper division student working for a baccalaureate degree, OR
   d. Earned a previous graduate degree or professional degree or equivalent from a U.S. institution of higher education accredited by an accrediting body listed in (2)(a) or its equivalent from a foreign institution in a field related to the discipline of the program to which the applicant is applying.
3. Each graduate program may determine other requirements for admission, consistent with the mission and purpose of their college and program beyond those listed in (2). All program admissions requirements must be published in the Graduate Catalog and are required to be reviewed and updated annually.
   a. Graduate programs must include at least 2 of the following materials to support the application:
      i. Letter(s) of reference
      ii. Resume or CV
      iii. Writing Sample
      iv. Personal, Goal, or Professional Statement
      v. Research Statement
      vi. Professional, Academic, Artistic, or Music Portfolio
      vii. Video answer to prompt
      viii. Other relevant supporting materials approved by the College of Graduate Studies
   b. Admissions criteria must not include preferences for applicants on the basis of race, color, national origin, disability, religion, or sex.
4. The requirement to submit GRE, GMAT, or MCAT scores is at the discretion of the program to which the student is applying. Please refer to the current catalog for specific program level standardized test score requirements.
   a. For programs that do not require a GRE or GMAT, all international applicants must submit a course-by-course evaluation of the student’s official transcript by a credential evaluation service recommended by UCF that shows a GPA equivalent of 3.0 from an earned degree equivalent to a U.S. bachelor’s degree obtained from an institution of higher education accredited by an accrediting body listed in (2)(a).
5. In addition to the above requirements, international students must show proficiency in written and spoken English in accordance with the provisions of University Regulation UCF-2.009.
6. All graduate applicants must indicate whether or not Florida residency is claimed. An application or residency affidavit submitted by or on behalf of a student which contains false, fraudulent or incomplete statements may result in denial of admission or denial of further registration and/or invalidation of UCF credit.
7. Exceptions to the above requirements:
   a. In any academic term, up to 20 percent of the graduate students may be admitted in a given degree program as exceptions to the minimum requirements for graduate admissions as defined in paragraph (2) (b) & (c), above.
   b. Students who do not meet the admissions criteria and who wish to enroll in courses but not degree programs at the post-baccalaureate level may enroll under the classification of non-degree seeking students. Graduate programs wishing to admit these students to graduate degree programs after the students have satisfactorily completed up to nine hours of graduate course work may do so provided that the number so admitted is included as part of the 20 percent exception, as defined in paragraph (6)(a), above.
8. Applicants may appeal an admissions decision by following the university admissions appeal procedure. Information regarding this procedure is available in the Admissions section in the Graduate Catalog.

### 3. Doctoral Program Policies

**Academic Integrity Training**

All students newly admitted to doctoral programs must complete training designed to inculcate an awareness and understanding of the fundamental issues of academic integrity and the responsible conduct of research (RCR) in a manner that is consistent with federal
regulations. This required training includes:

1. the online Collaborative Institutional Training Initiative (CITI) “Responsible Conduct of Research” training module in the appropriate disciplinary area; and
2. four face-to-face ethics/RCR workshops coordinated by the College of Graduate Studies and the Office of Research, or an approved alternative training offered as a program requirement for all students in the program.

Students in a program that has approved alternative ethics/RCR training must still complete the online CITI Responsible Conduct of Research training in the appropriate disciplinary area.

The workshops and CITI training modules are open to all UCF graduate students and postdoctoral fellows and associates. For the ethics/RCR workshops, priority is given to doctoral students who are required to complete these workshops prior to advancement to candidacy.

**Deadlines:**

1. The four face-to-face ethics/RCR training requirements must be completed prior to a student's advancement to candidacy.
2. The CITI module should be completed by the end of a student's second major (Fall/Spring) term of enrollment.
3. CITI and RCR training requirements must be completed in a manner that is consistent with federal regulations.

A doctoral student who has not completed the required training in academic integrity and the responsible conduct of research will not be advanced to candidacy.

**Workshops:**

The College of Graduate Studies and the Office of Research offer a series of workshops to enable students to fulfill the four workshop requirement. Students must take at least two workshops from a set of core workshops that focus on: personal integrity in the classroom, plagiarism, data management (including fabrication, falsification, and confidentiality), authorship and peer review, mentor and trainee responsibilities, collaborative research, and conflicts of interest. Students must complete two additional workshops from among the set of core workshops or a series of additional workshops, which will provide more specialized training such as human subjects, animal welfare, and other areas of ethical concern unique to a discipline or research area.

Programs may develop alternatives for the training workshops that focus on issues of particular relevance to their specific disciplines and fields, or that better accommodate the schedules of their students. Alternative training must be offered as a program requirement for all students in the program. The training content must be specified in the syllabus/syllabi of required formal courses and include the core topics listed above, as well as other topics appropriate to the specific discipline. Alternative training content must be submitted for review and approval by the College of Graduate Studies and the Office of Research prior to student attendance.

Further information concerning workshop sessions and registration and how to complete the CITI training module may be found at [Academic Integrity Training](#).

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**Candidacy**

**Admission to Candidacy**

A student must demonstrate their readiness for the PhD program by successfully completing the candidacy examination before admission to full doctoral status and enrollment into dissertation hours. The Candidacy Examination should be taken when the student is nearing the end of coursework. The exam is administered by the members of the student's dissertation advisory committee or another appropriate committee appointed by the program. Admission to candidacy will be approved by the program director and the college coordinator and forwarded to the UCF College of Graduate Studies for status change. Only after admission to candidacy may a student register for doctoral dissertation hours (XXX 7980). Effective beginning Summer 2019, students must have passed candidacy and have the candidacy and dissertation advisory committee documentation received and processed by the College of Graduate Studies by the date listed in the academic calendar in order to enroll in dissertation hours for that term.

Doctoral students admitted to candidacy are expected to enroll in dissertation hours and to devote full-time effort to conducting their dissertation research and writing the required dissertation document. Students in doctoral candidacy must continuously enroll in at least three hours of dissertation coursework (XXX 7980) each semester (including summer) until the dissertation is completed.

**Candidacy Examination**

The purpose of the Candidacy Examination is for the student to demonstrate a strong foundation of knowledge within the specific discipline, and the ability and preparation to conduct independent scholarly research. The committee may examine a broad range of appropriate capabilities, including theory, bibliography, research methodology, and the evaluation of preliminary research, when appropriate. The examination must have a written component; it also may include an oral defense of a written report or dissertation proposal. All written examination materials will be kept in the student's file in the program.

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**Conferral of Master's Degrees for Students in Doctoral Degree Programs**

A student making satisfactory progress in a doctoral program may be eligible to be awarded a master's degree in the same discipline. Policies concerning these degrees can be found under Master's Program Policies.

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2022-2023 Graduate Catalog
To avoid confusion of terminology for examinations, all programs should use the following terms:

**Qualifying Examination**

Eligibility to continue a doctoral program should be limited to superior students who have demonstrated intellectual ability, high achievement, and adequate preparation for advanced study and research in a chosen field. The decision to allow a student continuing progress toward a doctorate is made by the graduate committee of the program area concerned on the basis of the qualifying examination (optional by programs) and/or other criteria as specified by the individual program area. This exam is normally given within the first year of the doctoral program. This is a written examination and is permanently filed in the student's records in the program. Programs have their own requirements as to how many times this exam can be repeated.

**Candidacy Examination**

This exam takes place prior to admission to Candidacy Status. This is a written examination and is permanently filed in the student’s permanent records. It is normally taken near the end of completion of coursework and must be passed before being allowed to enroll in doctoral dissertation (XXX 7980) hours. Programs have their own requirements, which are explained in their graduate student handbooks, as to how many times this exam can be repeated.

**Dissertation Proposal Examination**

After passing the general Candidacy Examination, the student will write and defend a Dissertation Proposal in an oral examination. Programs have their own requirements as to how many times this exam can be repeated. All materials including the approved proposal and other agreements will be kept in the student’s file in the program.

**Dissertation Defense**

This is an oral examination (or defense) of the dissertation.

**Examination Committee**

In some programs, a doctoral examination committee will be formed consisting of several faculty members representing the appropriate disciplines and approved by the Dean or college designee to administer qualifying and/or candidacy examinations. In many cases, this committee will consist of the program graduate committee. All members will evaluate and vote as to whether students have successfully completed the exams.

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**Course Requirements**

The primary objective of doctoral study is to educate students to a point of excellence in conducting, disseminating, and applying scholarly research, with the explicit goal of making original, substantive contributions to their degree discipline. The advanced nature of doctoral education requires student participation, debate, evaluation, and discussion of diverse ideas and approaches. Careful analysis, independent research, and greater understanding and application of ideas are also expected.

The doctoral degree program requirements will consist of core and elective courses, seminars, directed and doctoral research, independent study, and dissertation research.

- Each doctoral program of study will include a minimum of 72 semester hours of graduate credit beyond the baccalaureate degree or a minimum of 42 semester hours of graduate credit beyond the master’s degree; these graduate credits must be taken as part of an approved graduate program of study. Some programs require considerably more than the minimum of 72 hours because of the nature of the discipline and the standards of the associated profession.
- All graduate credits in a doctoral program must be at 5000 level or higher.
- At least one-half of the credit hours used to meet program requirements must be in 6000-level or 7000-level courses, including the allowed number of research and dissertation hours.
- At least 50% of the credits offered for the degree are expected to be derived from a single field of concentration (that is, from one department). However, programs that are interdisciplinary in nature may be exempt from this policy upon approval from the Graduate Council Curriculum Committee.
- Only graduate-level credit with a grade of "C-" or higher may be used to satisfy degree requirements.
- A university-wide minimum of at least 27 hours of formal coursework exclusive of Independent Study (XXX 6908), dissertation and research is required for all doctoral programs; some programs require a greater number of formal coursework hours.
- A university-wide minimum of at least 15 hours of dissertation credits is required for all doctoral programs, although some programs require a greater number of dissertation hours.
- The dissertation hour requirements may only be satisfied by enrollment in dissertation hours.

**Course Levels 6000- and 7000-Level Courses**

A minimum of 36 credit hours (including courses taken in a master's program) must be in 6000-level and 7000-level courses, which are designed, respectively, for graduate students and doctoral students only. For students with waived hours from an earned master's, this amount is at least one-half of the program hours remaining after the waived hours are applied.

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**Dissertation Requirements**

2022-2023 Graduate Catalog
Dissertations are required in all PhD programs. For EdD programs, some tracks require a dissertation, while others require a dissertation-in-practice (see the program information for a description of a dissertation-in-practice). The dissertation consists of an original and substantial research study designed, conducted, and reported by the student with the guidance of the Dissertation Committee. The written dissertation must include a common theme with an introduction and literature review, details of the study, and results and conclusions prepared in accordance with program and university requirements. The dissertation is expected to represent a significant contribution to the discipline. Since this work must be original, it is very important that care is taken in properly citing ideas and quotations of others. Failure to do so is academic dishonesty and subject to termination from the program without receiving the degree. An oral defense of the dissertation is required.

Enrollment in Dissertation Hours

The university requires all doctoral students to take a minimum of 15 credit hours of doctoral dissertation hours; however, specific programs may require more than this minimum. Dissertation research is considered to be a full-time effort, and post-candidacy enrollment in at least three doctoral dissertations (XXX 7980) credit hours constitutes full-time graduate status. Doctoral students who have passed candidacy and have begun taking doctoral dissertation hours (XXX 7980) must enroll in at least three dissertation hours each semester (including summers, without skipping a semester) and continue doing so until they complete and successfully defend the dissertation. Students wishing to enroll in fewer than 3 credit hours must have approval from their advisor. Students who need to interrupt their dissertation work for extenuating circumstances must submit a Leave of Absence Form to the College of Graduate Studies. Submission and approval of the form must be obtained prior to the first day of classes for the term of non-enrollment.

Dissertation Advisory Committee Membership

Doctoral students must have a Dissertation Advisory Committee prior to advancement to candidacy status. The Committee will consist of a minimum of four members who are approved members of the Graduate Faculty or Graduate Faculty Scholars (see Graduate Faculty). At least three members must be Graduate Faculty, one of whom must serve as the chair of the committee. One member must be from either outside the student’s department at UCF (or college, if a college-wide program) or outside the university. The Graduate Program Committee may specify additional advisory committee membership beyond the minimum of four. These additional advisory committee members must also be approved members of the Graduate Faculty or Graduate Faculty Scholars. Graduate Faculty members must form the majority of any given committee.

Committee membership must be approved by the program director and submitted to the College of Graduate Studies. All members must be in fields related to the dissertation topic. The UCF College of Graduate Studies reserves the right to review appointments to a dissertation advisory committee, place a representative on any dissertation advisory committee, or appoint a co-chair. A student may request a change in membership of the dissertation advisory committee with the approval of the program director and re-submission to the College of Graduate Studies.

All members vote on acceptance or rejection of the dissertation proposal and the final dissertation. The dissertation proposal and final dissertation must be approved by a majority of the committee.

Responsibilities of Members of Doctoral Advisory Committees

All members of the doctoral advisory committee have responsibilities. See the Graduate Faculty and Graduate Faculty Scholars Policy for this information.

Dissertation Preparation

Thesis and Dissertation (ETD) describes university requirements and formatting instructions for dissertations and outlines the steps graduate students must follow in order to submit their dissertations electronically to the UCF College of Graduate Studies. The Thesis and Dissertation Office offers online and face-to-face workshops to inform graduate students about procedures, deadlines, and requirements associated with preparing a dissertation. Students who have just passed Candidacy are strongly encouraged to visit the online workshop.

Dissertation students will submit their dissertations electronically. Electronic thesis/dissertation (ETD) submissions will be archived by the UCF library in digital format and will be more widely accessible. In addition, students may use video and audio clips as well as other formats that may be appropriate for their field of study.

All dissertations that use research involving human subjects, including surveys, must obtain approval from an independent board, the Institutional Review Board (IRB), for this prior to starting the research. Graduate students and the faculty that supervise them are required to attend training on IRB policies, so this needs to start well in advance of the research start date. It is imperative that proper procedures are followed when using human subjects in research projects. Information about this process can be obtained from the Office of Research (www.research.ucf.edu). Click on Compliance and the IRB Policy and Procedures Manual is available. In addition, should the nature of the research or the faculty supervision change since the IRB approval was obtained, then new IRB approval must be sought. Failure to obtain this prior approval could jeopardize receipt of the student’s degree.

Students who wish to complete their degree requirements in a given semester must take their oral defense and submit their dissertation to the UCF College of Graduate Studies by the dates shown in the Academic Calendar.

Dissertation Defense

The dissertation defense is an oral presentation and defense of the written dissertation describing the student’s research. The advisory committee will evaluate and judge the dissertation defense. Successful students must demonstrate that they are able to conduct and report original independent research that contributes substantially to the discipline in which they study. The defense is a formal academic requirement and should be accorded respect and dignity, and thus, no refreshments or other distractions should be served during the defense.

Dissertations will be approved by a majority vote of the Dissertation Advisory Committee. Further approval is required from the Dean or Dean designee and the UCF College of Graduate Studies before final acceptance of the dissertation in fulfilling degree requirements.
Graduate programs may elect to offer alternatives to face-to-face dissertation defense. Programs that choose to offer such alternatives must develop and ensure procedures for the implementation of the alternative defense process and procedures must be published in the program's handbook. These procedures should address the form and time for the student's request for an alternative defense and the process for seeking approval.

Review for Original Work

The university requires all students submitting a dissertation as part of their graduate degree requirements to first have their electronic documents submitted through iThenticate for advisement purposes and for review of originality. The dissertation chair is responsible for scheduling this submission to iThenticate and for reviewing the results from iThenticate with the student's advisory committee. The advisory committee uses the results appropriately to assist the student in the preparation of their dissertation.

Before the student may be approved for final submission to the university, the dissertation chair must indicate completion of the Review for Original Work through iThenticate by signing the Dissertation Approval Form.

Dissertation Dissemination

While UCF respects the wishes of students who would like to publish their work and/or apply for patents, it is essential for scholarly research conducted at a university to be available for dissemination. While several options are available for the release of an ETD, it is the goal of the university that all dissertations be available through the UCF Libraries catalog. Students with potential patent concerns are required to discuss the following options with their dissertation adviser and indicate the availability choice on the Thesis and Dissertation Release Option electronic form, which the student submits in the myUCF Student Center.

For those with no patent or copyright concerns:

- Immediate worldwide dissemination with no restrictions.

For those who have patent issues dissemination options must be discussed and agreed to with your adviser. Choices are:

- Pending dissemination of the entire work for six months for patent or other proprietary issues, with an additional six months extension available. Once the patent and proprietary issues are resolved, then immediate worldwide dissemination with no restrictions.
- Pending dissemination of the entire work for six months for patent or other proprietary issues, with an additional six months extension available. Once the patent and proprietary issues are resolved, choosing this option allows the student to make the dissertation available to the university community for the period chosen below, and then for it to be distributed via the Web beyond that time.
  - one year
  - three years*
  - five years*

For those who have copyright concerns dissemination options are a student decision within the guidelines of individual departments that may have requirements for dissemination. If a department has no guidelines for dissemination, then students are free to choose one of the options below. In general, those in the sciences and engineering will choose one year while students in the arts and humanities may choose longer. Choosing this option allows the student to make the dissertation available to the university community for the period chosen below, and then for it to be distributed via the Web beyond that time.

- one year
- three years*
- five years*

*Does not require dissertation adviser signature and approval.

Public Access

Students, faculty, staff, and other interested parties are strongly encouraged to attend dissertation final defense sessions. Notices providing the date, time, and location of such meetings must be announced at least 2 weeks prior to the defense to all academic departments.

These sessions are educational and informative for graduate students and provide an opportunity for colleagues to observe the work of their peers with students. At the discretion of the Chair of the Committee, questions may be invited from the audience. That part of the session involving committee discussion leading to a vote on the acceptance of the work will be closed. Sessions may be recessed briefly to excuse visitors and the candidate before this stage begins.

Doctoral Admission Requirements

Eligibility for admission to a doctoral program is limited to superior students who have demonstrated intellectual ability, high achievement, and adequate preparation for advanced study and research in a chosen field.

Minimum university standards for admission can be found in the Doctoral Admissions section of the catalog. Meeting minimum university admission standards may not satisfy doctoral program admission requirements. Programs often require additional or higher criteria. See the Graduate Programs section of the catalog for specific program requirements.
Time Limitation and Continuous Enrollment

A student has seven years from the date of admission to the doctoral program to earn a doctoral degree. This is not affected by earning a master’s degree along the way.

Extenuating circumstances may arise that hinder a student’s progress towards program completion and the ability to maintain continuous enrollment. If such a need arises, the student may petition for a Special Leave of Absence. Leaves are considered for medical (e.g., illness, injury) or non-medical (e.g., family needs, military deployment).

Students should be proactive in maintaining accurate records with the university and petition for a Special Leave of Absence prior to the need. When this is not possible, students should do so promptly after the need arises. Students are required to complete and submit the Leave of Absence form with all relevant supporting documents.

Students may be granted a Special Leave of Absence for up to 6 consecutive academic terms. Course registration during the granted leave is not required. Time spent in a Special Leave of Absence that was granted Summer 2018 or later can add a maximum of 3 terms (1 academic year) to the total time limitation for degree completion:

<table>
<thead>
<tr>
<th>Special Leave of Absence Structure</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1 term of SLoA</td>
<td>1 term added to the time to degree completion</td>
</tr>
<tr>
<td>2 terms of SLoA</td>
<td>2 terms added to the time to degree completion</td>
</tr>
<tr>
<td>3 terms of SLoA</td>
<td>3 terms added to the time to degree completion</td>
</tr>
<tr>
<td>≥4 terms of SLoA</td>
<td>3 terms added to the time to degree completion</td>
</tr>
</tbody>
</table>

Note: SLoA approved prior to Summer 2018 will fall under the old version of the policy. SLoA approved Summer 2018 or later will follow the new policy. Students that fall under the old version of the policy can petition the 7-year Policy if extreme circumstances of SLoA cause delay beyond 7 years to completion.

Students who do not maintain continuous enrollment without a Special Leave of Absence (see Continuous Attendance and Special Leave of Absence in the General Graduate Policies) or exceed the period allowed in the leave request must file for readmission to the university.

Readmission

If doctoral students do not maintain continuous enrollment (see Continuous Attendance in the General Graduate Policies), they must file for readmission to the university. To file for readmission, the student must complete a new online application. For more information about readmission, refer to the Admissions in this catalog.

Readmission decisions are individually made, based on such factors as space in the program, reasons for the break-in graduate education, progress in the degree program, among others. Readmission is not guaranteed.

4. Education Specialist Programs Policies

Examinations

Educational Leadership majors must successfully complete one 5-hour examination in their major area and one 3-hour examination in an area of specialization. Curriculum and Instruction majors must successfully complete one 3-hour examination in their teaching specialty and one 3-hour examination in the Educational Foundations area. School Psychology (School Psychology Track) students must successfully complete one 3-hour examination during the last semester of enrollment.

Program of Study and Academic Standards

A program of study (i.e., required course work) will be specified by the student's program area and approved by the college. Minimal core requirements for the EdS degree consist of 36 hours beyond the master’s degree, which must include a minimum of 12 graduate-level hours in the specialization area, 6 graduate-level hours in research/statistics, and additional core requirements that are specific to each of the EdS degrees. An approved program of study must be on file with the College of Graduate Studies by the end of the student’s second major term. A graduate status GPA of 3.0 must be maintained in all graduate course work taken at UCF since admission into the specialist program. All academic standards which apply to master’s students will also apply to specialist students.

Specialist Admission Requirements
Minimum university standards for admission can be found in the University Admissions Standards section of the catalog. Meeting minimum university admission standards may not satisfy Educational Specialist program admission requirements. Programs often require additional or higher criteria. See the Graduate Programs section of the catalog for specific program requirements.

**Time Limitation and Continuous Attendance**

The student has seven years from the date of admission (prerequisite, articulation, and foundation courses are exempt) to the specialist program to complete the degree. No course older than seven years, at graduation, may be used in the program of study for a specialist degree. Students who do not maintain continuous enrollment (missing enrollment at the university for a period of three consecutive semesters) must file for readmission to the university, although seven years is measured from when the student was first admitted to the program.

**Readmission**

Specialist students should maintain continuous enrollment in their degree program. Students who anticipate that they may not be able to enroll continuously due to external circumstances should apply for a Special Leave of Absence (see Special Leave of Absence in the General Graduate Policies section).

If specialist students do not apply for a Special Leave of Absence and do not maintain continuous enrollment (see Continuous Attendance in the General Graduate Policies section), they must file for readmission to the university. To file for readmission, the student must complete a new online Application. For more information about readmission, refer to the Admissions section of this catalog.

Readmission decisions are individually made, based on such factors as space in the program, reasons for the break in graduate education, progress in the degree program, among others. Readmission is not guaranteed.

**UCF Education Specialist Programs Purpose**

Education Specialist (EdS) degrees are awarded in Educational Leadership, Curriculum and Instruction, and School Psychology (which offers a track in School Counseling). The EdS degree provides an opportunity for professionals in leadership positions in an educational environment to receive in-depth academic study. This degree provides the opportunity for the development of a high level of professional proficiency in such areas as instruction, supervision, administration, curriculum, and current research literature. The primary goal of the EdS degree is teaching or acquiring professional proficiency in a specialized education-related area. Because the purpose of the EdS degree may differ from that of the EdD, credit earned in an EdS program is not automatically transferable to a doctoral program. Instead, if a holder of an EdS degree enters a doctoral program at a later date, the doctoral advisory committee will decide how much of the credit earned in the EdS program will be credited toward the doctorate. In any case, only 30 hours taken prior to doctoral status may be transferred into the doctoral program of study.

**5. Master’s Program Policies**

**Accelerated Undergraduate and Graduate Programs**

Some programs combine undergraduate and graduate course work in a more seamless educational experience for students, reducing the time spent working on both degrees and providing a challenging educational experience to outstanding undergraduates. These accelerated bachelor's and master's (4+1) programs usually will allow students to complete a bachelor's and master's degree within about five years and are intended for only the most highly qualified undergraduate students.

While students are classified as undergraduate students, they are subject to undergraduate policies. Similarly, when classified as graduate students, they are subject to graduate policies and may qualify for graduate financial support.

The undergraduate requirements listed in the Graduate Catalog for specific programs are for informational purposes only. The official requirements are detailed in the Undergraduate Catalog and take precedence over what is described here.

**Advisement**

**Appointment of Committee or Advisor**

An academic advisor and advisory committee is required when the student is enrolled in a thesis option and can be useful when there is substantial flexibility in course work. It is the responsibility of the department to appoint an advisor and advisory committee.
Conferral of Master's Degrees for Students in Doctoral Degree Programs

A student making satisfactory progress in a doctoral program may be eligible to be awarded a Master's degree in the same discipline. The Master's degree program and the College of Graduate Studies have the authority to determine whether the doctoral program credits satisfactorily fulfill the Master's degree requirements. All requirements for the Master's degree must be fulfilled, including passing all examinations and submitting a thesis, if so required. Up to a maximum of 9 graduate credit hours of substitutions are allowable, provided that the substitutions are higher-level courses for their precise lower-level counterparts, exclusive of substitutions for thesis hours.

In such cases:

1. The program requirements for the Master's degree are governed by the requirement term used for the doctoral degree program.
2. The two degrees are not considered to be part of a formal "dual degree" program and, therefore, are not subject to the policies governing dual degree programs.
3. Courses credited towards the Master's degree are not implemented as transfer credits to another program and therefore fall outside of the transfer credit policy.

The general restriction that no credit hours may be counted for more than two-degree programs applies to these Master's degrees as well. Credits from a previously earned Master's degree may not be used to fulfill the requirements of a Master's degree for a student in a doctoral degree program (a "Master's along-the-way").

Course Requirements

The program requirements for a master's degree may include core and elective courses, seminars, independent study, clinical courses, directed research, and thesis research.

- A minimum of 30 semester hours of post-baccalaureate, graduate work (5000-level or higher) is required and must be taken as part of an approved graduate program of study. Some programs require more than the minimum of 30 hours because of the nature of the discipline and the standards of the associated profession.
- At least half of the credit hours used to meet program requirements must be at the 6000 level.
- Only graduate-level work with a grade of "C-" or higher may be used to satisfy degree requirements.
- For the master's degree, at least 24 semester hours of core and elective courses must be earned exclusive of thesis and research.
- In no case will the number of thesis hours in excess of the amount required by a program be counted toward degree completion.
- At least 50% of the credits offered for the degree are expected to be derived from a single field of concentration (that is, from one department). However, programs that are interdisciplinary in nature may be exempt from this policy upon approval from the Graduate Council Curriculum Committee.
- A research report, capstone course, comprehensive exam, or other culminating experience that demonstrates that graduate students have engaged in independent learning is required in a nonthesis option master's program. An explanation of how the culminating experience promotes independent learning is required in each program's curricular description.
- A thesis hour requirement may only be satisfied by enrollment in thesis hours.
- In the case where a student changes from a thesis to a nonthesis option, up to 6 thesis hours may be used to substitute for other research hours.

Independent Study Hours

- Independent study (XXX 6908) may be taken for a total of no more than six semester hours.

Residence Credit

The master's degree program must include at least 21 semester credit hours taken at UCF. Residence credits may be earned through enrollment in courses physically offered on the main campus; or at the UCF regional campuses (Brevard, Daytona Beach, and Downtown); or at geographical locations where UCF courses are being taught by regular UCF faculty members. Residence credits may also include UCF courses offered through the web or courses taken as a Traveling Scholar if prior approval is obtained.

Master's Admission Requirements

Minimum university standards for admission can be found in the University Admission Standards section of the catalog. Meeting minimum university admission standards may not satisfy master's program admission requirements. Programs often require additional or higher criteria. See the Graduate Programs section of the catalog for specific program requirements.

Other Academic Requirements

Comprehensive Culminating Experience
An appropriate culminating academic experience is required of all master's degree students. It may include a thesis defense, written or oral examination, research report, capstone course, presentation and defense of a portfolio of student work, or other appropriate scholarly activity of a type that has been approved by the Graduate Council that demonstrates that graduate students have engaged in independent learning. An explanation of how the culminating experience promotes independent learning is required in each program's curricular description.

Senior Scholars

UCF undergraduates who meet departmental eligibility requirements may enroll in UCF graduate courses and use them toward their undergraduate degree and their graduate program of study upon admission to a UCF graduate program. As Senior Scholars, they are entitled to use up to nine graduate credit hours (more may apply for some accelerated programs) toward a UCF graduate degree or certificate, provided they have received advisement and written approval to do so from the graduate program director. This permission must be obtained before enrolling in the graduate courses. In addition to approval from the graduate program director, undergraduates must consult their undergraduate adviser to ensure that registration in graduate-level course work will meet their bachelor's degree requirements. The student must receive college and university approval to interrupt the residency requirement. The University Waiver Form can be obtained from the undergraduate department office. Tuition and fees for graduate-level courses are different from undergraduate courses, and it is the student's responsibility to consult with the Office of Student Financial Assistance (http://finaid.ucf.edu/) regarding adjustments that might be needed for Bright Futures and other scholarship funding.

Thesis Requirements

The thesis is the culminating or comprehensive experience for those who conduct an original research study as part of a thesis-option program. The thesis consists of a common theme with an introduction and literature review, details of the study, and results and conclusions. Since the work is original, it is very important that care is taken in properly citing ideas and quotations of others. Academic dishonesty in a thesis, research report, and dissertation work may result in termination from the degree program.

An oral defense of the thesis is required. The approved thesis must be written and prepared in accordance with the program, college, and university requirements. Thesis and Dissertation (ETD) describes university requirements and formatting instructions for theses and outlines the steps that graduate students must follow in order to submit their theses electronically to the UCF College of Graduate Studies.

Additionally, the Thesis and Dissertation Office offers workshops to inform graduate students about procedures, deadlines, and requirements associated with preparing a thesis.

Thesis students are required to submit their thesis electronically. Electronic thesis/dissertation (ETD) submissions are archived by the UCF library in a digital format that is widely accessible. The electronic thesis may include video and audio clips as well as other formats that are appropriate for the field of study.

All theses that use research involving human subjects, including surveys, must obtain approval from an independent board, the Institutional Review Board (IRB) prior to starting the research. Graduate students and the faculty that supervise them are required to attend training on IRB policies, so this needs to start well in advance of the research start date. It is imperative that proper procedures are followed when using human subjects in research projects. Information about this process can be obtained from the Office of Research (www.research.ucf.edu). Click on “Compliance” and the IRB Policy and Procedures Manual is available. In addition, should the nature of the research or the faculty supervision change since the IRB approval was obtained, then new IRB approval must be sought. Failure to obtain this prior approval could jeopardize receipt of the student's degree.

Students who wish to complete their degree requirements in a given semester must take their oral defense and submit their final electronic copy to the UCF College of Graduate Studies by the dates shown in the Academic Calendar.

Thesis Advisory Committee Membership

A student writing a thesis must have a Thesis Advisory Committee consisting of at least three members who are approved members of the Graduate Faculty. This committee will recommend to the Dean of the college regarding the student's program of study, provide continual guidance for the student, and be the principal mechanism for the evaluation of the student's thesis and performance in any general examinations. At least two members of the Thesis Advisory Committee must be Graduate Faculty, one of whom must serve as the chair of the committee. Graduate Faculty Scholars may serve as a member or co-chair of a thesis advisory committee but may not serve as the chair.

Program areas may specify additional committee membership beyond the minimum of three. These committee members must also be approved members of the Graduate Faculty or Graduate Faculty Scholars. Graduate Faculty members must form the majority of any given committee. Additional information regarding the criteria for serving as a member, co-chair, or chair of a Thesis Advisory Committee is provided in the updated Graduate Faculty policy.

Committee membership must be approved by the program director and submitted to the College of Graduate Studies. All members must be in fields related to the thesis topic. The UCF College of Graduate Studies reserves the right to review appointments to a Thesis Advisory Committee, place a representative on any Thesis Advisory Committee, or appoint a co-chair. A student may request a change in membership of the Thesis Advisory Committee with the approval of the program director and re-submission to the College of Graduate Studies.

All committee members vote on acceptance or rejection of the final thesis. The thesis proposal and final thesis must be approved by a
majority of the committee.

Responsibilities of Members of Thesis Advisory Committees
All members of the doctoral advisory committee have responsibilities. See the Graduate Faculty and Graduate Faculty Scholars Policy for this information.

Enrollment in Thesis Hours
After completion of other course requirements, master's level students may be considered full-time if they enroll in at least three credit hours of thesis (XXX 6971) hours only. They subsequently must enroll in three thesis hours each semester continuously (including summers) until the successful completion of minimum program coursework and thesis hours. After which, with the approval of the thesis committee chair or adviser, students may enroll in a minimum of one thesis hour per semester. Students enrolled in thesis hours simultaneously with coursework hours must be enrolled in a combined nine credit hours to be considered full time for the fall and spring semesters, or six credit hours to be enrolled full time in the summer semester. Students who need to interrupt their thesis work for extenuating circumstances must submit a Leave of Absence Form to the College of Graduate Studies. Submission and approval of the form must be obtained prior to the first day of classes for the term of non-enrollment.

Thesis Defense
The thesis defense is an oral presentation and defense of the written thesis describing the student's research. The advisory committee will evaluate and judge the thesis defense. The defense is a formal academic requirement and should be accorded respect and dignity, and thus, no refreshments or other distractions should be served during the defense. Thesis defenses will be approved by a majority vote of the Thesis Advisory Committee. Thesis committee members who do not approve of the thesis may choose not to sign the thesis approval sheet. Further approval is required from the Dean or Dean designee and the UCF College of Graduate Studies before final acceptance of the thesis in fulfilling degree requirements.

Graduate programs may elect to offer alternatives to face-to-face dissertation defense. Programs that choose to offer such alternatives must develop and ensure procedures for the implementation of the alternative defense process and procedures must be published in the program's handbook. These procedures should address the form and time for the student's request for an alternative defense and the process for seeking approval.

Review for Original Work
The university requires all students submitting a thesis as part of their graduate degree requirements to first have their electronic documents submitted through iThenticate for advisement purposes and for review of originality. The thesis chair is responsible for scheduling this submission to iThenticate and for reviewing the results from iThenticate with the student's advisory committee. The advisory committee uses the results appropriately to assist the student in the preparation of their thesis.

Before the student may be approved for final submission to the university, the thesis chair must indicate completion of the Review for Original Work through iThenticate by signing the Thesis Approval Form.

Thesis Dissemination
While UCF respects the wishes of students who would like to publish their work and/or apply for patents, it is essential for scholarly research conducted at a university to be available for dissemination. While several options are available for the release of an ETD, it is the goal of the university that all theses be available through the UCF Libraries catalog. Upon uploading the final ETD to the UCF Libraries ETD website, students, in some cases with their advisers, must choose one of the options for the availability of their ETD through UCF. Students with potential patent concerns are required to discuss the following options with their thesis adviser and indicate the availability choice on the Thesis and Dissertation Release Option electronic form, which the student submits in the myUCF Student Center.

For those with no patent or copyright concerns:
- Immediate worldwide dissemination with no restrictions.

For those who have patent issues dissemination options must be discussed and agreed to with your adviser. Choices are:
- Pending dissemination of the entire work for six months for patent or other proprietary issues, with an additional six months extension available. Once the patent and proprietary issues are resolved, then immediate worldwide dissemination with no restrictions.
- Pending dissemination of the entire work for six months for patent or other proprietary issues, with an additional six months extension available. Once the patent and proprietary issues are resolved, choosing this option allows the student to make the thesis available to the university community for the period chosen below, and then for it to be distributed via the Web beyond that time.
  - one year
  - three years*
  - five years*

For those who have copyright concerns dissemination options are a student decision within the guidelines of individual departments that may have requirements for dissemination. If a department has no guidelines for dissemination, then students are free to choose one of the options below. In general, those in the sciences and engineering will choose one year while students in the arts and humanities may choose longer. Choosing this option allows the student to make the thesis available to the university community for the period chosen below, and then for it to be distributed via the Web beyond that time.

- one year
- three years*
Public Access

Students, faculty, staff, and other interested parties are strongly encouraged to attend thesis final defense sessions. Notices providing the date, time, and location of such meetings must be announced at least 2 weeks prior to the defense to all academic departments.

These sessions are educational and informative for graduate students and provide an opportunity for colleagues to observe the work of their peers. At the discretion of the Chair of the Thesis Advisory Committee, questions may be invited from the audience. That part of the session involving committee discussion leading to a vote on the acceptance of the work will be closed. Sessions may be recessed briefly to excuse visitors and the candidate before this stage begins.

Time Limitation for Degree Completion

The student has seven years from the date of admission to the master's program to complete the degree. Students may transfer in coursework according to the Transfer of Credit policy, however, courses older than seven years at the time of admission will not be transferred into the student's Program of Study.

Students who anticipate being out for an extended period of three consecutive semesters or longer should apply for a Special Leave of Absence no later than the end of the add/drop period of the third semester of absence. Students who do not maintain continuous enrollment without a Special Leave of Absence (see Continuous Attendance and Special Leave of Absence in the General Graduate Policies) must file for readmission to the university, although seven years is measured from when the student was first admitted to the program.

Readmission

Master's students should maintain continuous enrollment in their degree program. Students who anticipate that they may not be able to enroll continuously due to external circumstances should apply for a Special Leave of Absence (see Special Leave of Absence in the General Graduate Policies).

If master's students do not maintain continuous enrollment and have not filed for a special leave of absence (see Continuous Attendance in the General Graduate Policies), they must file for readmission to the university. To file for readmission, the student must complete a new online application. For more information about readmission, refer to the Admissions section of this catalog.

Readmission decisions are individually made, based on such factors as space in the program, reasons for the break-in graduate education, progress in the degree program, among others. Readmission is not guaranteed.

6. Graduate Certificate Program Policies

Certificate Program Admission Requirements

Students currently admitted to a graduate degree program or to non-degree status can apply and are eligible to enroll in graduate certificate programs. In addition, individuals who have previously completed bachelor's, master's, or doctoral degrees are eligible to enroll in certificate programs. In order to apply to a graduate certificate program, a student must submit an online admissions application, pay a $30 application fee, and submit an official transcript showing an earned bachelors or higher degree from an accredited institution recognized by UCF or recognized foreign institution. On the online application, the student must designate the certificate program that they wish to enter. Students are required to submit the application and obtain formal admission to the graduate certificate program. Students are advised to apply for the graduate certificate program well in advance of completion of all required courses. Students must complete the certificate requirements that are listed in the Graduate Catalog that is in effect at the time of their formal admission to the certificate program.

Admission to a certificate program does not guarantee admission to a graduate program. However, once a person is accepted into a master's, specialist, and doctoral graduate program, credits from a completed UCF certificate program may be applied toward an existing graduate program with the consent of the program.

Nondegree students who are enrolled in a certificate program are not eligible for tuition support, assistantships, or fellowships, and are not generally eligible for federal financial aid.

Certificate Programs Purpose

Graduate certificate programs are a way for universities to provide the latest disciplinary knowledge in the most flexible and convenient formats for the professional development of its alums and others who desire further education. Graduate certificate programs are very popular options at UCF for graduate study without having to commit to an existing master's or doctoral program. One of the benefits of enrolling in a graduate certificate program is that later, should students decide to do so, they can usually apply all of the credits earned in the graduate certificate to a graduate program. The graduate certificate program is meant to be flexible and
offer a short-term study that provides specialized knowledge that supplements an existing degree. Graduate certificate programs are particularly helpful to those professions where licensure and continuing professional development are required. Many of our graduate certificate programs are offered online for convenience. One of the most important benefits of our graduate certificate programs is that they are taught by our graduate faculty using regular graduate courses at the university.

UCF has 103 graduate certificate programs available to supplement existing graduate programs or to provide specialized knowledge in disciplines that complement the education of working professionals in the metropolitan area served by UCF. Many of our area employees have advanced graduate degrees and can enhance their education with specialized groups of courses. Frequently, a package of specialized courses that forms a certificate will increase employment credentials, lead to career enhancement, and produce more income.

It is the intent of these programs to be current and to provide specialized, state-of-the-art content to area employees. Often certificate programs are offered using flexible and non-traditional delivery systems that provide the best service to the employees in this metropolitan area. Distributed learning, weekend courses, evening courses, and accelerated term courses are acceptable.

Certificate programs are often ideal for nondegree students who would like to sample graduate courses before committing to a graduate degree program. Certificate programs may round out a graduate degree program, providing a special emphasis that supplements a graduate degree. Frequently, a certificate program can provide an interdisciplinary focus that provides more depth and understanding to an existing graduate program.

Any academic unit may propose a graduate certificate program that encompasses graduate courses in its graduate program. If an interdisciplinary certificate program is proposed, it must be acceptable to departments and faculty offering the courses and graduate programs on which the certificate program is based.

Completion of Graduate Certificate

In order to be processed for completion of a graduate certificate program, students must have obtained formal admission into the graduate certificate program (see Certificate Program Admission Requirements above). Students nearing completion of a graduate certificate program must complete the online Intent to Graduate Form by logging into myUCF and navigating to the Student Self Service> Student Center> Other Academics > Intent to Graduate: Apply. Intents to graduate should be filed online no later than the last day of registration for the semester of graduate certificate completion.

Students will only be processed for completion of a graduate certificate if they have previously submitted a certificate application form, have been formally admitted to the program, and have filed an intent to graduate.

Course Requirements and Loads

A certificate program must include a minimum of nine semester hours. The course work must consist of an integrated and organized sequence of study.

Note: Course substitutions are not permitted in Certificate programs.

No internship or independent study courses may be used in a certificate program. The use of practicum courses in certificate programs is not generally encouraged, but may be used in programs where there is a strong professional setting and on-campus faculty supervision. Alternative delivery programs are acceptable and encouraged.

Certificate students must take the full number of required hours for a certificate program. Generally, a course may not apply toward more than one certificate program. However, if an overlap of coursework occurs between two or more certificate programs for the same student, the student must complete the total required hours by taking electives approved by the program.

All courses that are offered as part of a certificate program must be graduate-level courses. Students must earn course grades of "B-" or better to get credit toward the certificate. Courses may be retaken to achieve a better grade. However, the certificate will only be awarded if the graduate status GPA in the certificate program of study is 3.0 or higher.

Transfer of Credit

No graduate credit hours taken at other institutions can be applied to a graduate certificate program at UCF. If requested prior to the completion of the certificate program requirements, graduate credit hours taken at UCF from a prior baccalaureate, master's, specialist, or doctoral degree may be applied toward a certificate, with the consent of the program, provided they are no more than seven years old. The request for using credits from prior years must be submitted no later than the end of the add/drop period in the semester in which the student takes the final course in the certificate program.

Time Limitation for Certificate Completion

The student has seven years from the date of admission (prerequisite, articulation, and foundation courses are exempt) to the
Certificate program to complete the certificate. In addition, no course older than seven years at the time of graduation may be used in the Program of Study for a certificate.

Students who do not maintain continuous enrollment (missing enrollment at the university for a period of three consecutive semesters) must file for readmission to the university, although seven years is measured from when the student was first admitted to the program.

Students who anticipate being out for an extended period of three consecutive semesters or longer should apply for a Special Leave of Absence no later than the end of the add/drop period of the third semester of absence. Students who do not maintain continuous enrollment without a Special Leave of Absence (see Continuous Attendance and Special Leave of Absence in the General Graduate Policies) must file for readmission to the university, although seven years is measured from when the student was first admitted to the program.

Readmission

Certificate students should maintain continuous enrollment in their certificate program. Students who anticipate that they may not be able to enroll continuously due to external circumstances should apply for a Special Leave of Absence (see Special Leave of Absence in the General Graduate Policies).

The student has seven years from the date of admission to the program to earn their degree. Students who do not maintain continuous enrollment (missing enrollment at the university for a period of three consecutive semesters) must file for readmission to the university. Although seven years is measured from when the student was first admitted to the program.

If certificate students do not maintain continuous enrollment and have not filed for a special leave of absence (see Continuous Enrollment in the General Graduate Policies), they must file for readmission to the university. To file for readmission, the student must complete a new online application. For more information about readmission, refer to the Admissions section of this catalog.

Readmission decisions are individually made, based on such factors as space in the program, reasons for the break-in graduate education, progress in the certificate program, among others. Readmission is not guaranteed.

7. International Graduate Student Policies

English-speaking Ability for Graduate Teaching Associates and Assistants

Students who plan to serve as graduate teaching associates or assistants (GTAs) and for whom English is a second language are required to pass the Versant English test. The Versant English test evaluates an individual's English-speaking skills. This requirement applies to all students from countries where English is not the native language; however, such students will be exempt if they have completed a previous degree from an accredited U.S. college or university recognized by UCF, from a country where English is the only official language, or from a university at which English is the only official language of instruction, or they have received a score of 26 or higher on the Speak portion of the ibt TOEFL. Only exempted students and those who have attended the UCF GTA Training and satisfactorily passed the evaluation of their English-speaking skills may be assigned as GTAs.

For more information about this requirement and the free English-speaking training that the university provides, see English-speaking Ability for Graduate Teaching in the Assistantships section of this graduate catalog and https://graduate.ucf.edu/graduate-teaching/. See Graduate Teaching in the UCF Graduate Student Handbook for Information on registering for GTA Training and Versant English testing.

Full-time Enrollment Requirements

A full-time degree-seeking graduate student must take at least 9 credit hours in the fall and spring semesters. A half-time load is defined as enrolled in at least 4.5 credit hours in fall and spring terms. During the summer term, full-time is 6 credit hours and half-time is 3 credit hours. There are two exceptions to this policy:

1. For master's students pursuing a thesis option, full-time enrollment is defined as 3 hours per semester (including Summers, without skipping a semester) of thesis coursework (XXX 6971), after completion of all coursework and until graduation. Students who wish to enroll in part-time hours should consult their adviser.
2. For doctoral students who have passed the candidacy exam and are registered for doctoral dissertation (XXX 7980) hours only, full-time is 3 hours per semester until graduation. Such students must continue to enroll in at least three dissertation hours each semester (including Summers, without skipping a semester) until they successfully complete the dissertation and graduate. Students who wish to enroll in part-time hours should consult their adviser.

Graduate students receiving assistantships, tuition support, and fellowships must be enrolled full-time as degree-seeking students who maintain good academic progress.

Special Considerations

All international students on F or J visas must maintain full-time, degree-seeking status regardless of financial support received from the university. F and J visa holders should contact UCF Global to ensure that their enrollment conforms to the full-time definition of their visa status. International students should not change their course schedule or drop classes without advisement from the UCF Global. All international students who enroll in less than 9 hours per term must submit to UCF Global a Reduced Course Load Form that explains the nature of the reduced hours and must obtain approval from UCF Global (see https://global.ucf.edu/ for Reduced Course Load Form).
This requirement also applies to international students who are enrolled in less than 9 hours per term in thesis or dissertation hours. Students who do not satisfy these full-time enrollment requirements will not qualify for graduate assistantships, fellowships, or tuition support.

**International Student Employment**

According to U.S. Citizenship and Immigration Services (USCIS) regulations, graduate students who are on an F-1 or J-1 visa may accept employment on campus without prior USCIS approval as long as students are enrolled full-time and employment does not interfere with their studies.

Graduate students who desire to engage in off-campus employment must be approved by the UCF Global for Curricular Practical Training (CPT) prior to beginning the employment. CPT is defined as employment that is an integral part of the established curriculum and can be in the form of an internship or cooperative educational experience. In order to qualify for CPT, there are several requirements that must be met. Please speak with an adviser at the UCF Global for more information on these requirements and prior to engaging in off-campus employment.

During the fall and spring semesters, on-campus employment is limited to no more than 20 hours per week while school is in session. During the summer, on-campus employment may be up to 40 hours per week. (Please note that all graduate assistants during the summer must enroll in a full-time course load.) Employment may also be up to 40 hours per week during vacation or other break periods. Please speak with an adviser at the UCF Global for clarification of these policies.

On-campus employment is not permitted after completion of the program of study unless the student is issued a Form I-20A-B to begin a new program and intends to enroll in the next regular academic term or session.

Students who received a bachelor's degree at one school and will start a master's degree or PhD at UCF are eligible to work during the summer at UCF as long as a Form I-20A-B was issued for the new masters or PhD program.

International students on an F-1 visa are eligible to apply for one year of optional practical training (OPT) after completion of their program.

For more information about the employment of international students, contact the UCF Global at (407) 823-2337 or visit the office to speak with an advisor.

**International Visiting Scholars**

The following policy and procedures allow departments to invite international visitors to study, teach, or participate in research activities at UCF. The policy is directed to those who do not wish to earn a degree, but who may audit courses in the postbaccalaureate, nondegree-seeking status for professional development and who normally have complete financial support provided by some outside agency. These visiting scholars will have J-1 visa status and use the Professor, Research Scholar, or Specialist category as permitted by immigration regulations. Visitors seeking degrees will use regular UCF admission procedures and must enter the United States using the F-1 or J-1 visa student category.

Visiting scholars who are required to audit courses at UCF must fill out the UCF application for admission as a nondegree student and pay the application fee. The deadline is about four months before the beginning of a term. A faculty member, as Faculty Sponsor, must accept the responsibility for recommending, advising, and directing the activities of the scholar. The procedure for extending an invitation to a prospective scholar is as follows:

1. If financial support will be provided to the visiting scholar using university resources, then the approval of the university must be obtained on all correspondence with the visiting scholar. Written arrangements should be made with the Vice President for Research for financial support prior to invitations to visiting scholars.
2. The Department Chair will submit a recommendation to the Dean specifying the Faculty Sponsor, documenting anticipated activities, and providing the following information on the Visiting Scholar:
   - Date of birth
   - City and country of birth
   - Country of residence if different from country of birth
   - Place of work (academic institution, business firm, etc.)
   - Current position held in country of residence
   - Academic background
   - Professional experience
   - Source and amount of financial support (recommended honorarium, if any)
   - English proficiency
   - Dates of visit
   - Statement of how the Visiting Scholar will participate in research and what will be accomplished
   - Office space, equipment, etc. which will be required for scholar's use
3. If arrangements are approved, the Dean will notify the Vice President for Research that the College is extending an invitation. The Chair's recommendation will be included with the notification. These will be sent to the UCF College of Graduate Studies so that the invitation and application may be placed in the visiting scholar's official university file.
4. The UCF College of Graduate Studies will then forward copies of the information to the UCF Global. Upon receipt and verification...
of the required documents, a Form DS-2019 for the purpose of the J-1 visa application J-1 Visa will be issued.

5. The Faculty Sponsor will then correspond with the visitor detailing the conditions of the visit, including whatever limited financial support and facilities will be provided and what is expected of the Scholar, with copies of this correspondence sent to the UCF Global and the Vice President for Research. The Scholar will be asked to write a brief report at the termination of the visit.

6. **All visiting scholars should report to the UCF Global directly upon arrival at UCF to ensure that their immigration documents are in order.**

During each academic term of the visit, the Visiting Scholar may be required to audit one hour of XXX 6918, Directed Research, under the direction of the Faculty Sponsor and also may be permitted (or required) to audit regular courses. The Visiting Scholar will be admitted to postbaccalaureate status and will audit courses as directed and approved by the Faculty Sponsor. The Visiting Scholar will not be permitted to take courses for credit unless formally admitted to a degree program or upon written approval from the Dean of the college in which the student is studying.

The international visiting scholar will be appointed Visiting Research Scholar or Visiting Scholar in the College and may be given a modest honorarium. Such scholars will normally not be maintained on the College payroll, but are expected to have extended financial support.

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**Linkage Agreements**

The State of Florida has established various linkage agreements to assist in the development of stronger economic and social ties between Florida and strategic foreign countries. Linkage Institutes are set up throughout the state and provide out-of-state tuition exemption to scholars from the foreign countries represented by the institutes. To participate in these exemptions, students must apply to the Linkage Institute for the country in which they reside to receive an out-of-state tuition award. Students participating are required to return home after their tenure of graduate study for a length of time equal to the exemption period. Each institute develops its own criteria for selection of students and typically supports the out-of-state fees for about 20 to 30 scholars a year. The institutes established in Florida are listed below with their contact persons.

**Florida-Brazil Institute**

Center for Latin American Studies
University of Florida
319 Grinter Hall
P.O. Box 115530
Gainesville, FL 32611-5530
Tel: (352) 392-0375 ext. 800
Fax: (352) 392-7682
Email: embruna@ufl.edu
Web Address: [http://www.floridabrazil.org/](http://www.floridabrazil.org/)

**Florida-Caribbean Institute**

Latin American & Caribbean Center
Florida International University
DM-353 11200 SW 8th Street
Miami, FL 33199
Phone: (305) 348-2894 Fax: (305) 348-3593
Email: lacc@fiu.edu
Web Address: [lacc.fiu.edu/academics/financial/fci/](http://lacc.fiu.edu/academics/financial/fci/)
Florida-China Institute
Ms. Michelle Loufek
Eastern Florida State College
519 Clearlake Road, Bldg 11-238
Cocoa, FL 32922
Email: loufekm@easternflorida.edu

Rachel L. Hendrix, Ed.S.
Director | International Affairs
University of West Florida
11000 University Parkway
Building 71, Room 116
Pensacola, FL 32514
Phone: (850) 474-2479
Email: rhendrix@uwf.edu
Web Address: www.uwf.edu/fcli/

Florida-Costa Rica Institute
Stephanie Tillman
Co-Director | Florida Costa Rica Linkage
International Programs | Internship Coordinator
Florida State University
282 Champions Way
PO Box 3062420
Tallahassee, FL 32306
Phone: (850) 644-3272
Email: Linkage-FLCR@fsu.edu
Web Address: flcrlinkage-fsu.us.fluidreview.com

Florida-Eastern Europe Institute
Mark Hartman, Director
UCF Global
University of Central Florida
4356 Scorpius St. Building 139
Orlando, FL 32816-0130
Phone: (407) 823-2337 Fax: (407) 823-2526
Email: eeli@ucf.edu
Web Address: https://global.ucf.edu/linkages/eeli/
Florida-Japan Institute
Rachel L. Hendrix, Co-Director
University of West Florida
11000 University Parkway
Pensacola, FL 32514
Phone: (850) 474-2479
Email: Japan@uwf.edu

Frank Jurkovic, Co-Director
St. Petersburg College
6605 5th Avenue North
St. Petersburg, FL 33710
Phone: (727) 341-4732 Fax: (727) 341-4623
Email: jurkovic.frank@spcollege.edu
Web Address: Florida-Japan Linkage Institute | University of West Florida (uwf.edu)

Florida-Mexico Institute
Latin American & Caribbean Center
Florida International University
DM-353 11200 SW 8th Street
Miami, FL 33199
Phone: (305) 348-2894 Fax: (305) 348-3593
Email: lacc@fiu.edu
Web Address: lacc.fiu.edu/academics/financial/fmi/

Florida-West Africa Institute
Mrs. Adianez Garcia Campos
International Center, Building 58E, Room 2300
University of North Florida
1 UNF Drive
Jacksonville, FL 32224
Phone: (904) 620-2657 Fax: (904) 620-3925
Email: intlctrscholarships@unf.edu

Mrs. Julie Abbot
Florida State College at Jacksonville
101 W. State St.
Jacksonville, FL 32202-2056
Phone: (904) 632-3248
Email: flawi@fscj.edu

Ms. Anges Coppin
Florida A&M University
Office of International Education and Development
Lee Hall Building, Suite 100
Tallahassee, FL 32307
Phone: (850) 599-3295 Fax: (850) 561-2520
Email: agnes.coppin@famu.edu
Web Address: www.unf.edu/intlctr/FLAWI_Waiver.aspx
Programs

Global Health and Public Affairs Graduate Certificate

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<tr>
<th>College</th>
<th>Program Description</th>
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<tbody>
<tr>
<td>Community Innovation and Education</td>
<td>Degree: CRT</td>
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<td>Dean's Office</td>
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Mathematics and Science Educator Graduate Certificate

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<th>Program Description</th>
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<tbody>
<tr>
<td>Community Innovation and Education</td>
<td>Degree: CRT</td>
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<tr>
<td>School of Teacher Education</td>
<td></td>
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<tr>
<td>Program Website: <a href="https://ccie.ucf.edu/secondary-education/">https://ccie.ucf.edu/secondary-education/</a></td>
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College of Arts and Humanities

Cognitive Sciences Graduate Certificate

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<tr>
<td>College of Arts and Humanities</td>
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<tr>
<td>Department</td>
<td>Department of Philosophy</td>
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<td><a href="https://philosophy.cah.ucf.edu/program/cognitive-sciences-grad-certificate/">https://philosophy.cah.ucf.edu/program/cognitive-sciences-grad-certificate/</a></td>
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</table>

Program Contact Information

Mason Cash PhD
Associate Professor
mason.cash@ucf.edu
Telephone: 407-823-6857
Psychology Building (PSY) 0246

Is this program available 100% online?
Yes

Program Description

The Cognitive Sciences Graduate Certificate program focuses on the interdisciplinary study of cognitive systems. It integrates a diverse range of approaches to examining cognitive processes, investigating the structures that support and scaffold cognition, attempting to understand, model and construct cognitive systems, and philosophically examining the foundations and applications of the cognitive sciences. It also includes applications of these investigations to many areas of human endeavor, including technology design, communication, training, education and clinical settings.

The interdisciplinary program is founded on the belief that cognition is a complex range of phenomena that cannot be well understood from any single disciplinary perspective. Thus, the program includes core interdisciplinary courses on the Cognitive Sciences, as well as drawing from related courses from many areas including Communication Sciences and Disorders, Education, Engineering and Computer Science, Linguistics, Neuroscience, Philosophy and Psychology.

The Graduate Certificate in Cognitive Sciences is designed for students from diverse backgrounds who wish to: (i) deepen and broaden knowledge gained in a related bachelor's degree, (ii) prepare for master's or PhD programs in the cognitive sciences, or (iii) complement current study in UCF graduate programs related to the cognitive sciences.
Degree Requirements

Required Courses
6 Total Credits

The program recommends that students complete these courses in the first year of the certificate.

- Complete the following:
  - PHI5327 - Topics in the Cognitive Sciences (3)
  - PHI5340 - Research Methods in the Cognitive Sciences (3)

Core Elective Courses
9 - 11 Total Credits

Choose at least 9 credit hours of elective courses from at least three of the following four Core Areas.

- Complete 3 of the following:
  - Language and Communication
    - Complete at least 1 of the following:
      - COM6046 - Interpersonal Communication (3)
      - LINS137 - Linguistics (3)
      - SPA6410 - Aphasia and Related Disorders (3)
      - SPA6417 - Management of Acquired Cognitive/Communication Disorders Across the Lifespan (3)
      - TSL6252 - Sociolinguistics for ESOL (3)
      - TSL6250 - Applied Linguistics in ESOL (3)
  - Artificial Intelligence and Modeling Cognition
    - Complete at least 1 of the following:
      - CAP5636 - Advanced Artificial Intelligence (3)
      - CAP6640 - Computer Understanding of Natural Language (3)
      - CAP6671 - Intelligent Systems: Robots, Agents, and Humans (3)
      - EEL6878 - Modeling and Artificial Intelligence (3)
      - EEL6812 - Introduction to Neural Networks and Deep Learning (3)
      - EEL6875 - Autonomous Agents (3)
  - Philosophy
    - Complete at least 1 of the following:
      - PHI5225 - Philosophy of Language (3)
      - PHI5325 - Topics in Philosophy of Mind (3)
      - PHI5328 - Philosophies of Embodiment (3)
      - PHI5329 - Philosophy of Neuroscience (3)
  - Psychology and Neuroscience
    - Complete at least 1 of the following:
      - DEP5057 - Developmental Psychology (3)
      - EXP5208 - Sensation and Perception (3)
      - EXP5256 - Human Factors I (3)
      - EXP6255 - Human Performance (3)
      - EXP6506 - Human Cognition and Learning (3)
      - PSB5005 - Physiological Psychology (3)
      - ZOO5745C - Neuroanatomical Pathways and their Neurotransmitters (4)
      - ZOO5748C - Clinical Neuroanatomy (5)
      - ZOO5749C - Clinical Neuroscience (5)

Restricted Elective Courses
3 Total Credits

Complete one elective course either from any of the above Core Areas or from the following list:
Complete all of the following:
- Complete at least 1 of the following:
  - CAP5415 - Computer Vision (3)
  - CAP5610 - Machine Learning (3)
  - CAP6676 - Knowledge Representation (3)
  - COM6467 - Studies in Persuasion (3)
  - EDF6141 - Human Intelligence (3)
  - EELS874 - Expert Systems and Knowledge Engineering (3)
  - EGI6305 - Theory and Development of Creativity (3)
  - EIN6258 - Human Computer Interaction (3)
  - EME6601 - Instructional Simulation Design for Training and Education (3)
  - EME6614 - Instructional Game Design for Training and Education (3)
  - EME6646 - Instructional Game Design for Training and Education (3)
  - ENC6740 - Topics in Rhetoric and Composition (3)
  - EXP6257 - Human Factors II (3)
  - EXP6257 - Human Factors II (3)
  - IDS6504 - Adult Learning (3)
  - IDS7657 - Professional Collaboration Around Language Issues (3)
  - SOP5059 - Advanced Social Psychology (3)
  - SPA6437 - Communication Foundations and Assistive/Instruction Technology for Communication (3)
- ENC 6740 - Topics in Rhetoric and Composition 3 Credit Hours  
  NOTE: Where topic is appropriate; topic should be cleared in advance with the Cognitive Sciences Certificate program director.

Grand Total Credits: **18 - 20**

**Program Details**

It is the policy of the College of Graduate Studies not to allow course substitutions for graduate certificate programs. All elective courses listed above have been approved for inclusion by the chair or director of the relevant program. However, it is the student's responsibility to ensure that all course prerequisites are met. Students without the appropriate prerequisites to courses will need to contact the instructor to inquire about the possibility of registration.

**Creative Writing MFA**

**College**

College of Arts and Humanities

**Department**

Department of English

**Program Website**

https://english.cah.ucf.edu/creative-writing-mfa/

**Program Handbook Link**

Creative Writing MFA

**Program Contact Information**

**English Graduate Programs**

englishgrad@ucf.edu

**Meghan Crowther**

Meghan.Crowther@ucf.edu

Telephone: 407-823-5329

**Terry Thaxton**

Terry.Thaxton@ucf.edu

Telephone: 407-823-2112

**Is this program available 100% online?**

No
**Program Description**

The Creative Writing MFA offers a workshop-intensive program in fiction, nonfiction, and poetry, emphasizing the art and craft of creative writing and concentrating on the student's written work. The program encourages hybrid and experimental forms.

The MFA program emphasizes the study of craft and published writing alongside the closely analyzed production of original work by students. Opportunities for professional development as writers, teachers, and editors abound. Our prolific, dedicated faculty members have won numerous prestigious awards for their work and have served as officers in national professional organizations. The MFA program in Creative Writing offers workshop courses in fiction, nonfiction, and poetry, emphasizing the art and craft of creative writing and concentrating on the student's written work.

The minimum total hours required for the Creative Writing MFA is 36 credit hours, including a minimum of nine required credit hours of graduate writing workshop classes. Each candidate will write a book-length creative thesis. There is no nonthesis option in Creative Writing.

**Total Credit Hours Required:** 36 Credit Hours Minimum beyond the Bachelor's Degree

**Program Prerequisites**

Students are required to have a proficiency in American and British Literature as reflected by completing at least one survey course in each field. Students with baccalaureate degrees in subjects other than English whose transcripts do not clearly indicate successful completion of such courses will be required to complete survey courses in British and American literature as co-requisites before the thesis defense. The particular courses that satisfy these co-requisites are selected in consultation with the MFA program director.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

2022-2023 Graduate Catalog
Degree Requirements

Required Courses

15 Total Credits

- Complete all of the following
  Core - 9 Hours
  - Complete at least 3 of the following:
    - CRW6025 - Advanced Graduate Writing Workshop (3)
    - CRW6920 - Fiction Workshop (3)
    - CRW6921 - Multi-Genre Workshop (3)
    - CRW6922 - Novel Workshop (3)
    - CRW6923 - Nonfiction Workshop (3)
    - CRW6924 - Poetry Workshop (3)
  - While the student is expected to concentrate their workshop study in their chief genre, multi-genre proficiency is encouraged. Additional credit hours beyond the required 9 credit hours in workshops that include their chief genre are recommended to assist the student in developing better writing and publication skills.

Specialization - 6 Hours

- Complete at least 2 of the following:
  - LIT6039 - Studies in Contemporary Poetry (3)
  - LIT6097 - Studies in Contemporary Fiction (3)
  - LIT6076 - Studies in Contemporary Nonfiction (3)
  - CRW5130 - Form and Theory in Creative Writing (3)

Elective Courses

15 Total Credits

- Complete all of the following
  Restricted Electives - 6 Hours
  - Complete all of the following
    - Earn at least 6 credits from the following:
      - CRW6720 - Professional Development in Creative Writing (3)
      - CRW6721 - Literary Journal Editing (3)
      - CRW6976 - Scholarship and Publication Models (3)
      - CRW6806C - Teaching Creative Writing (3)
      - CRW5948C - Creative Writing Service Learning (3)
      - CRW6946 - Internship (1 - 99)
      - CRW6025 - Advanced Graduate Writing Workshop (3)
      - CRW 5938 - Special Topics Seminar 3 Credit Hours may also be taken if offered CRW 6920, CRW 6921, CRW 6922, CRW 6923, CRW 6924 may substitute for CRW 6025

Unrestricted Electives - 6 Hours

- Earn at least 6 credits from the following:
  - CRW5130 - Form and Theory in Creative Writing (3)
  - LIT6216 - Issues in Literary Study (3)
  - LIT6936 - Studies in Literary, Cultural, and Textual Theory (3)
  - ENC5705 - Approaches to Teaching College Composition (3)
  - LIT6276 - Teaching College Literature (3)

Additional Electives - 3 Hours

- Earn at least 3 credits from the following types of courses:
  - An additional elective.

Thesis

6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - CRW 6971 Thesis 3 Credit Hours The candidate will complete a book-length manuscript of publishable quality, written and revised in CRW 6971 Thesis, that meets both departmental and university requirements for the thesis.

Practicum and Internship (Optional)

0 Total Credits

- Although a practicum or an internship is not required, they are encouraged to better prepare the student for their profession. These courses fulfill the 6-hour requirement in restricted electives and are listed in that category. CRW 6946 Internship The Florida Review Internship 3 Credit Hours The Cypress Dome Internship 3 Credit Hours Other Approved Internship 3 Credit Hours CRW 5948C - Creative Writing Service Learning 3 Credit Hours

Independent Learning

0 Total Credits

- The creative thesis, a book-length manuscript of original creative work, is the independent learning experience.

Grand Total Credits: 36

2022-2023 Graduate Catalog
Emerging Media MFA

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Program Website
https://svad.cah.ucf.edu/academics/emerging-media/

Program Contact Information

Animation and Visual Effects Track
Jo Anne Adams
Lecturer
joanne.adams@ucf.edu
Telephone: 407-823-2676
Orlando Tech Center (OTC) Suite 500, Room 190

Studio Art and Design Track
Jason Burrell
Senior Lecturer
jason.burrell@ucf.edu
Telephone: 407-823-2676
Visual Arts Building (VAB), Room 117

Is this program available 100% online?
No

Program Description
The Master of Fine Arts in Emerging Media program offers tracks in Animation and Visual Effects and Studio Art and Design. The MFA is a terminal scholarly and creative degree suitable for those students wishing to pursue careers as professors in higher education or as creative leaders in the industry.

Both tracks require 60 credit hours and students follow a three-year cohort style program (six full-time semesters excluding summers). Degree credit is obtained in theory courses, electives, supervised research, and a thesis project. Students progress through the program by taking required classes in particular semesters. Students must remain with their cohort to remain in good academic standing and graduate.

The Animation and Visual Effects track is a specialized program designed to emulate the professional studio environment, providing opportunities to assume an artistic leadership role. The principal emphasis is placed on narrative film structure and the entrepreneurial aspects of animation as related to independent filmmaking, studio employment, and job creation.

The Studio Art and Design track provides a concentrated studio experience to enhance creative approaches using 21st Century experimental practices. The Studio Art and Design MFA degree produces innovative, creative, professional talent in both traditional studio and industry practices. With focused study in contemporary studio practices, such as performance art, installation, experimental time-based media, and fine arts, graduate faculty inspire students to be citizens of the arts both as contributors and professionals.

Please scroll to the bottom of this page for further details on these Tracks.
Emerging Media MFA - Emerging Media MFA, Animation and Visual Effects Track

**Track Website**
https://svad.caah.ucf.edu/programanimation-and-visual-effects/

**Track Handbook**
Emerging Media MFA, Animation and Visual Effects Track

**Track Contact Information**

**Jo Anne Adams, MFA**
Lecturer
joanne.adams@ucf.edu
Telephone: 407-823-2676
Orlando Tech Center (OTC) Suite 500, Room 191

**Online Availability**
No
Track Description

Housed in the School of Visual Arts and Design (SVAD), the Emerging Media MFA - Animation and Visual Effects track is a specialized program designed to emulate the professional and independent studio environment, providing opportunities to assume an artistic leadership role. The principal emphasis is placed on narrative film structure and the entrepreneurial aspects of animation as related to independent filmmaking, studio employment, and job creation.

Designed to prepare students for careers in animation, courses provide an understanding of the collaborative function of a commercial studio during the first year production courses. In addition, students develop their unique style of independent filmmaking during preproduction and production of their thesis film over the duration of the three year program. Opportunities are available to co-direct a team of undergraduate Character Animation students, adding toward our canon of award-winning films. Labs and studios are equipped with the same industry-standard software and hardware used in professional studios.

Students desiring admission to the Emerging Media MFA - Animation and Visual Effects track should be primarily interested in the opportunity to create their own animation and/or visual effects thesis. In this program students are encouraged to develop their visual storytelling skills while using a variety of animation and visual effects techniques, including traditional hand-drawn, stop motion, 2D computer, and 3D computer animation.

Applicants should have an undergraduate degree in animation, visual effects, emerging media, art, film, theater, computer science, graphic design, illustration, creative writing, mass communications, game design, or related field and must demonstrate, through a portfolio of work and writing, that they are currently proficient and successful in the area of Animation.

The Emerging Media MFA - Animation and Visual Effects track is a competitive program whereby students receive the best instruction from professors who have had extensive professional industry experience and connections. Drawing on the expertise of the current faculty, graduates are well qualified to enter the teaching and academic professions. SVAD graduates have a competitive edge for greater opportunities within the animation, visual effects, and simulation industries.

Current SVAD alumni work for major animation and gaming companies such as Walt Disney Animation Studios, Pixar Animation Studios, Blue-Sky Animation Studios, Weta Digital, Framestore, Lightbox, MPC, Titmouse, Netflix, Genius Brands, Reel FX, Nickelodeon Animation Studios, Blur Studios, Epic Games, Electronic Arts, Riot Games, Turtle Rock Studios, and Blizzard Entertainment or creating simulations for organizations including the U.S. Navy, NASA, DISTI, and Lockheed Martin.

The Animation and Visual Effects track in the Emerging Media MFA program is a full-time three-year program (six full-time semesters excluding summers in most instances) and students must progress through the program by taking required classes in particular semesters. The program requires a minimum of 60 credit hours including a thesis project. All courses must be approved by the Graduate Program Director. The thesis consists of producing a short film and thesis document.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Bachelor's Degree

Graduate students must maintain a 3.0 or better GPA in all course work to complete the program.

Track Prerequisites

Applicants to the MFA program normally must hold an earned bachelor's degree in one of the areas below or equivalent and must have exhibited, through a portfolio of work or writing that they are currently proficient and successful in the area of Animation.

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ETS PPI: 523
Degree Requirements

Required Courses

48 Total Credits

- Complete the following:
  - DIG5439C - Script and Story Development for Animation and Visual Effects (3)
  - DIG5865 - The History of Animation and Visual Effects (3)
  - DIG5386C - Animation and Visual Effects Production I (3)
  - DIG5366C - Animation and Visual Effects Production II (3)
  - DIG5378C - Editing for Animation and Visual Effects I: Theory and Production (3)
  - DIG5385C - Visual Effects for Animation and Live Action I (3)
  - DIG5387C - Visual Development and Design for Animation and Visual Effects (3)
  - DIG6379C - Editing for Animation and Visual Effects II: Practical Editing (3)
  - DIG6365C - Media and Music for Animation and Visual Effects (3)
  - DIG6388C - Animation and Visual Effects Production III (3)
  - DIG6384C - Directing for Animation and Visual Effects (3)
  - DIG6389C - Animation and Visual Effects Production IV (3)
  - DIG6377C - Visual Effects for Animation and Live Action II (3)
  - DIG6866C - Technical Problem Solving for Animation and Visual Effects (3)
  - FIL5800 - Research Methods in Film and Digital Media (3)
  - FIL6619 - Guerilla Marketing and Models of Distribution (3)

Thesis

12 Total Credits

- Complete all of the following
  - Earn at least 12 credits from the following:
    - DIG6971 - Thesis (1 - 99)
  - The thesis consists of a short film production and thesis document. The final oral review before the supervisory thesis committee occurs at the end of the sixth semester. At the same time, the graduate student presents a short film production. Students are required to submit an electronic version of the thesis to the UCF College of Graduate Studies. After approval by the UCF College of Graduate Studies, the UCF Library will add it to its archives and make the electronic version of the thesis accessible on the web. The required thesis is created during the independent learning experience in the degree program.

Equipment Fee

0 Total Credits

- Students in the Emerging Media MFA program pay a $90 equipment fee each semester that they are enrolled.

Independent Learning

0 Total Credits

- A thesis is required.

Grand Total Credits: **60**
Track Details

Course Schedule

The Emerging Media MFA - Animation and Visual Effects track is a full-time, three-year cohort program that requires students to abide by the following course sequence. Students must remain with their cohort in order to remain in good academic standing and graduate.

Year 1

Fall: 12 Credit Hours
- DIG 5439C - Script and Story Development for Animation and Visual Effects 3 Credit Hours
- DIG 5865 - The History of Animation and Visual Effects 3 Credit Hours
- DIG 5386C - Animation and Visual Effects Production I 3 Credit Hours
- FIL 5800 - Research Methods in Film and Digital Media 3 Credit Hours

Spring: 12 Credit Hours
- DIG 5366C - Animation and Visual Effects Production II 3 Credit Hours
- DIG 5387C - Visual Development and Design for Animation and Visual Effects 3 Credit Hours
- DIG 5378C - Editing for Animation and Visual Effects I: Theory and Production 3 Credit Hours
- DIG 5385C - Visual Effects for Animation and Live Action I 3 Credit Hours

Year 2

Fall: 9 Credit Hours
- DIG 6379C - Editing for Animation and Visual Effects II: Practical Editing 3 Credit Hours
- DIG 6388C - Animation and Visual Effects Production III 3 Credit Hours
- DIG 6384C - Directing for Animation and Visual Effects 3 Credit Hours

Spring: 9 Credit Hours
- DIG 6389C - Animation and Visual Effects Production IV 3 Credit Hours
- DIG 6377C - Visual Effects for Animation and Live Action II 3 Credit Hours
- DIG 6365C - Media and Music for Animation and Visual Effects 3 Credit Hours

Year 3

Fall: 9 Credit Hours
- DIG 6866C - Technical Problem Solving for Animation and Visual Effects 3 Credit Hours
- DIG 6971 - Thesis 6 Credit Hours

Spring: 9 Credit Hours
- FIL 6619 - Guerilla Marketing and Models of Distribution 3 Credit Hours
- DIG 6971 - Thesis 6 Credit Hours

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Emerging Media MFA - Emerging Media MFA, Studio Art and Design Track

2022-2023 Graduate Catalog
Track Website

https://svad.cah.ucf.edu/program/studio-art-mfa/

Track Handbook

Emerging Media MFA, Studio Art and Design Track

Track Contact Information

Jason Burrell
jason.burrell@ucf.edu
Telephone: 407-823-2676

Visual Arts Building (VAB), Room 117

Online Availability

No

Track Description

The Studio Art and Design track of the MFA in Emerging Media provides a concentrated studio experience to enhance creative approaches using 21st Century experimental practices. The Studio Art and Design MFA degree produces innovative creative, professional talent in both traditional studio and industry practices. With focused study in contemporary studio practices, such as performance art, installation, experimental time-based media, and fine arts, graduate faculty inspire students to be citizens of the arts both as contributors and professionals.

Students in the program are invited to combine their backgrounds in traditional art or computer-related disciplines within a conceptually driven, interdisciplinary environment. Courses provide exposure to time-based media, performance art, video art, sound works, kinetic sculpture, computer-based art, and art using the Internet to understand how these forms are driving 21st century artistic practice and informing our understanding of contemporary cultural identities.

The Studio Art and Design MFA track is composed of a minimum of 60 credit hours, to be acquired in three years (six full-time semesters excluding summers). Degree credit is obtained in theory courses, studio art courses, electives, and supervised research. All courses must be approved by the Graduate Program Director. The thesis consists of a body of artistic work accompanied by electronic (Internet) documentation and a culminating exhibition.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Bachelor's Degree

Graduate students must maintain a 3.0 or better GPA in all course work to complete the program. Continuation in the MFA program requires a positive annual evaluation by the Program Director of the School of Visual Arts and Design and by the Graduate Committee of the School of Visual Arts and Design.

Track Prerequisites

Applicants to the MFA program normally must hold an earned BFA degree in Visual Art from an accredited institution recognized by UCF. Applicants who hold an earned BA, BS, or other baccalaureate degree in Visual Art or a related discipline from an accredited university may also apply.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
Online Application
Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses
24 Total Credits

- Complete all of the following
  - Complete the following:
    - ARH5897 - Advanced Seminar in Art History (3)
    - ART6687 - Research Concentration (3)
  - Earn at least 12 credits from the following types of courses:
    - ART 6911C - Studio Concentration 3 Credit Hours Should be taken 4 times for a total of 12 credit hours.
  - Earn at least 6 credits from the following types of courses:
    - ART 6930 - Graduate Seminar 1 Credit Hours Should be taken 6 times for a total of 6 credit hours.

Elective Courses
18 Total Credits

- Complete all of the following
  - Students should choose from graduate level courses within the School of Visual Arts & Design that are not already required for their program. These courses included those with the following prefixes: ARH, ART, GRA, and PGY. If approved by the Graduate Program Director, there are many graduate-level courses in the College of Arts and Humanities that can be used as electives in addition to other graduate courses. These courses must be selected to ensure that at least one-half of the courses in the student's plan of study are taken at the 6000 level. Normally, at least half of the selected electives should be taken within the School of Visual Arts and Design.
  - Restricted Electives - 9 Credit Hours
    - Complete at least 3 of the following:
      - ART5280 - Serial Content (3)
      - ART5284 - Design Theory and Methods (3)
      - ART5696 - Art, Design and Human Interactions (3)
      - ART5811 - The Professional Practice of Art (3)
      - ART6683 - Time Arts (3)
  - Unrestricted Electives - 9 Credit Hours
    - Earn at least 9 credits from the following types of courses:
      - Graduate students enroll in three graduate ART/ARH/GRA/PGY split-level courses (graduate courses stacked with corresponding undergraduate courses). The graduate level syllabus distinctly highlights the increased research, production, and evaluative criteria.

Thesis
18 Total Credits

- Earn at least 18 credits from the following types of courses:
  - ART 6971 - Thesis 18 Credit Hours The thesis consists of a body of artistic work accompanied by electronic (Internet) documentation and a culminating exhibition. The final oral review before the supervisory thesis committee occurs at the end of the sixth semester. At the same time, the graduate student presents a thesis exhibition of selected works from the cumulative body of works produced during his/her three years of residency. In addition, the thesis requires an artist's statement and documentation. The thesis will contain research intentions, results, and the body of the creative works produced. Students are required to submit an electronic version of the thesis to the UCF College of Graduate Studies. After approval by the UCF College of Graduate Studies, the UCF Library will add it to its archives and make the electronic version of the thesis accessible on the web. The required thesis is the independent learning experience in the degree program.

Equipment Fee
0 Total Credits

- Students in the Emerging Media MFA program pay a $90 equipment fee each semester that they are enrolled.

Independent Learning
0 Total Credits

- A thesis is required.

Grand Total Credits: 60
**Track Details**

**Course Schedule**
The Emerging Media MFA is a full-time 3-year cohort program that requires students to abide by the following course sequence. Students must remain with their cohort to remain in good academic standing and graduate.

**Year 1**

**Fall: 10 Credit Hours**
- ARH 5897 - Advanced Seminar in Art History **3 Credit Hours**
- ART 6911C - Studio Concentration **3 Credit Hours**
- ART 6930 - Graduate Seminar **1 Credit Hours**
- Restrictive Elective: **3 Credit Hours**

**Spring: 10 Credit Hours**
- ART 6911C - Studio Concentration **3 Credit Hours**
- ART 6930 - Graduate Seminar **1 Credit Hours**
- Restricted Elective: **3 Credit Hours**
- ART/ARH/GRA/PGY 5000-Level Unrestricted Elective: **3 Credit Hours**

**Year 2**

**Fall: 10 Credit Hours**
- ART 6911C - Studio Concentration **3 Credit Hours**
- ART 6930 - Graduate Seminar **1 Credit Hours**
- Restricted Elective: **3 Credit Hours**
- ART/ARH/GRA/PGY 5000-Level Unrestricted Elective: **3 Credit Hours**

**Spring: 10 Credit Hours**
- ART 6687 - Research Concentration **3 Credit Hours**
- ART 6911C - Studio Concentration **3 Credit Hours**
- ART 6930 - Graduate Seminar **1 Credit Hours**
- ART/ARH/GRA/PGY 5000-Level Unrestricted Elective: **3 Credit Hours**

**Year 3**

**Fall: 10 Credit Hours**
- ART 6930 - Graduate Seminar **1 Credit Hours**
- ART 6971 - Thesis **9 Credit Hours**

**Spring: 10 Credit Hours**
- ART 6930 - Graduate Seminar **1 Credit Hours**
- ART 6971 - Thesis **9 Credit Hours**

**Financial Information**
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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**
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**Grad Fellowships**
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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
English MA

College
College of Arts and Humanities

Department
Department of English

Program Website
http://english.cah.ucf.edu/

Program Handbook Link
English MA

Program Contact Information
Terry Ann Thaxton MFA
Professor
EnglishGrad@ucf.edu
Telephone: 407-823-2112
Trevor Colbourn Hall (TCH) 251

Is this program available 100% online?
No

Program Description
The Master of Arts in English program offers two tracks: Literary, Cultural, and Textual Studies, and Technical Communication. The program is designed for students interested in intellectual and practical questions of aesthetics, critique, culture, text, and interpretation.

Please scroll to the bottom of this page for further details on these Tracks.

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gradadmissions@ucf.edu
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ETS PPI: 523

English MA - English MA, Literary, Cultural, and Textual Studies Track

Track Website
https://english.cah.ucf.edu/graduate-lct/

Track Handbook
English MA, Literary, Cultural, and Textual Studies Track
Track Contact Information

English Graduate Programs
englishgrad@ucf.edu

Meghan Crowther
Meghan.Crowther@ucf.edu
Telephone: 407-823-5329

Terry Thaxton
Terry.Thaxton@ucf.edu
Telephone: 407-823-2112

Online Availability
No

Track Description

The Literary, Cultural and Textual Studies track in the Master of Arts in English program prepares students for both academic and nonacademic careers.

The program encourages students to make connections among texts (critical, theoretical, scholarly, literary, etc.), to engage in research and critical thinking at an advanced level, and to write scholarship of merit and distinction.

Each student must complete at least 33 credit hours, including three core courses. Near the end of the degree program, each candidate must complete a Capstone Course and choose either the thesis option or the nonthesis option, which requires 3 additional credit hours of a 6000-level Literary, Cultural and Textual Studies course.

The program teaches research methods in one or more courses and requires a research study and final report focusing on literary criticism in a student’s particular specialization.

Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

A bachelor's degree in English or its equivalent.

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Degree Requirements

Required Courses
9 Total Credits

- Complete all of the following
  Core - 6 Hours
  - Complete the following:
    - ENG5009 - Methods of Bibliography and Research (3)
    - ENG6078 - Contemporary Movements in Literary, Cultural, and Textual Theory (3)
  Capstone - 3 Hours
  - Complete all of the following
    - Complete the following:
      - ENG6950 - Capstone Course (3)
    - Students must take a Capstone Course after completing at least 18 credit hours in the program. The Capstone Course is a systematic and comprehensive revision of previous graduate research, with special attention to the use of theory and to professionalization and with the goal of publication and/or conference presentation.

Foreign Language Proficiency
0 Total Credits

- Students must also prove proficiency in a foreign language at the first-year level prior to completing the degree program.

Elective Courses
21 Total Credits

- Complete all of the following
  Restricted - 15 Hours
  - Complete all of the following
    - Complete at least 5 of the following:
      - ENG6074 - Historical Movements in Literary, Cultural, and Textual Studies (3)
      - LIT6216 - Issues in Literary Study (3)
      - LIT6936 - Studies in Literary, Cultural, and Textual Theory (3)
      - LIT6276 - Teaching College Literature (3)
      - LIN5137 - Linguistics (3)
      - TSL6250 - Applied Linguistics in ESOL (3)
    - LIT 6216 and/or LIT 6936 can be taken four times for credit when course content is different.
  Unrestricted - 6 Hours
  - Earn at least 6 credits from the following types of courses:
    In consultation with the graduate adviser, students will choose two graduate-level English courses.

Thesis/Nonthesis Option
3 Total Credits

- Complete 1 of the following
  Thesis Option
  - Earn at least 3 credits from the following types of courses:
    Students will complete a formal thesis on a topic selected in consultation with an advisory committee and will meet both departmental and university requirements for the thesis. LIT 6971 Thesis 3 Credit Hours
  Nonthesis Option
  - Earn at least 3 credits from the following types of courses:
    Students will complete 3 additional hours of 6000-level Literary, Cultural, and Textual Studies courses. Elective 3 Credit Hours

Independent Learning
0 Total Credits

- All courses in the Master's in English, Literary, Cultural and Textual Studies Track require students to complete substantial independent research projects and thus provide students the opportunity to engage in independent learning.

Grand Total Credits: 33
Financial Information

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https://funding.graduate.ucf.edu

English MA - English MA, Technical Communication Track

Track Website
https://english.cah.ucf.edu/graduate-tech-comm/

Track Handbook
English MA, Technical Communication Track

Track Contact Information

English Graduate Programs
englishgrad@ucf.edu

Meghan Crowther
Meghan.Crowther@ucf.edu
Telephone: 407-823-5329

Terry Thaxton
Terry.Thaxton@ucf.edu
Telephone: 407-823-2112

Online Availability

Yes
**Track Description**

The Technical Communication track in the Master of Arts in English program is completely online and provides students with theoretical and applied skills in such areas as technical writing, visual design, usability, ethics, stylistics, computer documentation, international communication, and the rhetoric of science.

Students in this program come from a variety of educational backgrounds such as Psychology, Computer Science, and English. The program's faculty members have won prestigious awards, are well published in the field, and have considerable experience in teaching online courses.

Our graduates hold a variety of jobs in the central Florida region; they have found work as technical writers, technical editors, information designers, web designers, corporate trainers, consultants, information developers, educators, documentation specialists, or have other communication-related jobs.

Each student must complete at least 33 credit hours of coursework including 15 credit hours of required courses and 15 credit hours of elective courses. Near the end of the degree program, each candidate will take a comprehensive examination and complete a thesis option, a nonthesis option with a research project approved by the faculty, or a nonthesis option consisting of an additional 6000-level three-credit-hour Technical Communication course taught by the Department of English.

**Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree**

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses
15 Total Credits

- Complete all of the following
  - Complete the following:
    - ENC6297 - Production and Publication Methods (3)
    - ENC6217 - Technical Editing (3)
    - ENC6261 - Technical Writing, Theory and Practice (3)
    - ENG5009 - Methods of Bibliography and Research (3)

- Choose one of the following:
  - Complete at least 1 of the following:
    - ENC6338 - The Rhetorics of Public Debate (3)
    - LIT6435 - Rhetoric of Science (3)

Elective Courses
15 Total Credits

- Complete all of the following
  - Restricted - 9 Hours
    - Complete at least 3 of the following:
      - ENC6257 - Visual Technical Communication (3)
      - ENC6306 - Persuasive Writing (3)
      - ENC6247 - Proposal Writing (3)
      - ENC6292 - Project Management for Technical Writers (3)
      - ENC6296 - Interactive Design in Technical Communication (3)
      - ENC6338 - The Rhetorics of Public Debate (3)
      - ENC6425 - Hypertext Theory and Design (3)
      - ENC6335 - Rhetorical Traditions (3)
      - LIN5675 - English Grammar and Usage (3)
      - LIT6435 - Rhetoric of Science (3)

  - Unrestricted - 6 Hours
    - Earn at least 6 credits from the following types of courses:
      - Students in consultation with the graduate adviser will choose two graduate-level English courses or approved courses from outside the department.

Thesis/Nonthesis Options
3 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 3 credits from the following types of courses:
      - Students complete a formal thesis written in consultation with an advisory committee and will meet both departmental and university requirements for the thesis. ENC 6971 Thesis (3 credit hours)

  - Nonthesis Option
    - Earn at least 3 credits from the following types of courses:
      - Students will enroll in directed research and complete a research project approved by an advisory committee. This project will be on a topic in technical communication and in a format other than that of a traditional thesis. ENC 6918 Directed Research (3 credit hours) Or, students will enroll in an additional 6000-level course in technical communication taught by the Department of English.

Comprehensive Examinations
0 Total Credits

- The comprehensive examination is a written exam based on four of the core courses (excluding ENG 5009).

Independent Learning
0 Total Credits

- Both the thesis and special project options of the Master's in English, Technical Communication Track require students to conduct original research and to produce a final paper detailing the subject, purpose, scope, methodology, and conclusions of the study, thus providing students the opportunity to engage in independent learning.

Grand Total Credits: 33
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

English, Rhetoric and Composition MA

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Program Website
https://writingandrhetoric.cah.ucf.edu/rhetoric-and-composition-ma/

Program Handbook Link
English, Rhetoric and Composition MA

Program Contact Information

Department of Writing and Rhetoric Graduate Team
Rhetgrad@ucf.edu
Telephone: 407-823-2295
Trevor Colbourn Hall (TCH) 165A

Is this program available 100% online?
Yes
Program Description

The Master of Arts in English with emphasis in Rhetoric and Composition is a program that offers theory and fundamental knowledge in professional writing with an application in various work and research settings. The program provides students with a foundation in Rhetoric and Writing Studies so that students can apply ethical and rhetorical approaches to research, compose and analyze multimodal texts, and explore pedagogical praxis in learning environments. Students in our program examine how writing functions (in digital, social, historical, and other environments) in the world to make meaning and implement change. Our program is offered fully online and in-person to prepare students to work as writing specialists within industry and/or nonprofit, teach in college environments, enter a Ph.D. Program, or meet other unique professional goals.

Upon completion of this program, students receive a Master of Arts in English. Their transcript will show both Master of Arts in English and Rhetoric and Composition track.

Each student must complete at least 33 credit hours, including 15 credit hours of required courses, 15 credit hours of elective courses, and 3 hours of thesis or non-thesis hours. The program requires students complete a thesis or non-thesis project approved by the graduate faculty that contributes to some aspect of rhetorical, writing, and/or literacy studies.

Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

A bachelor's degree in English, Rhetoric, and Composition, Writing Studies, Communication Studies, or related discipline. Or a completed bachelor's degree with substantial coursework in one of the aforementioned areas.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
**Degree Requirements**

**Required Courses**

15 Total Credits

- Complete the following:
  - ENC5703 - Composition Histories and Theories (3)
  - ENC5920 - Colloquium in Rhetoric and Composition (3)
  - ENC6335 - Rhetorical Traditions (3)
  - ENC6712 - Studies in Literacy and Writing (3)
  - ENC6720 - Research Methods in Rhetoric and Composition (3)

**Elective Courses**

15 Total Credits

- Complete all of the following
  - Restricted - 9 Hours
    - Complete all of the following
      - Complete at least 3 of the following:
        - ENC5237 - Writing for the Business Professional (3)
        - ENC5276 - Theory and Practice of Tutoring Writing (3)
        - ENC5337 - Rhetorical Theory (3)
        - ENC5705 - Approaches to Teaching College Composition (3)
        - ENC6421 - Digital Rhetorics (3)
        - ENC6428 - Digital Literacies (3)
        - ENC6245 - Teaching Professional Writing (3)
        - ENC6247 - Proposal Writing (3)
        - ENC6306 - Persuasive Writing (3)
        - ENC6332 - Gendered Rhetoric (3)
        - ENC6333 - Contemporary Rhetoric and Composition Theory (3)
        - ENC6338 - The Rhetorics of Public Debate (3)
        - ENC6339 - Rhetorical Movements (3)
        - ENC6701 - Professional Writing Studies (3)
        - ENC6740 - Topics in Rhetoric and Composition (3)
        - ENC6945 - Community Literacy Practicum (3)
        - LIN5137 - Linguistics (3)
        - LIN5675 - English Grammar and Usage (3)
        - LIT6435 - Rhetoric of Science (3)

  - - ENC 5705 - Approaches to Teaching College Composition Note: Graduate Teaching Associates are required to enroll in this course before they become instructors of record.
  - - ENC 6740 - Topics in Rhetoric and Composition
    This course may be used in the degree program a maximum of two times when course content is different.

- Unrestricted - 6 Hours
  - Earn at least 6 credits from the following types of courses:
    Students will work with an advisor to choose two other graduate-level Writing and Rhetoric courses or approved courses outside the department (e.g., English, Texts & Technology, History, etc.).

**Thesis/Non-Thesis Option**

3 Total Credits

- Complete 1 of the following
  - Thesis
    - Earn at least 3 credits from the following types of courses:
      ENC 6971 - Thesis 3 Credit Hours Students complete a formal thesis on a topic selected in consultation with an advisory committee and will meet both departmental and university requirements for the thesis.
  - Non-thesis
    - Complete all of the following
      - Earn at least 3 credits from the following:
        - ENC6918 - Directed Research (1 - 99)
        - Students complete a capstone project, which may be an essay intended for publication or a portfolio representative of their work in the program.

Grand Total Credits: **33**

**Ethics, Theoretical and Applied Graduate Certificate**

**College**

College of Arts and Humanities
Department

Department of Philosophy

Program Website

http://philosophy.cah.ucf.edu/program/ethics-grad-certificate/

Program Contact Information

Jonathan Beever PhD
jonathan.beever@ucf.edu
Telephone: 407-823-4340
Psychology Building (PSY) 238

Is this program available 100% online?

Yes

UCF Online

Please note: Theoretical and Applied Ethics Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

Students in the Graduate Certificate in Theoretical and Applied Ethics program develop ethics literacy by applying ethical theories and principles to complex contemporary situations, connecting individual and professional interests to ethical engagement, and developing analytic writing and speaking skills related to ethical inquiry.

This interdisciplinary graduate certificate provides spaces for interdisciplinary engagement on contemporary topics of ethical inquiry across philosophy, the humanities, the sciences, health care, business, education, criminal justice, public administration, public relations, journalism, politics and other areas. Students will regularly engage peers and faculty across these disciplinary boundaries, broadening their capacity for ethical decision-making and cultivating skills that can be applied in their professional and civic lives.

Students may choose to specialize in some specific academic discipline or tailor their own areas of concentration relevant to their backgrounds and interests.

All elective courses have been approved for inclusion by the chair or director of the relevant program. However, students will need to work with the program director to obtain the consent of the course instructor to enroll in electives.

Program Prerequisites

Relevant experience with theoretical and applied ethics through course work at the undergraduate or graduate level or through professional experience working with ethical issues will be evaluated by the graduate program director.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses

6 Total Credits

- Complete the following:
  - PHI5627 - Theoretical and Applied Ethics (3)
  - PHI5665 - Knowledge, Responsibility, and Society (3)

Elective Courses

6 Total Credits

- Earn at least 6 credits from the following:
  - ACG6835 - Ethics and Professionalism in Accounting and Auditing (3)
  - ADV6209 - Advertising and Society (3)
  - ANG6003 - Ethics in Anthropology (3)
  - BUL6444 - Law and Ethics (3)
  - CCJ5456 - The Administration of Justice (3)
  - CCJ6431 - Leadership and Ethics in Criminal Justice (3)
  - CCJ6485 - Issues in Justice Policy (3)
  - CJC5020 - Foundations of Corrections (3)
  - CJE5021 - Foundations of Law Enforcement (3)
  - CJL6568 - Law and Social Control (3)
  - CLP6932 - Ethical and Professional Issues in Mental Health Practices (3)
  - CLP7623 - Ethical and Professional Issues in Clinical Psychology (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDH6407 - Ethical and Legal Issues in Student Personnel (3)
  - HSA6555 - Health Care Ethics and Law (4)
  - IDC6600 - Emerging Cyber Issues (3)
  - MAN6066 - Ethical Leadership (3)
  - MHS6702 - Ethical and Legal Issues (3)
  - MMC6202 - Legal and Ethical Issues for Communication (3)
  - PAD5041 - Ethics and Values in Public Administration (3)
  - PET5495 - Critical Issues: Ethics in Coaching and Sport (3)
  - PHI5634 - Medical Ethics (3)
  - PHI5687 - Ethics in Science and Technology (3)
  - PHI5697 - Neuroethics (3)
  - PHI6679 - Digital Ethics (3)
  - PHM5035 - Environmental Philosophy (3)
  - POT6007 - Seminar in Political Theory (3)
  - SPB6506 - Moral and Ethical Issues in Sport (1.5)
  - WST5347 - Research in Women and Gender Studies (3)

Grand Total Credits: 12

Gender Studies Graduate Certificate

College

College of Arts and Humanities

Department

Program in Women’s and Gender Studies

Program Website

http://wgst.cah.ucf.edu

Program Handbook Link

More information can be found HERE.

Program Contact Information

Anne Bubriski
Anne.Bubriski@ucf.edu
Telephone: 407-823-2269
Trevor Colbourn Hall (TCH) 348C

Is this program available 100% online?

Yes
UCF Online

Please note: Gender Studies Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Gender Studies provides skills for practical application of gender theories and research in the workforce to advance leadership and participation, economic empowerment, policy and planning, multi-modal digital literacies, and cross-cultural communication in order to promote gender equality.

The Gender Studies certificate includes courses from both the humanities and the social sciences. The program is open to both degree-seeking and nondegree-seeking graduate students. Most courses are offered at times that will accommodate part-time and working students. Students should consult with the instructor since entry to some graduate courses is restricted by registration codes from the department.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses
6 Total Credits
- Complete the following:
  - WST5601 - Theories in Gender Studies (3)
  - WST5347 - Research in Women and Gender Studies (3)

Elective Courses
6 Total Credits
- Earn at least 6 credits from the following:
  - WST5108 - Global Women in Crisis (3)
  - WST5920 - Colloquium on Gender Topics (3)
  - TPP6247 - Theatre for Social Change (3)
  - THE5427 - Women in Theatre (3)
  - THE5237 - Cultural Diversity in Theatre (3)
  - THE5215 - Global Theatre (3)
  - CCJ6669 - Race, Crime and Justice (3)
  - CCJ6696 - Criminal Justice Perspectives on Human Trafficking (3)
  - COM6463 - Studies in Intercultural Communication (3)
  - MHS6470 - Human Sexuality and Relationships (3)
  - PAD5145 - Volunteerism in Nonprofit Management (3)
  - PAD5146 - Nonprofit Resource Development (3)
  - PAD5185 - Foundations of Social Justice for Public Service (3)
  - PAD5186 - Policy Advocacy for Social Justice (3)
  - PAD6149 - Nonprofit Administration (3)
  - POS6079 - The Politics of Race, Ethnicity, Gender, and Class in the United States (3)
  - SYD6538 - Topics in Social Inequalities (3)
  - SYD6795 - Class, Race, and Gender in American Society (3)
  - CLP6459C - Human Sexuality, Marriage, and Sex Therapies (3)
  - ENG6814 - Gender in Texts and Technology (3)
  - ENC6332 - Gendered Rhetoric (3)
  - Course Not Found
  - SYD6809 - Seminar in Gender Issues (3)
  - SYP5566 - Seminar on Domestic Violence: Theory, Research and Social Policy (3)
  - LTE936 - Studies in Literary, Cultural, and Textual Theory (3)
  - HIS5926 - Colloquium: History of Women and Gender (3)
  - SYP6563 - Reactions to Domestic Violence (3)

Grand Total Credits: 12

Program Details

It is the policy of the College of Graduate Studies not to allow course substitutions for graduate certificate programs. All elective courses listed above have been approved for inclusion by the chair or director of the relevant program. However, it is the student's responsibility to ensure that all course prerequisites are met. Students without the appropriate prerequisites to courses will need to contact the instructor to inquire about the possibility of registration.

History MA

College
College of Arts and Humanities

Department
Department of History

Program Website
http://history.cah.ucf.edu/academics/graduate-programs/

Program Handbook Link
History MA
Is this program available 100% online?

No

Program Description

The Master of Arts in History is designed to serve the needs of a variety of students, including those who plan to pursue a PhD, those wishing to improve their proficiency as secondary school teachers, and those who seek to enrich their intellectual lives. In addition to the General MA program, Public History and Accelerated Undergraduate to Graduate tracks are offered.

Please scroll to the bottom of this page for further details on these Tracks.

Students are served by departmental members whose areas of research include classical history, early Christianity, African history, American cultural and social history, local history, the South, the American Civil War, the American frontier, women and gender roles, Asian history, Middle-Eastern history, twentieth-century mass movements, Nazism and anti-Semitism in Central Europe, Latin American history, and European history, as well as other areas.

Program Prerequisites

A bachelor's degree in History (or an equivalent).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RTZ-HT-58
TOEFL: 5233
ETS PPI: 523

Degree Requirements

Required Courses (Core)

6 Total Credits

- Complete the following:
  - HIS6159 - Historiography (3)
  - HIS6905 - History Capstone Class (3)

Required Courses (Specialization)

18 Total Credits

- Complete 1 of the following
  - Students may specialize in one of the two areas below. Specialization courses must be approved by the student's adviser.
    - Eastern Hemisphere: African, Asian, European, or Middle Eastern - 18 Credit Hours
  - Complete at least 6 of the following:
    - AFH5259 - Colloquium in African History (3)
    - AFH5806 - The Historiography of Slavery in Africa (3)
    - ASH5229 - History of the Middle East (3)
    - ASH5408 - Colloquium in Modern China (3)
    - ASH5485 - U.S. China Relations (3)
    - ASH5925 - Colloquium in South Asian History (3)
    - ASH6936 - Seminar in US-China Relations (3)
    - EUH5419 - Colloquium in Roman History (3)
    - EUH5546 - Colloquium: British History (3)
    - EUH5579 - Colloquium in Soviet Russia (3)
    - EUH5905 - European Imperialism (3)
- EUH5925 - Colloquium in Medieval Europe (3)
- EUH5208 - Colloquium in Early Modern History (3)
- EUH6939 - Seminar in European History (3)
- EUH5459 - Colloquium in French History (3)

Western Hemisphere: Caribbean, North American, or South American- 18 Credit Hours

- Complete at least 6 of the following:
  - AMH5116 - Colloquium in Early American History (3)
  - AMH5169 - Colloquium in the American Early Republic (3)
  - AMH5176 - Colloquium in Civil War and Reconstruction (3)
  - AMH5296 - Colloquium in 20th Century U.S. (3)
  - HIS5503 - History of Technology (3)
  - AMH5391 - Colloquium in U.S. Cultural History (3)
  - AMH5406 - Colloquium in American South (3)
  - AMH5636 - Colloquium in US Environmental History (3)
  - AMH5925 - Colloquium in US Military History (3)
  - AMH6346 - Seminar in the History of American Automobility (3)
  - AMH5077 - Colloquium in Twentieth Century Tourism (3)
  - AMH6429 - Seminar in Community and Local History (3)
  - AMH6939 - Seminar in U.S. History (3)
  - HIS5067 - Introduction to Public History (3)
  - HIS5083 - Cultural Heritage Management (3)
  - HIS6096 - Seminar in Historic Preservation (3)
  - HIS6165 - Digital Tools for Historians (3)
  - HIS6167 - Spatial History (3)
  - HIS5088 - Readings in Curation and Public History (3)
  - HIS6094 - Seminar in Curation and New Media (3)
  - LAH5920 - Colloquium in Latin American History (3)
  - HIS5926 - Colloquium: History of Women and Gender (3)
  - HIS6592 - Seminar in Oral History (3)

Elective Courses
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  Students will choose history courses outside their area of specialization.

Thesis
6 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following types of courses:
    - HIS 6971 - Thesis The culminating event of the program is a minimum of six credit hours at the 6000-level developing and sustaining a historical argument in writing according to the accepted professional and ethical standards of the discipline.
    - Defense
    - The final step in completing the thesis requirement is a one-hour oral defense before the thesis committee.

Comprehensive Examinations
0 Total Credits

- Each candidate for the Master of Arts in History must pass written examinations in two fields upon conclusion of regular course work and before beginning a thesis. These examinations must be taken and passed as part of the requirements for the capstone course. Students are provided two attempts at successfully passing the examinations. Each student will also submit a thesis prospectus and preliminary bibliography, which the three members of the student's thesis committee judge acceptable as the preliminary step to beginning the thesis. An oral defense of the written exams and the thesis prospectus and bibliography is also a requirement of the capstone course.

Foreign Language
0 Total Credits

- Students will also be expected to demonstrate a reading competency in one foreign language translation examination. The foreign language examination (FLE) must be completed one semester prior to the thesis defense. For detailed information on the History Foreign Language Exam requirement and process, please see the department's MA program guidebook.

Grand Total Credits: 36

History MA - History MA, Accelerated Graduate Program Track

Track Website
http://history.cah.ucf.edu/academics/graduate-programs/

2022-2023 Graduate Catalog
Track Handbook

History MA, Accelerated Graduate Program Track

Track Contact Information

Amy E. Foster, PhD
Associate Professor and Director of Graduate Programs
Amy.Foster@ucf.edu
Telephone: 407-823-2225
Trevor Colbourn Hall (TCH) 317C

Online Availability

No

Track Description

The Accelerated Undergraduate/Graduate track in the History MA program allows highly qualified undergraduate majors in history to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate program. Participation will enable completion of the Bachelor of Arts and Master of Arts degrees in five instead of six years for students enrolled in full-time course work.

The History MA program requires a minimum of 36 credit hours beyond the bachelor's degree, including 12 credit hours of required courses, 18 credit hours in an area of concentration, and six credit hours of electives outside of the area of concentration. Students must pass a foreign language competency test, pass a written examination in two fields, and successfully complete and defend their thesis. No graduate credit is given for any grade lower than "B- ."

Track Prerequisites

The accelerated undergraduate/graduate program in history allows highly qualified UCF undergraduate majors in history to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program. Students apply for admission to the combined undergraduate and graduate program toward the end of their junior year or after 12 hours of upper-level history course work.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses (Core)
6 Total Credits

- Complete the following:
  - HIS6159 - Historiography (3)
  - HIS6905 - History Capstone Class (3)

Required Courses (Specialization)
18 Total Credits

- Complete 1 of the following
  - Students may specialize in one of the two areas below. Specialization courses must be approved by the student's adviser.
    - Eastern Hemisphere: African, Asian, European, or Middle Eastern- 18 Credit Hours
  - Complete at least 6 of the following:
    - AFH5259 - Colloquium in African History (3)
    - AFH5806 - The Historiography of Slavery in Africa (3)
    - ASH5229 - History of the Middle East (3)
- ASH5408 - Colloquium in Modern China (3)
- ASH5485 - U.S. China Relations (3)
- ASH5925 - Colloquium in South Asian History (3)
- ASH6936 - Seminar in US-China Relations (3)
- EUH5419 - Colloquium in Roman History (3)
- EUH5459 - Colloquium in French History (3)
- EUH5546 - Colloquium: British History (3)
- EUH5579 - Colloquium in Soviet Russia (3)
- EUH5905 - European Imperialism (3)
- EUH5925 - Colloquium in Medieval Europe (3)
- EUH5208 - Colloquium in Early Modern History (3)
- EUH6939 - Seminar in European History (3)

Western Hemisphere: Caribbean, North American, or South American - 18 Credit Hours

- Complete at least 6 of the following:
  - AMH5116 - Colloquium in Early American History (3)
  - AMH5169 - Colloquium in the American Early Republic (3)
  - AMH5176 - Colloquium in Civil War and Reconstruction (3)
  - AMH5296 - Colloquium in 20th Century U.S. (3)
  - HIS5503 - History of Technology (3)
  - AMH5391 - Colloquium in U.S. Cultural History (3)
  - AMH5406 - Colloquium in American South (3)
  - AMH5636 - Colloquium in US Environmental History (3)
  - AMH5925 - Colloquium in US Military History (3)
  - AMH6346 - Seminar in the History of American Automobility (3)
  - AMH5077 - Colloquium in Twentieth Century Tourism (3)
  - AMH6429 - Seminar in Community and Local History (3)
  - AMH6939 - Seminar in U.S. History (3)
  - HIS5067 - Introduction to Public History (3)
  - HIS5083 - Cultural Heritage Management (3)
  - HIS5925 - History in the Digital Age (3)
  - HIS6096 - Seminar in Historic Preservation (3)
  - HIS6165 - Digital Tools for Historians (3)
  - HIS6167 - Spatial History (3)
  - HIS5088 - Readings in Curation and Public History (3)
  - HIS6094 - Seminar in Curation and New Media (3)
  - LAH5920 - Colloquium in Latin American History (3)
  - HIS5926 - Colloquium: History of Women and Gender (3)
  - HIS6592 - Seminar in Oral History (3)

Elective Courses
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  Students will choose history courses outside their area of specialization.

 Thesis
6 Total Credits

- Complete all of the following
  Hours
  - Earn at least 6 credits from the following types of courses:
    HIS 6971 - Thesis The culminating event of the program is a minimum of six credit hours at the 6000-level developing and sustaining a historical argument in writing according to the accepted professional and ethical standards of the discipline.
    Defense
  - The final step in completing the thesis requirement is a one-hour oral defense before the thesis committee.

 Comprehensive Examinations
0 Total Credits

- Each candidate for the Master of Arts in History must pass written examinations in two fields upon conclusion of regular course work and before beginning a thesis. These examinations must be taken and passed as part of the requirements for the capstone course. Students are provided two attempts at successfully passing the examinations. Each student will also submit a thesis prospectus and preliminary bibliography, which the three members of the student's thesis committee judge acceptable as the preliminary step to beginning the thesis. An oral defense of the written exams and the thesis prospectus and bibliography is also a requirement of the capstone course.

 Foreign Language
0 Total Credits

- Students will also be expected to demonstrate reading competency in one foreign language translation examination. The foreign language examination (FLE) must be completed one semester prior to the thesis defense. For detailed information on the History Foreign Language Exam requirement and process, please see the department's MA program guidebook.

Grand Total Credits: 36
**Track Details**

**Additional Notes on the Accelerated Undergraduate and Graduate Program in History**

- Students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "B-" in each undergraduate and graduate history course for them to be counted toward the major.
- Students must compile a portfolio of their written work in history (completed inside and outside the classroom).
- Students admitted to the combined bachelor's/master's program may take one 5000-level course the first semester of their senior year.
- After successfully completing one 5000-level course, students will be eligible to take HIS 6159 - Historiography and another 5000-level course or the 6000-level seminar following the 5000-level colloquium they have already completed.
- Students may substitute these 9 hours of graduate-level work for 9 hours of 3000- or 4000-level undergraduate work.
- Students need to pay fees at the graduate rate for the graduate courses they take.

**Schedule for Students Enrolled Full-time**

- Students complete 9 hours of graduate-level courses in their senior year.
- Students enroll in at least 3 credit hours of graduate-level courses the summer after they receive their bachelor's degree.
- Students enroll in 9 hours of graduate-level courses in both spring and fall semesters during their master's program.
- Students complete the Capstone course, pass their preliminary exams, and fulfill their foreign language requirement by the end of their first year in the master's program.
- Students complete and defend a master's thesis in 6 hours.

**Undergraduate Requirements**

Please see the current edition of the Undergraduate Catalog.

**Graduate Requirements**

The History MA program requires a minimum of 36 credit hours beyond the bachelor's degree, including 12 credit hours of required courses, 18 credit hours in an area of concentration, and six credit hours of electives outside of the area of concentration. Students must pass a foreign language competency test, pass a written examination in two fields, and successfully complete and defend their thesis. No graduate credit is given for any grade lower than "B-".

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**History MA - History MA, Public History Track**

**Track Website**

http://history.cah.ucf.edu/academics/graduate-programs/

**Track Handbook**

History MA, Public History Track
**Track Contact Information**

Amy E. Foster, PhD  
Associate Professor  
Amy.Foster@ucf.edu  
Telephone: 407-823-2225  
Trevor Colbourn Hall (TCH) 315B

Scot A. French, PhD  
Associate Professor and Director of Public History  
Scot.French@ucf.edu  
Telephone: 407-823-2225  
Trevor Colbourn Hall (TCH) 315B

**Online Availability**

No

**Track Description**

The Public History Track in the History MA program is designed to teach students how to preserve and interpret history while engaging a broad variety of audiences. Students who wish to pursue careers in community and local history, digital history, historic site preservation and administration, museum studies, oral history, heritage tourism, or a variety of other careers that employ applied research will find this degree valuable and rewarding.

Courses in the Public History Track allow students to learn the theories, methods, and technical skills historians use as they put history to work in the world. They build on the foundation of reading colloquia and research seminars that are firmly located in time and space to explicitly focus on the practice of history.

**Track Prerequisites**

A bachelor's degree in History (or an equivalent).

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

Required Courses (Core)  
9 Total Credits

- Complete the following:
  - HIS5067 - Introduction to Public History (3)
  - HIS6159 - Historiography (3)
  - HIS6905 - History Capstone Class (3)

Required Courses (Specialization)  
15 Total Credits

- Complete all of the following  
  Public History- 9 Credit Hours
  - Complete at least 3 of the following:
    - AMH6346 - Seminar in the History of American Automobility (3)
    - HIS6592 - Seminar in Oral History (3)
    - HIS5083 - Cultural Heritage Management (3)
    - HIS5925 - History in the Digital Age (3)
    - HIS6165 - Digital Tools for Historians (3)
    - HIS5088 - Readings in Curation and Public History (3)
    - HIS6094 - Seminar in Curation and New Media (3)
- HIS6167 - Spatial History (3)
- HIS6942 - Internship (3)
- AMH6429 - Seminar in Community and Local History (3)
- HIS6096 - Seminar in Historic Preservation (3)

**Western Hemisphere Courses: Caribbean, North American, or South American - 6 Credit Hours**
- Complete at least 2 of the following:
  - AMH5116 - Colloquium in Early American History (3)
  - AMH5169 - Colloquium in the American Early Republic (3)
  - AMH5176 - Colloquium in Civil War and Reconstruction (3)
  - AMH5296 - Colloquium in 20th Century U.S. (3)
  - HIS5503 - History of Technology (3)
  - AMH5391 - Colloquium in U.S. Cultural History (3)
  - AMH5406 - Colloquium in American South (3)
  - AMH5077 - Colloquium in Twentieth Century Tourism (3)
  - AMH6346 - Seminar in the History of American Automobile (3)
  - HIS5926 - Colloquium: History of Women and Gender (3)
  - AMH5636 - Colloquium in US Environmental History (3)
  - AMH5925 - Colloquium in US Military History (3)
  - AMH6939 - Seminar in US-China Relations (3)
  - LAH5920 - Colloquium in Latin American History (3)

**Elective Courses**
6 Total Credits

**Eastern Hemisphere Courses: African, Asian and Middle Eastern, or European**
- Complete at least 2 of the following:
  - AFH5259 - Colloquium in African History (3)
  - AFH5806 - The Historiography of Slavery in Africa (3)
  - ASH5229 - History of the Middle East (3)
  - ASH5408 - Colloquium in Modern China (3)
  - ASH5485 - U.S. China Relations (3)
  - ASH5925 - Colloquium in South Asian History (3)
  - ASH6936 - Seminar in US-China Relations (3)
  - EUH5419 - Colloquium in Roman History (3)
  - EUH5459 - Colloquium in French History (3)
  - EUH6936 - Seminar in US-China Relations (3)
  - EUH5905 - European Imperialism (3)
  - EUH5925 - Colloquium in Medieval Europe (3)
  - EUH5208 - Colloquium in Early Modern History (3)
  - EUH6939 - Seminar in European History (3)
  - EUH5579 - Colloquium in Soviet Russia (3)

**Thesis**
6 Total Credits
- Complete all of the following
  - Hours
- Earn at least 6 credits from the following types of courses:
  - HIS 6971 Thesis The culminating event of the program is a minimum of six credit hours at the 6000-level developing and sustaining a historical argument in writing according to the accepted professional and ethical standards of the discipline.
  - Thesis or Project Defense
- The final step in completing the thesis requirement is a one-hour oral defense before the thesis committee.

**Comprehensive Examination**
0 Total Credits
- Each candidate for the Master of Arts in History must pass written examinations in two fields upon conclusion of regular course work and before beginning a thesis. These examinations must be taken and passed as part of the requirements for the capstone course. Students are provided two attempts at successfully passing the examinations. Each student will also submit a thesis prospectus and preliminary bibliography, which the three members of the student's thesis committee judge acceptable as the preliminary step to beginning the thesis. An oral defense of the written exams and the thesis prospectus and bibliography is also a requirement of the capstone course.

**Foreign Language Competency**
0 Total Credits
- Students will also be expected to demonstrate reading competency in a foreign language translation examination. The foreign language examination (FLE) must be completed one semester prior to the thesis defense. For detailed information on the History Foreign Language Exam requirement and process, please see the department's MA program guidebook.

**Grand Total Credits:** 36
Track Details

The Public History track requires a minimum of 36 credit hours beyond the bachelor's degree, including 9 credit hours of required core courses, 15 credit hours in the public history area of concentration, and 6 credit hours of elective courses taken outside of the area of concentration. All students must pass a foreign language translation examination, pass a capstone written examination in two fields, and successfully complete and defend their thesis or project. No graduate credit is given for any grade lower than "B-.

Students have the option to take up to two (2) graduate courses (6 hours) in another UCF department/program at the discretion of the History MA Graduate Director. Students must meet in person with the Graduate Director prior to enrollment in the proposed course, with written information about the course and justification, before approval will be granted. Any course outside the history program will replace the student's independent study option. Only two (2) courses from any graduate certificate program (i.e. GIS, Women's Studies) can be counted toward the History MA degree.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Music MA

College
College of Arts and Humanities

Department
School of Performing Arts

Program Website
http://performingarts.cah.ucf.edu/study/#musicgrad/

Program Handbook Link
Music MA

Program Contact Information
Keith Koons DMA
Professor
keith.koons@ucf.edu
Telephone: 407-823-5116
Performing Arts Center (PAC) M122

Is this program available 100% online?
No
Program Description

The Master of Arts in Music program is intended to provide additional study and training in music to individuals who already hold a bachelor's degree in music or the equivalent.

The Conducting Concentration is designed for those students who wish to specialize in conducting, leading to recital performances as a conductor.

The Music Studies Concentration reflects the general nature of this degree and allows students to pursue a variety of interests within music, such as performance, jazz studies, music education, and composition. The philosophy of this program is to provide graduate students with the advanced education, skills, and credentials to enhance their professional abilities and opportunities.

The Music MA program requires a minimum of 30-34 credit hours beyond the bachelor's degree. Students must take 11 credit hours of required music courses and 17 credit hours of elective courses. Both thesis and nonthesis options are available and students planning on pursuing a doctoral degree are encouraged to select the thesis option. Nonthesis students must take a Recital or Graduate Project course (2 credit hours) in addition to the 28 credit hours of coursework described above, and thesis students must complete a thesis project (6 credit hours).

Total Credit Hours Required: 30-34 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

A bachelor's degree in music from a NASM accredited school or the equivalent.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Students Choose Music Studies or Conducting Concentration
30 - 34 Total Credits

- Complete 1 of the following
  Music Studies Concentration - 30-34 Credit Hours
  Music Studies Required Courses - 11 Credit Hours
  Complete all of the following
    - Complete the following:
      - MUH6916 - Music Bibliography and Research (3)
      - MUH6935 - Music History Seminar (3)
      - MUT6621 - Techniques and Concepts of Musical Analysis (3)
    - Earn at least 2 credits from the following types of courses:
      To include a minimum of 2 credits of applied lessons (5000 or 6000-level in MVB, MVK, MVS, MVP, MVV, MVW, or MVO) or ensembles (5000 or 6000-level in MUN or MUO).
      Music Studies Elective Courses - 17 Credit Hours
    - Music Studies Restricted Electives in Music
  - Complete all of the following
    - Course selections in this area will be in a cognate or area of emphasis with approval by program adviser (Performance, Conducting, Composition, Music History, Music Theory, Music Education, Jazz Studies, etc.). Students may not take non-repeatable graduate courses that are similar to courses taken at the undergraduate level.
    - Earn at least 9 credits from the following:
      - MUH6935 - Music History Seminar (3)
      - MUES348C - K-12 Music Methods (4)
      - MUE6175 - Teaching Music Performance (3)
      - MUG6106 - Advanced Conducting I (2)
      - MUG6306 - Conducting and Literature (3)
      - MUC5112 - Composition V (2)
      - MUC6251 - Composition VI (2)
      - MUS5677 - Health and Wellness for the Performing Artist (3)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUT5936</td>
<td>Music Theory Seminar</td>
<td>(3)</td>
</tr>
<tr>
<td>MUH5326</td>
<td>Medieval and Renaissance Music</td>
<td>(3)</td>
</tr>
<tr>
<td>MUH5345</td>
<td>Music of the Baroque</td>
<td>(3)</td>
</tr>
<tr>
<td>MUH5356</td>
<td>Eighteenth-Century Music</td>
<td>(3)</td>
</tr>
<tr>
<td>MUH5375</td>
<td>Music Since 1900</td>
<td>(3)</td>
</tr>
<tr>
<td>MUH5816</td>
<td>Jazz Styles and Analysis</td>
<td>(3)</td>
</tr>
<tr>
<td>MUH5365</td>
<td>Music of the 19th Century</td>
<td>(3)</td>
</tr>
<tr>
<td>MUN5368L</td>
<td>Graduate Chamber Singers</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5385L</td>
<td>Graduate University Chorus</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5325</td>
<td>Women's Chorus</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5465L</td>
<td>Graduate Chamber Music</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5145</td>
<td>Wind Ensemble</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5215</td>
<td>Symphony Orchestra</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5125</td>
<td>Concert Band</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5715L</td>
<td>Jazz Ensemble</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5716L</td>
<td>Jazz Chamber Group</td>
<td>(1)</td>
</tr>
<tr>
<td>MUO5505L</td>
<td>Graduate Opera Workshop</td>
<td>(1)</td>
</tr>
<tr>
<td>MUN5445</td>
<td>Percussion Ensemble</td>
<td>(1)</td>
</tr>
</tbody>
</table>

Students may also take the following towards this 9 credit hour requirement: MVX 5XXX - Performance V (audition required) 2 Credit Hours MVX 6XXX - Performance VI (audition required) 2 Credit Hours

Note: The designation MUN 5XXX means that any 5000-level ensemble course will fulfill this requirement; similarly, MVX 5XXX means that any 5000-level applied music course in performance will fulfill this requirement. * MUN 5368L, MUN 5385L, MUN 5465L, and MUO 5505L may be used in the degree program a maximum of five times. * MUN 5325, MUN 5145, MUN 5215, MUN 5125, MUN 5445, MUN 5715L, and MUN 5716L may be used in the degree program a maximum of four times.

Music Studies Restricted Elective Studies in Supportive Areas - 8 Credit Hours

- Complete all of the following
  - Earn at least 8 credits from the following types of courses:
    - MVO 5250 - Advanced Secondary Instruction 1 Credit Hours MUS 6908- Independent Study 1-3 Credit Hours 5000- or 6000-level music courses or non-music courses with approval of advisor; may include any new or repeatable courses from the sections above. Students may not take non-repeatable graduate courses that are similar to courses taken at the undergraduate level. Music Studies Thesis/Nonthesis Option - 6 Credit Hours
  - Complete 1 of the following
    - Earn at least 6 credits from the following types of courses:
      - Music Studies Thesis Option MUS 6971 Thesis 6 Credit Hours Students planning to pursue a doctoral degree (in areas such as music theory, music education, or music history) are strongly encouraged to select the thesis option.
    - Earn at least 2 credits from the following types of courses:
      - Music Studies Nonthesis Option - 2 Credit Hours The culminating experience may be a recital in performance, composition, or conducting (Graduate Recital); or a written project of smaller scope than a thesis; e.g., a portfolio or research paper (Graduate Project). MUS 6976L - Graduate Recital 2 Credit Hours or MUS 6975L - Graduate Project 2 Credit Hours

Conducting Concentration - 30 Credit Hours

- Conducting Required Courses - 11 Credit Hours
  - Complete all of the following
    - Complete the following:
      - MUH6916 - Music Bibliography and Research (3)
      - MUH6935 - Music History Seminar (3)
      - MUS6960 - Comprehensive Exam
      - MUT6621 - Techniques and Concepts of Musical Analysis (3)
    - Earn at least 2 credits from the following types of courses:
      - To include a minimum of 2 credits of applied lessons (5000 or 6000-level in MVB, MVK, MVS, MVP, MVV, MVW, or MVO) or ensembles (5000 or 6000-level in MUN or MUO).
  - Conducting Elective Courses - 17 Credit Hours
  - Conducting Area of Emphasis - 12 Credit Hours
  - Complete all of the following
    - Earn at least 12 credits from the following:
      - MUG6306 - Conducting and Literature (3)
    - Course will be taken 4 times at 3 credits each.
  - Conducting Music Electives - 5 Credit Hours
  - Complete all of the following
    - Earn at least 5 credits from the following:
      - MUC5112 - Composition V (2)
      - MUC6251 - Composition VI (2)
      - MUE5348C - K-12 Music Methods (4)
      - MUE6175 - Teaching Music Performance (3)
      - MUG6106 - Advanced Conducting I (2)
      - MUH5326 - Medieval and Renaissance Music (3)
      - MUH5345 - Music of the Baroque (3)
- MUH5356 - Eighteenth-Century Music (3)
- MUH5365 - Music of the 19th Century (3)
- MUH5375 - Music Since 1900 (3)
- MUH5816 - Jazz Styles and Analysis (3)
- MUH6935 - Music History Seminar (3)
- MUN5125 - Concert Band (1)
- MUN5145 - Wind Ensemble (1)
- MUN5215 - Symphony Orchestra (1)
- MUN5325 - Women's Chorus (1)
- MUN5368L - Graduate Chamber Singers (1)
- MUN5385L - Graduate University Chorus (1)
- MUN5445 - Percussion Ensemble (1)
- MUN5465L - Graduate Chamber Music (1)
- MUN5715L - Jazz Ensemble (1)
- MUN5716L - Jazz Chamber Group (1)
- MUO5505L - Graduate Opera Workshop (1)
- MUS5577 - Health and Wellness for the Performing Artist (3)
- MUT5936 - Music Theory Seminar (3)

- * MUN 5368L, MUN 5385L, MUN 5465L, and MUO 5505L may be used in the degree program a maximum of five times. * MUN 5325, MUN 5145, MUN 5215, MUN 5125, MUN 5445, MUN 5715L, and MUN 5716L may be used in the degree program a maximum of four times. Conducting Nonthesis Option - 2 Credit Hours

Complete the following:
- MUS6976L - Graduate Recital (2)

Grand Total Credits: 30 - 34

Program Details

Additional Program Requirements

- Performance V and VI, Conducting & Literature, and ensembles all require an audition.
- Composition V and VI requires submission of a portfolio.
- No more than 6 credit hours of MUN courses may be counted toward the degree.
- A minimum of 15 credit hours applied to the degree must be at the 6000 level.

Equipment Fee

Students in the Master of Arts in Music Program pay a $90 equipment fee each semester that they are enrolled.

Professional Writing Graduate Certificate

College

College of Arts and Humanities

Department

Department of Writing and Rhetoric

Program Website

https://cah.ucf.edu/writingrhetoric/program/professional-writing-grad-certificate/

Program Contact Information

Department of Writing and Rhetoric Graduate Team
Rhetgrad@ucf.edu
Telephone: 407-823-2295
Trevor Colbourn Hall (TCH) 165A

Sonia Arellano PhD
Director for Graduate Programs

Steffen Guenzel PhD
Graduate Programs Advisor

Is this program available 100% online?

Yes
Please Note: The Professional Writing Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees. See http://ucf.edu/online for more information.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

Our Professional Writing Certificate is a fully online program with a flexible curriculum designed for working professionals. The program provides students with rhetorical theories and practices to consider ethical approaches to multimodal texts in professional writing environments.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - ENC5337 - Rhetorical Theory (3)
  - ENC6701 - Professional Writing Studies (3)

Elective Courses
9 Total Credits

- Complete all of the following
  - Complete at least 3 of the following:
    - ENC5237 - Writing for the Business Professional (3)
    - ENC5276 - Theory and Practice of Tutoring Writing (3)
    - ENC5705 - Approaches to Teaching College Composition (3)
    - ENC5930 - Current Topics in Professional Writing (3)
    - ENC6216 - Editing Professional Writing (3)
    - ENC6217 - Technical Editing (3)
    - ENC6247 - Proposal Writing (3)
    - ENC6257 - Visual Technical Communication (3)
    - ENC6261 - Technical Writing, Theory and Practice (3)
    - ENC6292 - Project Management for Technical Writers. (3)
    - ENC6296 - Interactive Design in Technical Communication (3)
    - ENC6297 - Production and Publication Methods (3)
    - ENC6306 - Persuasive Writing (3)
    - ENC6332 - Gendered Rhetoric (3)
    - ENC6333 - Contemporary Rhetoric and Composition Theory (3)
    - ENC6335 - Rhetorical Traditions (3)
    - ENC6338 - The Rhetorics of Public Debate (3)
    - ENC6339 - Rhetorical Movements (3)
    - ENC6421 - Digital Rhetorics (3)
    - ENC6425 - Hypertext Theory and Design (3)
    - ENC6428 - Digital Literacies (3)
    - ENC6429 - Teaching Writing With Computers (3)
    - ENC6945 - Community Literacy Practicum (3)
    - ENC6712 - Studies in Literacy and Writing (3)
    - ENC6745 - Teaching Professional Writing (3)
    - ENC6740 - Topics in Rhetoric and Composition (3)
    - ENG5009 - Methods of Bibliography and Research (3)
    - LIN5137 - Linguistics (3)
    - LIN5675 - English Grammar and Usage (3)

- Note: Due to their similarity, students can apply either ENC 6216 or ENC 6217 to this program of study. Students cannot use both for elective credit for this program.

Exit Survey
0 Total Credits

- Students should complete the Exit Survey at the end of their program if they would like to receive a certificate of program completion in addition to their grade audit.

Grand Total Credits: 15

Spanish MA

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Program Website
https://mll.cah.ucf.edu/program/spanish-ma/

Program Handbook Link
Spanish MA

2022-2023 Graduate Catalog
Is this program available 100% online?
No

Program Description
The Master of Arts in Spanish is intended for those who wish to continue their study of the literature, linguistics and culture of the Spanish-speaking world at the graduate level.

The Spanish program focuses on the literature, linguistics, culture and civilization of Spain, Latin America, and Hispanics in the United States. Students in the program learn research methods, enhance language skills, and acquire a scholarly view of culture, literature, and linguistics of the Spanish-speaking world.

The Master of Arts program in Spanish has both thesis and nonthesis options. A total of 36 credit hours of coursework for the nonthesis option or 30 credit hours of coursework plus 6 credit hours of thesis (3 credit hours minimum) are required of students seeking the master's degree in Spanish. After 9-18 credit hours in the program, students are expected to select either Literature or Spanish Linguistics as their specialization.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites
A bachelor's degree in Spanish or a related field.

Prospective students are expected to have read widely in Hispanic literature/linguistics and to be competent in understanding, reading, and writing Spanish. They should also be familiar with the vocabularies of literary criticism and grammar.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Research Methods
3 Total Credits

Complete the following:

- SPW6919 - Advanced Spanish Graduate Research (3)

Culture and Civilization
6 Total Credits

Complete at least 2 of the following:

- SPN5502 - Hispanic Culture of the United States (3)
- SPN5505 - Spanish Peninsular Culture and Civilization (3)
- SPN5506 - Spanish American Culture and Civilization (3)

Literature/Linguistics Specialization
15 Total Credits

Complete 1 of the following

- Literature Specialization - 15 Hours
- Spanish Linguistics - 3 Hours
Complete all of the following

- Complete at least 1 of the following:
  - SPN5705 - Bilingualism in the US (3)
  - SPN5825 - Spanish Dialectology (3)
  - SPN5845 - History of the Spanish Language (3)
  - SPN6805 - Spanish Morphosyntax (3)

Literature

- Complete all of the following
  - Complete at least 4 of the following:
    - SPW5741 - Contemporary Spanish American Southern Cone Literature (3)
    - SPW6825 - Colloquium in Don Quixote & Cervantes in the 21st Century (3)
    - SPW6405 - Medieval Spanish Literature (3)
    - SPW6217 - Spanish American Prose I (3)
    - SPW6218 - Spanish American Prose II (3)
    - SPW6269 - Nineteenth Century Spanish Novel (3)
    - SPW6306 - Spanish American Drama (3)
    - SPW6315 - Early Modern Spanish Theatre (3)
    - SPW6356 - Spanish American Poetry (3)
    - SPW6485 - Contemporary Peninsular Literature (3)
    - SPW6725 - The Generation of 1898 (3)
    - SPW6216 - Spanish Golden Age Prose and Poetry (3)
    - SPW6775 - Spanish Caribbean Prose (3)
    - SPW 6825 - Colloquium in Don Quixote & Cervantes in the 21st Century 3 Credit Hours * (May be repeated for credit with different topics) * Examples of Seminar Series Topics: Don Quixote, Spanish American Literature Written by Women, Gabriel García Márquez, Memory and Identity in Modern Spanish Literature, Semantics and Pragmatics, Special Study in Spanish Linguistics

Linguistics Specialization - 15 Hours

- Spanish Linguistics - 12 Hours
  - Complete all of the following
    - Complete the following:
      - SPN5705 - Bilingualism in the US (3)
      - SPN5825 - Spanish Dialectology (3)
      - SPN5845 - History of the Spanish Language (3)
      - SPN6805 - Spanish Morphosyntax (3)

Elective Courses

6 Total Credits

- Earn at least 6 credits from the following types of courses:
  All students required to take at least 6 credit hours of electives. These must be approved by your adviser.

Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following:
      - SPW6971 - Thesis (1 - 99)
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      Students in the nonthesis option must take an additional 6 credit hours of electives as approved by your adviser.

2022-2023 Graduate Catalog
Comprehensive Examination
0 Total Credits

**Requirements and Reading List for Literature Specialization or Linguistics Specialization**

- Students must pass a comprehensive examination in order to qualify for the Master of Arts in Spanish. This examination is based on knowledge of the literature and culture of Spain and Hispanic America and/or on concepts of linguistic theory and analysis. Since this examination will be given toward the end of the coursework (only during fall and spring semesters), it is expected that the student will have developed an ability to analyze literature, culture, and linguistics at the graduate level. It is also expected that the responses, both written and oral, will show an excellent command of the Spanish language. The oral examination will follow the written examination and will allow students to expand more readily on particular points of culture, literature, and linguistics, and to show ability in the use of the spoken language. If a student does not successfully pass both the written and oral comprehensive examinations, he or she may be able to retake the exams in the following semester (fall or spring). Thereafter, if the student does not pass the examinations the second time, he/she will be removed from the program.

The Graduate Committee has developed a reading list of major Peninsular, Latin American, and Linguistics works and works by Hispanics in the U.S., with which the student must be familiar. The comprehensive examination is based on the entirety of the respective reading lists (primary and secondary areas) and the courses that the student has taken.

Independent Learning
0 Total Credits

- All classes require a research paper or research project that allows students to engage in independent learning. The program also offers a thesis option.

**Grand Total Credits:** 36

**Program Details**

A minimum grade of "B" must be earned in each required course. Students will be allowed a maximum total of 6 semester hours of "C" grades in elective courses. Students are allowed to transfer up to 6 credit hours of corresponding graduate courses with the grade of "A" or "B" from an accredited university. University policies and procedures will be followed for all degree requirements. Courses are to be chosen from the following categories in accordance with the number of hours designated in each, based on the student's specialization.

**Literature Specialization**

- Research Methods: 3 Credit Hours
- Spanish Linguistics: 3 Credit Hours
- Culture and Civilization: 6 Credit Hours
- Literature: 12 Credit Hours
- Electives: 6 Credit Hours
- Nonthesis Option Electives, 6 Credit Hours OR Thesis Option, 6 Credit Hours

**Linguistics Specialization**

- Research Methods: 3 Credit Hours
- Spanish Linguistics: 12 Credit Hours
- Culture and Civilization: 6 Credit Hours
- Literature: 3 Credit Hours
- Electives: 6 Credit Hours
- Nonthesis Option Electives, 6 Credit Hours OR Thesis Option, 6 Credit Hours

Students must choose electives from the additional, available courses listed below in conjunction with their faculty adviser. The aim of the selections should be to complement the acquisition of knowledge in the particular area of Hispanic studies chosen. Courses must be selected so that at least one-half of the required courses are taken at the 6000 level.

All students are required to take SPW 6919 - Advanced Spanish Graduate Research, which results in a research paper that organizes and summarizes knowledge in a chosen area of study.

**Courses are delivered face to face, hybrid or online, and are conducted entirely in Spanish.**

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**Teaching English as a Foreign Language Graduate Certificate**

**College**

College of Arts and Humanities

**Department**

Department of Modern Languages and Literatures

**Program Website**

https://mll.cah.ucf.edu/program/tefl-grad-certificate/

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2022-2023 Graduate Catalog
Program Contact Information

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Trevor Colbourn Hall (TCH) 358F

Kerry Purmensky  
Kerry.Purmensky@ucf.edu  
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Trevor Colbourn Hall (TCH) 365D

Is this program available 100% online?
No

Program Description

The Graduate Certificate in Teaching English as a Foreign Language prepares students with specialized knowledge and skills to teach English as a Foreign Language in overseas settings.

The program focuses on the fundamentals of EFL teaching principles and methodology, linguistics, materials/curriculum development, and assessment.

English has become the gateway to many international and technical jobs, as well as the key to entrance into institutions of higher education. The number of people interested in learning English as an other language is increasing steadily. With the rising demand for English instructors comes an increasing need for individuals qualified to teach English as a Foreign Language. The majority of overseas English language schools require their teachers to be certified in Teaching English as a Foreign Language. Our flexible, four-course program is taught by qualified instructors with experience in language pedagogy and overseas teaching. (Note: The TEFL Certificate Program is not designed for teachers seeking K-12 ESOL endorsement in Florida.)

If you are looking to teach English overseas, the TEFL Certificate at UCF is your gateway to a new career. Your courses will not only prepare you for teaching in another country, they are accredited courses that will count toward your graduate degree.

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Institution Codes

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete at least 4 of the following:
    - TSL5345 - Methods of ESOL Teaching (3)
    - TSL6940 - ESOL Practicum (3)
    - TSL5940 - Issues in TEFL (3)
    - TSL6142 - Critical Approaches to ESOL (3)
    - TSL6250 - Applied Linguistics in ESOL (3)
    - TSL6350 - Grammar for ESOL Teachers (3)
    - TSL6440 - Assessment Issues in TESOL (3)
    - TSL6640 - Research in Second Language (3)
    - TSL6252 - Sociolinguistics for ESOL (3)
    - TSL5380 - Computers and Technology for ESOL (3)
    - TSL5601 - Second Language Vocabulary Learning (3)
    - TSL6642 - Issues in Second Language Acquisition (3)
    - TSL6374 - TESOL Listening, Speaking and Pronunciation (3)
    - TSL6442 - Fundamentals of Standardized Assessment in TESOL (3)
    - TSL5376 - Reading and Writing in a Second Language (3)

- Note: Though the courses may be taken in any order, it is recommended that TSL 6940 - ESOL Practicum be taken near the end of a program of study (if that course is included).

Independent Learning
0 Total Credits

- Many of the courses have service-learning or practical experience components. This is to ensure that at the end of your TEFL Graduate Certificate you have the education, experience, and expertise to teach EFL in any setting.

Grand Total Credits: 12

Program Details

The TEFL Graduate Certificate can be completed in one or more semesters, depending on the semester of entrance. Students must consult with their adviser or the program director prior to selecting the four courses for their program. No course substitutions are allowed.

Teaching English to Speakers of Other Languages (TESOL) MA

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Program Website
https://mll.cah.ucf.edu/program/tesol/

Program Handbook Link
Teaching English to Speakers of Other Languages (TESOL) MA

Program Contact Information

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Trevor Colbourn Hall (TCH) 358F

Kerry Purmensky
Kerry.Purmensky@ucf.edu
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Trevor Colbourn Hall (TCH) 365D

Is this program available 100% online?
No
Program Description

The Master of Arts in Teaching English to Speakers of Other Languages (TESOL) provides students a strong foundation in language acquisition, use, and pedagogy. We offer our students a strong foundation in theory with numerous opportunities for gaining practical teaching experience and developing individual research agendas.

Our program supports study abroad opportunities with a focus on service learning in numerous countries, including Spain, Mexico, and China.

Our successful graduates have received Fulbright English Teaching Assistant scholarships, English Language Fellowships, and obtained positions teaching overseas and here in the United States. Our faculty work hard to support our students as they develop their scholarship and teaching skills in preparation for a successful career in TESOL.

Because UCF offers a PhD in Education with a specialty in TESOL, students can begin their TESOL career at the undergraduate level and continue to a terminal degree at the doctoral level here on campus. We offer an undergraduate TEFL Certificate, an undergraduate Minor in Applied Linguistics, and a graduate TEFL Certificate.

Our professors have diverse research interests and thrive on working with students to develop their professionalism in the field. Current research trends in the department include Applied Linguistics, technology in teaching, assessment, community engagement, Russian ESOL, and sociolinguistics.

This graduate program is proud to partner with the Peace Corps Paul D. Coverdell Fellows Program to provide returning volunteers an opportunity to expand their education.

The Teaching English to Speakers of Other Languages MA program requires 30-36 credit hours beyond the bachelor's degree dependent on whether students select a thesis or nonthesis option. The thesis option consists of 30 credit hours that includes 24 credit hours of core courses, 3 credit hours of electives, and 3 credit hours of TSL 6971 - Thesis. The nonthesis option requires 36 semester hours and includes 24 semester hours of core courses and 12 semester hours of electives. All students, both thesis and nonthesis, must take a written final comprehensive examination covering the core TSL courses.

Total Credit Hours Required: 30-36 Credit Hours Minimum beyond the Bachelor's Degree

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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
24 Total Credits

- Complete all of the following
  - Complete the following:
    - TSL5525 - ESOL Cultural Diversity (3)
    - TSL6142 - Critical Approaches to ESOL (3)
    - TSL6250 - Applied Linguistics in ESOL (3)
    - TSL6350 - Grammar for ESOL Teachers (3)
    - TSL6440 - Assessment Issues in TESOL (3)
    - TSL6642 - Issues in Second Language Acquisition (3)
    - TSL6640 - Research in Second Language (3)
  - Complete at least 1 of the following:
    - TSL5345 - Methods of ESOL Teaching (3)
    - TSL6940 - ESOL Practicum (3)

Thesis/Nonthesis Option
6 - 12 Total Credits

- Complete 1 of the following
  - Thesis Option - 6 Hours
    - Complete all of the following
      - Earn at least 3 credits from the following:
        - TSL6971 - Thesis (1 - 99)
      - Complete at least 1 of the following:
        - TSL5325 - ESOL Strategies (3)
        - TSL5380 - Computers and Technology for ESOL (3)
        - TSL5376 - Reading and Writing in a Second Language (3)
        - TSL5940 - Issues in TEFL (3)
        - TSL6252 - Sociolinguistics for ESOL (3)
        - TSL5601 - Second Language Vocabulary Learning (3)
        - TSL6374 - TESOL Listening, Speaking and Pronunciation (3)
        - LIN5137 - Linguistics (3)
        - EDF6886 - Multicultural Education (3)
        - TSL6940 - ESOL Practicum (3)
        - EDH6305 - Teaching and Learning in Colleges and Universities (3)
        - SPA6474 - Assessment and Management of Culturally and Linguistically Diverse Populations (3)
        - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
        - ENC5276 - Theory and Practice of Tutoring Writing (3)
        - ENC5705 - Approaches to Teaching College Composition (3)
        - EDF6401 - Statistics for Educational Data (3)
  - TSL 5907 - Directed Independent Study 3 credit hours may also be taken

- Nonthesis Option - 12 Hours
  - Complete all of the following
    - Complete at least 4 of the following:
      - TSL5325 - ESOL Strategies (3)
      - TSL5380 - Computers and Technology for ESOL (3)
      - TSL5376 - Reading and Writing in a Second Language (3)
      - TSL5940 - Issues in TEFL (3)
      - TSL6252 - Sociolinguistics for ESOL (3)
      - TSL5601 - Second Language Vocabulary Learning (3)
      - TSL6374 - TESOL Listening, Speaking and Pronunciation (3)
      - LIN5137 - Linguistics (3)
      - EDF6886 - Multicultural Education (3)
      - TSL6940 - ESOL Practicum (3)
      - EDH6305 - Teaching and Learning in Colleges and Universities (3)
      - SPA6474 - Assessment and Management of Culturally and Linguistically Diverse Populations (3)
      - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
      - ENC5276 - Theory and Practice of Tutoring Writing (3)
      - ENC5705 - Approaches to Teaching College Composition (3)
      - EDF6401 - Statistics for Educational Data (3)
  - TSL 5907 - Directed Independent Study 3 credit hours may also be taken

Grand Total Credits: 30 - 36
Program Details

Most students complete the nonthesis option so that they can focus more on coursework related to specific aspects of TESOL, pedagogy, or education. The thesis option is appropriate for those students wishing to research current issues in the discipline or eventually pursue a doctoral program in TESOL or related language field. By the end of the second semester, students wishing to pursue the thesis option should speak with the program director to seek approval and a recommendation for a thesis committee chairperson.

Our courses are focused on theory into practice and, therefore, often have a service-learning, practical, or applied project as an integral part of the curriculum. The TSL 6640 - Research in Second Language is required and should be taken in the first semester of study. A final cumulative course, TSL 6642 - Issues in Second Language Acquisition, is also required. TSL 5325 - ESOL Strategies will help students prepare for their comprehensive exam.

All students must take a comprehensive written examination covering the core TSL courses. This examination is normally taken in the last semester of graduate work and will be reviewed by members of the TESOL Graduate Committee. A student may take the comprehensive examination only twice, and a second examination will not be given in the same semester in which the first attempt occurred.

Texts and Technology PhD

College

College of Arts and Humanities

Department

College of Arts and Humanities Dean’s Office

Program Website

http://tandt.cah.ucf.edu/

Program Handbook Link

Texts and Technology PhD

Program Contact Information

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Telephone: (407) 823-2126
Trevor Colbourn Hall (TCH) 236

Anastasia Salter PhD
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Carla Gripp
carla.gripp@ucf.edu
Telephone: 407-823-2126
Trevor Colbourn Hall (TCH) 236C

Is this program available 100% online?

No

Program Description

Dedicated to inventing the future of the humanities, Texts and Technology is an interdisciplinary doctoral program that integrates fields such as writing, rhetoric, philosophy, technical communication, and public history with digital methods and practices in coding, game design, and archiving. The program supports engagement with digital practices in dialectical, rhetorical, procedural, and critical-cultural fields. The T&T program considers literacy in a broad sense, from traditional notions of writing and communication to more contemporary notions of computational and procedural literacy (e.g., using programming and new media installations as inventive methods for production, critique, and analysis).

Since 2001, UCF’s Texts and Technology doctoral program has excelled in supporting its students with an internationally recognized faculty and by offering a rigorous curriculum in a friendly environment. Students bring knowledge of a specific discipline and deepen their understanding of the subject through a digital lens. In the T&T program, students adapt, develop, assess, and invent information practices in relation to emergent information technologies in and beyond the humanities.

Program Prerequisites

Applicants must hold an earned master's degree from an accredited institution recognized by UCF or recognized foreign institution prior to entering the Texts and Technology program. Fields with a technological and/or textual theory component, such as digital humanities, public history, technical communication, digital media, cultural studies, philosophy, rhetoric, or linguistics, are especially applicable.
Degree Requirements

Required Courses
18 Total Credits

- Complete all of the following
  - Core
    - Complete the following:
      - ENG6800 - Introduction to Texts and Technology (3)
      - ENG6801 - Texts and Technology in History (3)
      - ENG6810 - Theories of Texts and Technology (3)
      - ENG6005 - Dissertation Research Design in Texts and Technology (3)
  - Procedural Literacy
    - Complete at least 1 of the following:
      - DIG6836 - Humanistic Data Analysis (3)
      - ENG6819 - Critical Making for Humanist Scholarship (3)
  - Research Methods
    - Complete all of the following
      - Complete at least 1 of the following:
        - ENG6812 - Research Methods for Texts and Technology (3)
        - DIG6825 - Research Methods for Interactive Media (3)
        - ENC6720 - Research Methods in Rhetoric and Composition (3)
        - HIS6159 - Historiography (3)
      - Select one course from the list above, or an alternate 6000-level methods course subject to approval by the instructor and the Texts and Technology Program Director.

Area of Specialization (See Program Details Section for Descriptions)
12 Total Credits

- Complete 1 of the following
  - Digital Humanities
    - Earn at least 12 credits from the following:
      - ARH5897 - Advanced Seminar in Art History (3)
      - DIG5137 - Information Architecture (3)
      - DIG5508 - Programming for Digital Media (3)
      - DIG6812 - Digital Interaction for Informal Learning (3)
      - DIG6647 - History and Theory of Dynamic Media (3)
      - ENC6425 - Hypertext Theory and Design (3)
      - ENC6426 - Visual Texts and Technology (3)
      - ENC6428 - Digital Literacies (3)
      - ENG6074 - Historical Movements in Literary, Cultural, and Textual Studies (3)
      - ENG6078 - Contemporary Movements in Literary, Cultural, and Textual Theory (3)
      - ENG6624 - Social Media Research for Humanities (3)
      - ENG6806 - Digital Editing and Databases (3)
      - ENG6808 - Narrative Information Visualization (3)
      - ENG6811 - Cultural Contexts in Texts and Technology (3)
      - ENG6813 - Interdisciplinary Teaching (3)
      - ENG6814 - Gender in Texts and Technology (3)
      - ENG6819 - Critical Making for Humanist Scholarship (3)
      - HIS6167 - Spatial History (3)
      - LIT6216 - Issues in Literary Study (3)
• LIT6936 - Studies in Literary, Cultural, and Textual Theory (3)
• PHIS665 - Knowledge, Responsibility, and Society (3)
• PHI6679 - Digital Ethics (3)
• PHMS5035 - Environmental Philosophy (3)
• THE5307 - Contemporary Theatre Practice (3)
• THE5545 - Theatre for Social Change (3)
• TPA6186 - Immersive Experience Studio (3)
• TPA6188 - Visualizing Themed Environments (3)
• WST5347 - Research in Women and Gender Studies (3)
• WST5601 - Theories in Gender Studies (3)

Digital Media
• Earn at least 12 credits from the following:
  • DIG5137 - Information Architecture (3)
  • DIG5487 - Media Aesthetics (3)
  • DIG5508 - Programming for Digital Media (3)
  • DIG5831 - Computational Media (3)
  • DIG6136 - Design for Interactive Media (3)
  • DIG6432 - Transmedia Story Creation (3)
  • DIG6436 - Ethnographic Storytelling and New Media (3)
  • DIG6504 - Previsualization and Concept Development (3)
  • DIG6551 - Theory and Practice of Interactive Storytelling (3)
  • DIG6605 - Physical Computing (3)
  • DIG6647 - History and Theory of Dynamic Media (3)
  • DIG6812 - Digital Interaction for Informal Learning (3)
  • DIG6817 - Contemporary Topics in Interactive Media (3)
  • ENC6225 - User-Centered Design for Technical Communication (3)
  • ENC6296 - Interactive Design in Technical Communication (3)
  • ENC6421 - Digital Rhetorics (3)
  • ENC6425 - Hypertext Theory and Design (3)
  • ENG6624 - Social Media Research for Humanities (3)
  • ENG6806 - Digital Editing and Databases (3)
  • ENG6808 - Narrative Information Visualization (3)
  • ENG6813 - Interdisciplinary Teaching (3)
  • ENG6819 - Critical Making for Humanist Scholarship (3)
  • HIS6167 - Spatial History (3)
  • PHI6679 - Digital Ethics (3)

Editing, Publishing, and Interdisciplinary Curating (EPIC)
• Earn at least 12 credits from the following:
  • ARH5897 - Advanced Seminar in Art History (3)
  • CRW6025 - Advanced Graduate Writing Workshop (3)
  • CRW6721 - Literary Journal Editing (3)
  • CRW6976 - Scholarship and Publication Models (3)
  • DIG6136 - Design for Interactive Media (3)
  • DIG5487 - Media Aesthetics (3)
  • DIG6436 - Ethnographic Storytelling and New Media (3)
  • DIG6812 - Digital Interaction for Informal Learning (3)
  • ENC6216 - Editing Professional Writing (3)
  • ENC6217 - Technical Editing (3)
  • ENC6257 - Visual Technical Communication (3)
  • ENC6297 - Production and Publication Methods (3)
  • ENC6426 - Visual Texts and Technology (3)
  • ENC6428 - Digital Literacies (3)
  • ENG6806 - Digital Editing and Databases (3)
  • HIS5083 - Cultural Heritage Management (3)
  • HIS5088 - Readings in Curation and Public History (3)
  • HIS6094 - Seminar in Curation and New Media (3)
  • LNS575 - English Grammar and Usage (3)
  • LIT6216 - Issues in Literary Study (3)
  • PHI6679 - Digital Ethics (3)

Public History
• Earn at least 12 credits from the following:
  • AMH5636 - Colloquium in US Environmental History (3)
  • HIS5503 - History of Technology (3)
  • AMH6346 - Seminar in the History of American Automobility (3)
  • AMH6429 - Seminar in Community and Local History (3)
  • ENG6808 - Narrative Information Visualization (3)
  • HIS5067 - Introduction to Public History (3)
  • HIS5083 - Cultural Heritage Management (3)
  • HIS5088 - Readings in Curation and Public History (3)
  • HIS5925 - History in the Digital Age (3)
  • HIS6094 - Seminar in Curation and New Media (3)
- HIS6096 - Seminar in Historic Preservation (3)
- HIS6165 - Digital Tools for Historians (3)
- HIS6167 - Spatial History (3)
- HIS6942 - Internship (3)
- PHI6679 - Digital Ethics (3)

**Rhetoric and Composition**
- Earn at least 12 credits from the following:
  - ENC5337 - Rhetorical Theory (3)
  - ENC5705 - Approaches to Teaching College Composition (3)
  - ENC5920 - Colloquium in Rhetoric and Composition (3)
  - ENC6245 - Teaching Professional Writing (3)
  - ENC6332 - Gendered Rhetoric (3)
  - ENC6333 - Contemporary Rhetoric and Composition Theory (3)
  - ENC6335 - Rhetorical Traditions (3)
  - ENC6338 - The Rhetorics of Public Debate (3)
  - ENC6339 - Rhetorical Movements (3)
  - ENC6428 - Digital Literacies (3)
  - ENC6712 - Studies in Literacy and Writing (3)
  - ENC6740 - Topics in Rhetoric and Composition (3)
  - ENC6945 - Community Literacy Practicum (3)
  - ENG6624 - Social Media Research for Humanities (3)
  - ENG6808 - Narrative Information Visualization (3)
  - ENG6811 - Cultural Contexts in Texts and Technology (3)
  - PHI6679 - Digital Ethics (3)

**Scientific and Technical Communication**
- Earn at least 12 credits from the following:
  - ENC6217 - Technical Editing (3)
  - ENC6261 - Technical Writing, Theory and Practice (3)
  - ENC6292 - Project Management for Technical Writers (3)
  - ENC6296 - Interactive Design in Technical Communication (3)
  - ENC6297 - Production and Publication Methods (3)
  - ENC6425 - Hypertext Theory and Design (3)
  - ENC6421 - Digital Rhetorics (3)
  - ENC6247 - Proposal Writing (3)
  - ENC6257 - Visual Technical Communication (3)
  - ENC6338 - The Rhetorics of Public Debate (3)
  - ENC6624 - Social Media Research for Humanities (3)
  - ENG6808 - Narrative Information Visualization (3)
  - LIN5675 - English Grammar and Usage (3)
  - LIT6435 - Rhetoric of Science (3)
  - PHI6679 - Digital Ethics (3)

**Elective Courses - Interdisciplinary Electives**

9 Total Credits

- Earn at least 9 credits from the following types of courses:
  Students select 9 credit hours of interdisciplinary electives from any Area of Specialization, or from other departments within the university, subject to approval by the instructor and the Texts and Technology Program Director. This requirement encourages students to find graduate-level coursework best suited to develop their research agendas and to prepare for their dissertations.

**Admission to Candidacy**

3 Total Credits

**Candidacy Examination**

- Earn at least 3 credits from the following types of courses:
  ENC 7919 Doctoral Research 3 credit hours Students are admitted to doctoral candidacy status upon completion of a written examination with three parts—one part based on a reading list reviewed biennially by the Texts and Technology faculty and the other two parts based on reading lists prepared by each student and approved by the examination committee. The candidacy examination for each student is written and evaluated by a committee of three UCF Texts and Technology graduate faculty members chosen by the student. Students must be registered for ENC 7919 during the semester in which they take their candidacy examination and they must find a Texts and Technology core faculty member to serve as the chair of their examination during the semester before enrolling in ENC 7919. Students cannot register for dissertation credit (ENC 7980) until the semester after they have successfully passed the candidacy examination. Students who fail the candidacy examination a second time cannot continue in the program. The following are required in order to be admitted to candidacy and enroll in dissertation hours: Successful completion of all coursework, except for dissertation hours. Successful completion of the candidacy examination. Completion of College of Graduate Studies CITI and Academic Integrity Training An approved dissertation advisory committee is on file, consisting of approved graduate faculty and graduate faculty scholars. A current, approved program of study is on file.

**Dissertation and Oral Defense**

15 Total Credits
Earn at least 15 credits from the following types of courses:
ENC 7980 Students choose their dissertation adviser and committee from among the faculty in the Texts and Technology PhD program and must have one member from outside the College of Arts and Humanities. Students typically choose the adviser after they have completed approximately 27 credit hours toward the degree or after the first year-and-a-half of coursework. All dissertation committee members, including outside readers, must hold a PhD or another relevant degree or, if serving as a UCF Graduate Scholar, the external member must have documented evidence of exceptional relevant experience and/or scholarly or creative productivity. Students must write a dissertation on their research that will explain and defend a significant original contribution to the field of Texts and Technology. It may be of a theoretical, historical or pragmatic nature, but must meet conventional academic standards. Students are required to submit and defend a written dissertation proposal (the prospectus) during the first year in dissertation. The dissertation committee administers the candidate's oral defense of the dissertation, with passing determined by acceptance by a majority of the committee. The dissertation adviser, the dissertation committee and the dean of the college or designee must approve the final dissertation. Format approval is required from the Thesis and Dissertation Office and final approval of degree requirement completion by the College of Graduate Studies (Millican Hall 230) Students will submit at least one substantial scholarly article to a national and/or international peer-reviewed journal or proceedings conference with the approval and assistance of the dissertation chair and the director of the doctoral program.

Grand Total Credits: 57
Program Details

Area of Specialization

Students select an Area of Specialization no later than after having completed 18 credit hours in the program. Students are required to select 12 credit hours from an Area of Specialization as noted below, or other graduate courses in the discipline subject to approval by the instructor and the Texts and Technology Program Director.

Suggested courses in various Areas of Specialization are listed above. These course groupings are only guides, are not exhaustive, and are meant to assist with advising and course selection in order to meet the individual student's educational goals and objectives. The lists are not intended to restrict elective choices among focus areas as we strongly encourage Texts and Technology students to maintain an interdisciplinary approach to their doctoral education.

If a student identifies another UCF graduate course that may be of value to their Texts and Technology research area, but it is not already identified in a list below, that student may request approval from the T&T Program Director for the course to be used as an elective in the Graduate Plan of Study. All such requests must be made in advance of enrolling in the course.

Digital Humanities

ENG 6812 - Research Methods for Texts and Technology (3 credit hours) is the recommended Methods course.

The Digital Humanities Area of Specialization prepares students for careers in research, teaching, government, and industry and combines the study and application of digital technologies with the study of human society and culture. Students develop an understanding of social and cultural shifts in relation to information technologies and invent new practices for conducting research, teaching, and writing (broadly defined) in digital media.

Digital Media

DIG 6825 - Research Methods for Interactive Media (3 credit hours) or ENG 6624 - Social Media Research for Humanities (3 credit hours) is the recommended Methods course.

The Digital Media Area of Specialization emphasizes the conceptual, theoretical, design, and technical skills needed to engage the changing platforms on which we work, teach, and live. This specialization prepares students for careers in user experience design, digital storytelling, and interactive communication. Students develop an understanding of critical making, code and software studies and development, user-centered design, and the critique and design of games and interactive media.

Editing, Publishing, and Interdisciplinary Curating (EPIC)

ENG 6812 Research Methods for Texts and Technology or DIG 6825 Research Methods for Interactive Media, or ENC 6720 Research Methods in Rhetoric and Composition, or HIS 6159 Historiography can be taken as the required Methods course.

The Editing, Publishing, and Interdisciplinary Curating Area of Specialization prepares students for careers in editing, publishing, and curating, including consideration of current and developing technologies of print and online publication; digital archiving and collections; digital world-building and publication; curation of film, visual art, gaming, and other media; scholarly projects and publications; and the impact of technologies on the way we read, interact with media, and think.

Public History

If the student does not hold a master's degree in History, HIS 6159 - Historiography (3 credit hours) is the recommended Methods course. If the student holds a master's degree in history, the recommended Methods course is ENG 6812 - Research Methods for Texts and Technology (3 credit hours).

The Public History Area of Specialization engages students in collaborations with various communities in the gathering of historic materials, preservation, archiving, curating, oral history, and related fields while preparing students for careers in academia, museums, governments, and non-profit agencies. It pays special attention to digital platforms and tools and their uses for involving public audiences in historical analysis and interpretation.

Rhetoric and Composition

ENC 6720 - Research Methods in Rhetoric and Composition (3 credit hours) is the recommended Methods course.

The Rhetoric and Composition Area of Specialization trains students to communicate effectively, persuasively, and ethically across a range of civic, professional, and educational contexts and pays special attention to digital platforms and tools and their uses for involving public audiences.

Scientific and Technical Communication

ENG 6812 - Research Methods for Texts and Technology (3 credit hours) is the recommended Methods course.

The Scientific and Technical Communication Area of Specialization provides a foundation in rhetorical theory, communication theory, design theory, and other theories informing the discipline. Students develop practical projects in a variety of professional contexts such as scientific and medical communication and communicating for international audiences.

Theatre MA

College

College of Arts and Humanities
Department
School of Performing Arts

Program Website
http://performingarts.cah.ucf.edu/study/#theatregrad/

Program Handbook Link
Theatre MA

Program Contact Information
Julia Listengarten PhD
Professor
julia.listengarten@ucf.edu
Telephone: 407-823-3858
Performing Arts Center (PAC) T220

Earl Weaver
Associate Professor
earl.weaver@ucf.edu
Telephone: 407-823-5158
Performing Arts Center (PAC) T231

Is this program available 100% online?
No

Program Description
The Master of Arts in Theatre provides developing theatre scholars, high school teachers and community college teachers the opportunity to strengthen skills and knowledge of theatre beyond the undergraduate level.

MA students will graduate with a deeper knowledge of theatre theory, history and practice and be able to apply critical thinking through research and creative work. MA students will develop dramaturgical skills through their work on productions while also understanding how to apply theoretical frames to their own creative practice.

MA students typically pursue a variety of goals: increasing specific theatrical skills, extending theatre skills into new areas, preparing for entrance into doctoral Theatre programs, or in the case of educators, expanding their expertise and credentials. Students may be admitted on either a full-time or part-time basis.

The Master of Arts in Theatre program offers a rigorous course of study of 39 credit hours minimum, culminating in the writing of a scholarly thesis. Of the 39 credit hours required for the degree, 30 credit hours are required core courses with the other 9 credit hours chosen from a specified list of elective Theatre courses offered by the School.

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites
Students applying for entrance into the MA program must have successfully completed the following undergraduate courses or their equivalent: Script Analysis or Play Analysis, Theatre History or Dramatic Literature, Directing I.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Core
6 Total Credits
Complete the following:

- THE5910 - Research Methods in Theatre (3)
- THE5945L - Theatre Practicum I (1)
- THE5946L - Theatre Practicum II (1)
- THE6947L - Theatre Practicum III (1)

Concentration
15 Total Credits

Complete 1 of the following

Theatre Studies Concentration - 15 Credit Hours

Complete the following:

- THE6507 - Dramatic Theory and Criticism (3)
- THE5205 - American Theatre (3)
- TPA5405 - Theatre Management (3)
- THE6086C - Careers in Professional Theatre (3)
- THE5307 - Contemporary Theatre Practice (3)

Musical Theatre Concentration - 15 Credit Hours

Earn at least 15 credits from the following:

- THE6308 - Script and Score Analysis (3)
- TPP6344 - Musical Theatre Directing (3)
- TPP5754 - Musical Theatre Voice I (2)
- TPP6755 - Musical Theatre Voice II (2)
- THE6756 - Methods of Teaching Drama (3)
- TPP5554C - Musical Theatre Dance I (2)
- THE6918 - Directed Research (1 - 99)
- TPP6933 - Acting Studio V (2)

Elective Courses
9 Total Credits

Complete 1 of the following

Theatre Studies Concentration - 9 Credit Hours

Complete all of the following

- Earn at least 9 credits from the following:
  - TPA5345C - 2D Computer Assisted Design for Theatre (2)
  - TPA5346C - 3D Modeling for Theatre (2)
  - THE5288 - Period Costumes, Architecture and Decor I (3)
  - THE5289 - Period Costumes, Architecture and Decor II (3)
  - TPA5885C - Puppetry (2)
  - TPP5248C - Storytelling as a Theatrical Art Form (2)
  - THE6756 - Methods of Teaching Drama (3)
  - THE5385 - Dramatic Literature for Children (3)
  - TPA5085C - Design Seminar for Theatre (2)
  - TPP6247 - Theatre for Social Change (3)

Other graduate-level courses may be permitted with school approval.

Musical Theatre Concentration - 9 Credit Hours

Complete all of the following

- Earn at least 9 credits from the following:
  - THE5237 - Cultural Diversity in Theatre (3)
  - THE5425 - Women in Theatre (3)
  - THE6908 - Independent Study (1 - 99)
  - THE5205 - American Theatre (3)
  - THE5288 - Period Costumes, Architecture and Decor I (3)
  - THE5289 - Period Costumes, Architecture and Decor II (3)
  - THE5307 - Contemporary Theatre Practice (3)
  - THE5385 - Dramatic Literature for Children (3)
  - THE5507 - Dramatic Theory and Criticism (3)
  - TPA5085C - Design Seminar for Theatre (2)
  - TPA5345C - 2D Computer Assisted Design for Theatre (2)
  - TPA5346C - 3D Modeling for Theatre (2)
  - TPA5405 - Theatre Management (3)
  - TPA5885C - Puppetry (2)
  - TPP5248C - Storytelling as a Theatrical Art Form (2)
  - TPP6247 - Theatre for Social Change (3)
  - THE6086C - Careers in Professional Theatre (3)
  - THE5215 - Global Theatre (3)

Other graduate-level courses may be permitted with school approval.

Thesis
9 Total Credits
Earn at least 9 credits from the following:
- THE6971 - Thesis (1 - 99)

Examination
0 Total Credits
- A comprehensive Theatre exam is administered to MA majors at the end of their course work. The department allows two attempts at a comprehensive exam.

Transfer and Residency
0 Total Credits
- Students without an earned master's degree can usually transfer up to 9 semester hours of credit into this program. A minimum of 30 credits must be taken at the University of Central Florida. Students must complete a residency requirement of at least two full-time consecutive semesters. A summer session may be counted toward the two consecutive semester requirement.

Independent Learning
0 Total Credits
- A thesis is required.

Grand Total Credits: 39

Program Details
Candidates must demonstrate the ability to understand the conceptual basis of their art and to be able to articulate that understanding to others. In addition to their theoretical studies, MA students are also required to demonstrate proficiency in theatrical production. Students are expected to select either Theatre Studies or Musical Theatre as their concentration when applying for the program. Please note that the Theatre MA, Musical Theatre concentration may be completed fully online/remote, although not all elective options or program prerequisites may be offered online.

Students must maintain a minimum "B" (3.00) overall Theatre GPA to continue in the major. Fifty percent of graduate course work must be at the 6000 level. Theatre courses with grades of less than "C" will not be counted toward degree requirements. Continuation in the MA program requires a positive annual evaluation. All graduate students must consult with an area adviser. All MA students must successfully complete a written thesis. The thesis proposal must be approved in advance.

Course Schedule—Theatre Studies Concentration

Year 1
Fall—10 Credit Hours
- THE 5910 - Research Methods in Theatre 3 Credit Hours
- TPA 5405 - Theatre Management 3 Credit Hours or elective
- 5000 level Theatre elective 3 Credit Hours
- THE 5945L - Theatre Practicum I 1 Credit Hours

Spring—10 Credit Hours
- 6000-level Theatre electives 3 Credit Hours
- THE 5205 - American Theatre 3 Credit Hours
- THE 5307 - Contemporary Theatre Practice 3 Credit Hours
- THE 5946L - Theatre Practicum II 1 Credit Hours

Year 2
Fall—10 Credit Hours
- THE 6086C - Careers in Professional Theatre 3 Credit Hours
- THE 6507 - Dramatic Theory and Criticism 3 Credit Hours
- THE 6947L - Theatre Practicum III 1 Credit Hours
- THE 6971 - Thesis 6 Credit Hours

Spring—9 Credit Hours
- 6000-Level Theatre Elective 3 Credit Hours
- THE 6971 Thesis 6 Credit Hours

Course Schedule—Musical Theatre Concentration

Summer 1—10 Credit Hours
- TPP 5754 - Musical Theatre Voice I 2 Credit Hours
- TPP 6344 - Musical Theatre Directing 3 Credit Hours
- TPP 5554C - Musical Theatre Dance I 2 Credit Hours
- THE 5910 - Research Methods in Theatre 3 Credit Hours

Summer 2—7 Credit Hours
- TPP 6755 - Musical Theatre Voice II 2 Credit Hours
- TPP 6933 - Acting Studio V 2 Credit Hours
- THE 6756 - Methods of Teaching Drama 3 Credit Hours

**Academic Year Courses—22 Credit Hours**
- THE 5945L - Theatre Practicum I 1 Credit Hours
- THE 5946L - Theatre Practicum II 1 Credit Hours
- THE 6947L - Theatre Practicum III 1 Credit Hours
- THE 6918 Directed Research 1 Credit Hour
- THE 6971 Thesis 9 Credit Hours
- Electives 9 Credit Hours

**Elective Courses—9 Credit Hours**
- THE 5237 - Cultural Diversity in Theatre 3 Credit Hours
- THE 5425 - Women in Theatre 3 Credit Hours
- THE 5215 - Global Theatre 3 Credit Hours
- THE 6908 Independent Study 3-6 Credit Hours
- THE 5205 - American Theatre 3 Credit Hours
- THE 5288 - Period Costumes, Architecture and Decor I 3 Credit Hours
- THE 5289 - Period Costumes, Architecture and Decor II 3 Credit Hours
- THE 5307 - Contemporary Theatre Practice 3 Credit Hours
- THE 5385 - Dramatic Literature for Children 3 Credit Hours
- TPA 5085C - Design Seminar for Theatre 2 Credit Hours
- TPA 5345C - 2D Computer Assisted Design for Theatre 2 Credit Hours
- TPA 5346C - 3D Modeling for Theatre 2 Credit Hours
- TPA 5405 - Theatre Management 3 Credit Hours
- TPP 5248C - Storytelling as a Theatrical Art Form 2 Credit Hours
- TPP 6247 - Theatre for Social Change 3 Credit Hours

**Theatre MFA**

**College**  
College of Arts and Humanities

**Department**  
School of Performing Arts

**Program Website**  
http://performingarts.cah.ucf.edu/study/#theatregrad/

**Program Handbook Link**  
Theatre MFA

**Program Contact Information**

**Julia Listengarten PhD**  
Professor  
 julia.listengarten@ucf.edu  
Telephone: 407-823-3858  
Performing Arts Center (PAC) T220

**Is this program available 100% online?**  
No
Program Description

The Theatre MFA program is currently not accepting applications for the Acting track. Please contact the program for more information.

The Theatre MFA program with tracks in Acting, Themed Experience, and Theatre for Young Audiences is designed for students who demonstrate the artistic and intellectual capacity and evidence of professional promise to pursue careers in professional and academic theatre. Please scroll to the bottom of this page for further details on these Tracks.

The program is a highly selective, rigorous, three-year professional training program emphasizing both theatre theory and practice. The MFA degree is rooted in the belief that classroom study and practical experience in the theatre are of equal and complementary value. The production aspect, therefore, is integrated into the curriculum because it is the principal means available for the coordination of all the elements of dramatic art. We seek to pursue all possible ways to fuse production responsibilities with classroom work effectively for the purpose of teaching and training.

Students, in addition to becoming highly trained theatre practitioners, must also demonstrate the ability to understand the conceptual basis of their art and to be able to articulate that understanding to others. Toward this end, the department will recruit and develop graduate students who can serve, along with faculty and staff, as role models for undergraduate students whose BA and BFA programs of study are integrally connected with the graduate program.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Theatre MFA - Theatre MFA, Acting Track

Track Website

http://performingarts.cah.ucf.edu/study/#theatregrad/

Track Handbook

Theatre MFA, Acting Track

Track Contact Information

Michael Wainstein MFA
Professor
Michael.Wainstein@ucf.edu
Telephone: 407-823-2519
Performing Arts Center (PAC) M255D

Julia Listengarten PhD
Professor
julia.listengarten@ucf.edu
Telephone: 407-823-3858
Performing Arts Center (PAC) T220

Online Availability

No
Track Description

We are not accepting applications for Fall 2023. Our next recruitment cycle begins in Fall 2023 for Fall 2024 admission.

The Master of Fine Arts in Acting Track is a NAST-accredited pre-professional actor training program. Through intensive practical and theoretical classwork and production experience, students are prepared physically and vocally as artists to succeed in this demanding profession.

The program is a highly selective, rigorous, three-year professional training program emphasizing both theatre theory and practice. The first two years are spent on campus in classes and performing in Theatre UCF productions. The third year is spent as a resident company member at Orlando Shakes where students perform in mainstage and theatre for young audience productions, teach, study and assist with the operations of the theatre.

Students, in addition to becoming highly trained theatre practitioners, must also demonstrate the ability to understand the conceptual basis of their art and to be able to articulate that understanding to others. Toward this end, the department will recruit and develop graduate students who can serve, along with faculty and staff, as role models for undergraduate students whose BA and BFA programs of study are integrally connected with the graduate program.

The Acting track of the Theatre MFA program requires 47 credit hours of core and specialization courses that follow a suggested yearly schedule in addition to a thesis and an internship. The electives can be chosen (with instructor approval) from existing courses in other MFA tracks in Theatre. Because allowed electives are both two- and three-credit-hour courses, the course of study shows a sliding number of credits for electives. Consequently, although the 61 credit hours are required, a student may graduate with as many as 65 credit hours.

Total Credit Hours Required: 61 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

General Entrance and Area Specific Prerequisites - Students applying for entrance into the MFA Programs must have successfully completed the following undergraduate courses or their equivalent:

- Acting - Script Analysis or Play Analysis, Theatre History or Dramatic Literature, Stage Voice, Stage Movement, Advanced Acting.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
# Degree Requirements

## Core
6 Total Credits

- Complete the following:
  - THE5910 - Research Methods in Theatre (3)
  - TPP5087C - Theatre Careers in Performance (3)

## Specialization
41 Total Credits

- Earn at least 41 credits from the following types of courses:
  - In the "Track Details" Section below, a suggested course schedule is provided. Students will work directly with their advisor in creating a plan of study for this requirement.

## Thesis
6 Total Credits

- Earn at least 6 credits from the following:
  - THE6971 - Thesis (1 - 99)

## Internship
8 Total Credits

- Earn at least 8 credits from the following:
  - THE6948 - Professional Internship (4)

## Transfer and Residency
0 Total Credits

- Students who do not hold a master's degree can usually transfer up to nine semester hours into this program. Ordinarily, students holding completed MS or MA degrees will not be admitted into the MFA program. Each case will be evaluated on an individual basis. Final acceptance and number of credits to be transferred will be determined by a graduate faculty committee. A minimum of 51 credits must be taken at the University of Central Florida. A student without an earned master's degree must complete a residency requirement of at least five semesters with at least four of them being full-time, consecutive semesters. Summer session may be counted toward the four consecutive semesters.

## Independent Learning
0 Total Credits

- The Independent Learning Requirement is met by successful completion of a master's thesis.

Grand Total Credits: 61
Track Details

Students must maintain a minimum "B" (3.0) overall Theatre grade point average to continue in the major. Theatre courses with grades of less than "C" will not be counted toward degree requirements. All Acting program students are required to audition for all fall and spring productions and must accept the roles assigned. A student's continuation in the program is contingent upon positive end-of-semester evaluations. Students must successfully complete internship and thesis requirements. The thesis proposal must be approved in advance.

Of the 61 hours required for the Acting track, the following courses constitute the MFA Graduate Core Curriculum. See the Course Schedule below for an understanding of how the curricular elements are articulated.

Course Schedule

Year 1
Fall: 10 Credit Hours
- TPP 5156C - Acting Studio I 3 Credit Hours
- TPP 5515 - Movement Studio I 2 Credit Hours
- TPP 5715C - Stage Voice I 2 Credit Hours
- THE 5910 - Research Methods in Theatre 3 Credit Hours

Spring: 11 Credit Hours
- TPP 5157C - Acting Studio II 3 Credit Hours
- TPP 5516C - Movement Studio II 2 Credit Hours
- TPP 5716C - Stage Voice II 2 Credit Hours
- THE 5307 - Contemporary Theatre Practice 3 Credit Hours
- TPP 5278C - Musical Theatre Lab 1 Credit Hours

Year 2
Fall: 13 Credit Hours
- TPP 6146C - Acting Studio III 3 Credit Hours
- TPP 6517 - Movement Studio III 2 Credit Hours
- TPP 6717C - Stage Voice III 2 Credit Hours
- THE 6507 - Dramatic Theory and Criticism 3 Credit Hours
- TPP 5087C - Theatre Careers in Performance 3 Credit Hours

Spring: 9 Credit Hours
- TPP 6518C - Movement Studio IV 2 Credit Hours
- TPP 6718C - Stage Voice IV 2 Credit Hours
- TPP 6267 - Acting Studio IV 2 Credit Hours
- THE 5205 - American Theatre 3 Credit Hours

Year 3
Fall: 9 Credit Hours
- THE 6948 - Professional Internship 4 Credit Hours
- THE 6971 - Thesis 3 Credit Hours
- TPP 6186C - Advanced Scene Study 2 Credit Hours

Spring: 9 Credit Hours
- THE 6948 - Professional Internship 4 Credit Hours
- THE 6971 - Thesis 3 Credit Hours
- TPP 6933 - Acting Studio V 2 Credit Hours

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Theatre MFA - Theatre MFA, Theatre for Young Audiences Track

Track Website
http://performingarts.cah.ucf.edu/study/#theatregrad/

Track Handbook
Theatre MFA, Theatre for Young Audiences Track

Track Contact Information

Vandy Wood
Associate Professor
vandy@ucf.edu
Telephone: 407-823-2862
Performing Arts Center (PAC) T235

Julia Listengarten PhD
Professor
julia.listengarten@ucf.edu
Telephone: 407-823-3858
Performing Arts Center (PAC) T220

Online Availability
No

Track Description
The University of Central Florida offers one of the nation's most distinct graduate training programs in Theatre for Young Audiences. The program offers courses such as Puppetry, Storytelling and Methods of Teaching Drama is partnered with Orlando Repertory Theatre, a professional Theatre for Young Audiences in vibrant downtown Orlando.

The Master of Fine Arts in Theatre for Young Audiences track is designed for students who demonstrate the artistic and intellectual capacity and evidence of professional promise to pursue careers in professional and academic theatre. This track is for all theatre disciplines and offers opportunities to create work with and for youth, including community-based applied theatre, teaching artistry and education, devised theatre and directing.

The program is a highly selective, rigorous, three-year professional training program emphasizing both theatre theory and practice. The MFA degree is rooted in the belief that classroom study and practical experience in the theatre are of equal and complementary value.

Students, in addition to becoming highly trained theatre practitioners, must also demonstrate the ability to understand the conceptual basis of their art and to be able to articulate that understanding to others. Toward this end, the department will recruit and develop graduate students who can serve, along with faculty and staff, as role models for undergraduate students whose BA and BFA programs of study are integrally connected with the graduate programs. Assistantships also offer students teaching opportunities in the theatre department.

The Theatre for Young Audiences track of the Theatre MFA program requires 6 credit hours of core courses and 26 credit hours of specialization courses to be completed following a yearly schedule in addition to a thesis and an internship. The electives can be chosen (with instructor approval) from existing courses in other MFA tracks in Theatre. Because allowed electives are both two- and three-credit-hour courses, the course of study shows a sliding number of credits for electives. Consequently, although 61 credit hours are required, a student may graduate with as many as 65 credit hours. Students earning the degree are expected to demonstrate proficiency in their area of specialization.

Total Credit Hours Required: 61 Credit Hours Minimum beyond the Bachelor's Degree
**Track Prerequisites**

**General Entrance and Area Specific Prerequisites**—Students applying for entrance into the MFA Programs must have successfully completed the following undergraduate courses or their equivalent:

- **Theatre for Young Audiences**—Script Analysis or Play Analysis, Directing I, Theatre History or Dramatic Literature, as well as experience in some area of theatre and/or education.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

- GRE: 5233
- GMAT: RZT-HT-58
- TOEFL: 5233
- ETS PPI: 5233
Degree Requirements

Core
6 Total Credits

- Complete the following:
  - THE5910 - Research Methods in Theatre (3)
  - THE6086C - Careers in Professional Theatre (3)

Specialization
26 Total Credits

- Complete the following:
  - THE6756 - Methods of Teaching Drama (3)
  - THE5385 - Dramatic Literature for Children (3)
  - TPAS081C - Design Concepts for Youth Theatre (3)
  - TPP5386C - Directing for Young Audiences (3)
  - THE6726 - Advanced TYA Seminar (3)
  - TPP5289C - Acting Methodologies (2)
  - THE6507 - Dramatic Theory and Criticism (3)
  - TPP6216C - Theatre for Young Audiences Tour (3)
  - TPP6247 - Theatre for Social Change (3)

Elective Courses
11 Total Credits

- Earn at least 11 credits from the following:
  - TPP6686 - Playwriting for Young Audiences (3)
  - TPP5246C - Circus Arts (2)
  - TPA5885C - Puppetry (2)
  - TPP5125C - Improvisation Studio (2)
  - TPP5248C - Storytelling as a Theatrical Art Form (2)

Thesis
6 Total Credits

- Earn at least 6 credits from the following:
  - THE6971 - Thesis (1 - 99)

Internship
12 Total Credits

- Complete 1 of the following
  - All Internship - 12 Credit Hours
    - Earn at least 12 credits from the following:
      - THE6946 - Internship (1 - 99)
  - Internship/Elective Combo Option - 12 Credit Hours
    - Earn at least 12 credits from the following types of courses:
      - If students decide to only take the minimum 6 internship credits, the remaining 6 credits must be taken in the electives area.

Examination
0 Total Credits

- A comprehensive departmental Theatre exam is administered to the MFA students in the Theatre for Young Audiences Track at the end of their course work. The department allows two attempts at a comprehensive exam.

Transfer and Residency
0 Total Credits

- Students who do not hold a master's degree can usually transfer up to nine semester hours into this program. Ordinarily, students holding completed MS or MA degrees will not be admitted into the MFA program. Each case will be evaluated on an individual basis. Final acceptance and number of credits to be transferred will be determined by a graduate faculty committee. A minimum of 51 credits must be taken at the University of Central Florida. A student without an earned master's degree must complete a residency requirement of at least five semesters with at least four of them being full-time, consecutive semesters. Summer session may be counted toward the four consecutive semesters.

Independent Learning
0 Total Credits

- The Independent Learning Requirement is met by successful completion of a master's thesis.

Grand Total Credits: 61
Track Details

Students must maintain a minimum "B" (3.0) overall Theatre grade point average to continue in the major. Theatre courses with grades of less than "C" will not be counted toward degree requirements. A student's continuation in the program is contingent upon a positive annual evaluation. Students must successfully complete an internship, present a written journal documenting their experience and a thesis project. The thesis proposal must be approved in advance.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Theatre MFA - Theatre MFA, Themed Experience Track

Track Website
https://www.cah.ucf.edu/themed-experience/

Track Contact Information

Peter Weishar
Professor and Director of Themed Experience
Peter.Weishar@ucf.edu
Telephone: 407-823-0987
Performing Arts Center (PAC) T216

Online Availability

No

Track Description

The Master of Fine Arts in Theatre offers a Themed Experience Track designed to teach the unique creative skills, processes and concepts utilized to design and produce themed environments such as theme parks, zoos, aquariums, themed retail, dining, museums, virtual worlds and exhibitions. This program will build upon the strength and diversity of UCF's Theatre, Art, Design and Hospitality programs as well as the ideal location in Orlando, the international hub of the themed entertainment industry.

The Master of Fine Arts in Themed Experience track program offers a rigorous course of study of 61 credit hours minimum, culminating in a collaborative creative project and thesis as well as an industry or academic internship. Of the 61 credit hours required for the degree, 44-47 credit hours are required and core courses of which up to 12-15 credit hours are electives. There is a 6 credit hour thesis project and 8-11 hours of industry internship credits.

Total Credit Hours Required: 61 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

General Entrance and Area Specific Prerequisites - Students applying for entrance into the MFA Programs must have successfully completed a bachelor's degree program from an accredited institution which UCF recognizes. Concentration or experience in the visual, written, or performing arts is preferred.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core
6 Total Credits

◦ Complete the following:
  ◦ THE5910 - Research Methods in Theatre (3)
  ◦ TPA6437 - Careers in Themed Experience (3)

Themed Experience Concentration
26 Total Credits

◦ Complete the following:
  ◦ THE5288 - Period Costumes, Architecture and Decor I (3)
  ◦ THE5289 - Period Costumes, Architecture and Decor II (3)
  ◦ THE5945L - Theatre Practicum I (1)
  ◦ TPA6187 - Themed Experience Seminar (3)
  ◦ TPA5085C - Design Seminar for Theatre (2)
  ◦ TPA6158 - Small Project Studio (3)
  ◦ TPA6186 - Immersive Experience Studio (3)
  ◦ TPA6188 - Visualizing Themed Environments (3)
  ◦ TPA6921 - Collaborative Project Studio (3)
  ◦ TPP5248C - Storytelling as a Theatrical Art Form (2)

Elective Courses
12 Total Credits

◦ Earn at least 12 credits from the following types of courses:
  Choose 2 College of Arts and Humanities electives and 2 Rosen College of Hospitality electives: HMG Themed Entertainment Graduate courses (6 credit hours total) CAH Graduate level courses (6 credit hours total) Any other graduate-level courses may be permitted with school approval.

Internship
11 Total Credits

◦ Complete 1 of the following
  Preferred Minimum
  ◦ Earn at least 11 credits from the following:
    ■ THE6948 - Professional Internship (4)

    Internship/Elective Combo (with permission of the program coordinator)
  ◦ Complete all of the following
    ◦ Earn at least 8 credits from the following:
      ■ THE6948 - Professional Internship (4)

    ◦ Earn at least 3 credits from the following types of courses:
      Students may take as few as 8 credit hours of internship with permission of the program coordinator, the remaining credits required for the degree may be taken as additional CAH or HMG electives.

Thesis
6 Total Credits

◦ Earn at least 6 credits from the following:
  ◦ THE6971 - Thesis (1 - 99)

Critique and Evaluation
0 Total Credits

◦ A final critique and evaluation of creative work is administered to all MFA majors at the end of their course work. The department allows two attempts at the final critique and evaluation.

Transfer and Residency
0 Total Credits

◦ Students who do not hold a master's degree can usually transfer up to nine semester hours into this program. Ordinarily, students holding completed MS or MA degrees will not be admitted into the MFA program. Each case will be evaluated on an individual basis. Final acceptance and number of credits to be transferred will be determined by a graduate faculty committee. A minimum of 51 credits must be taken at the University of Central Florida. A student without an earned master's degree must complete a residency requirement of at least five semesters with at least four of them being full-time, consecutive semesters. Summer session may be counted toward the four consecutive semesters.

Independent Learning
0 Total Credits

◦ The Independent Learning Requirement is met by successful completion of a master's thesis.

Grand Total Credits: 61
Track Details

Candidates must demonstrate the ability to understand the conceptual basis of the themed experience and to be able to articulate that understanding to others.

Students must maintain a minimum "B" (3.00) overall Theatre GPA to continue in the major. All graduate course work must be at the 5000 level or above. Theatre courses with grades of less than "C" will not be counted toward degree requirements. Continuation in the MFA program requires a positive annual evaluation. All graduate students must consult with an area adviser. All MFA students must successfully complete a creative thesis project. The thesis project must be approved in advance.

Course Schedule

Year 1

Fall: 11 Credit Hours

- THE 5288 - Period Costumes, Architecture and Decor I 3 Credit Hours
- THE 5910 - Research Methods in Theatre 3 Credit Hours
- TPA 5085C - Design Seminar for Theatre 2 Credit Hours
- TPA 6187 - Themed Experience Seminar 3 Credit Hours

Spring: 9-10 Credit Hours

THE 5945L Theatre Practicum I may be taken either Year 1 or 2 of the spring semester.

- THE 5289 - Period Costumes, Architecture and Decor II 3 Credit Hours
- THE 5945L - Theatre Practicum 1 Credit Hours
- TPA 6158 - Small Project Studio 3 Credit Hours
- TPA 6188 - Visualizing Themed Environments 3 Credit Hours

Year 2

Fall: 11 Credit Hours

- TPP 5248C - Storytelling as a Theatrical Art Form 2 Credit Hours
- TPA 6186 - Immersive Experience Studio 3 Credit Hours
- CAH or HMG Graduate Elective 3 Credit Hours
- CAH or HMG Graduate Elective 3 Credit Hours

Spring: 9-10 Credit Hours

THE 5945L Theatre Practicum I may be taken either Year 1 or 2 of the spring semester.

- THE 5945L - Theatre Practicum 1 Credit Hours
- TPA 6437 - Careers in Themed Experience 3 Credit Hours
- TPA 6921 - Collaborative Project Studio 3 Credit Hours
- CAH or HMG Graduate Elective 3 Credit Hours

Year 3

Fall: 9-13 Credit Hours

- THE 6971 - Thesis 3 Credit Hours

Spring: 3-13 Credit Hours

- THE 6971 - Thesis 3 Credit Hours

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Themed Experience MS

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Program Website
https://www.cah.ucf.edu/themed-experience/

Program Contact Information

Peter Weishar
Professor and Director of Themed Experience
Peter.Weishar@ucf.edu
Telephone: 407-823-0987
Performing Arts Center (PAC) T216

Is this program available 100% online?
No

Program Description

The Master of Science in Themed Experience is designed to teach the unique creative skills, processes and concepts utilized to design and produce themed environments such as theme parks, zoos, aquariums, themed retail, dining, museums, virtual worlds and exhibitions.

Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core
6 Total Credits

- Complete the following:
  - THE5910 - Research Methods in Theatre (3)
  - TPA6437 - Careers in Themed Experience (3)

Themed Experience Concentration
15 Total Credits

- Complete the following:
  - TPA6158 - Small Project Studio (3)
  - TPA6186 - Immersive Experience Studio (3)
  - TPA6187 - Themed Experience Seminar (3)
  - TPA6188 - Visualizing Themed Environments (3)
  - TPA6921 - Collaborative Project Studio (3)

Restricted Elective/Internship Courses
12 Total Credits

- Complete all of the following
  - Students may choose from a course list of restricted electives and/or enroll in internships for a total of twelve (12) hours of elective credit. Students must select one course each from the College of Engineering and Computer Science (CECS) and the Rosen College of Hospitality Management. Additional courses that qualify for elective credit are pulled from a variety of disciplines across several colleges at UCF.
  - Earn at least 12 credits from the following:
    - AMH5077 - Colloquium in Twentieth Century Tourism (3)
    - ARH5897 - Advanced Seminar in Art History (3)
    - ART5284 - Design Theory and Methods (3)
    - DIG5487 - Media Aesthetics (3)
    - DIG6136 - Design for Interactive Media (3)
    - DIG6432 - Transmedia Story Creation (3)
    - DIG6551 - Theory and Practice of Interactive Storytelling (3)
    - EINS5251 - Usability Engineering (3)
    - EINS6258 - Human Computer Interaction (3)
    - ENG6808 - Narrative Information Visualization (3)
    - ENT5619 - Creativity and Entrepreneurship (3)
    - FIL5422C - Experimental Cinema II (3)
    - HIS5088 - Readings in Curation and Public History (3)
    - HIS6094 - Seminar in Curation and New Media (3)
    - HIS6096 - Seminar in Historic Preservation (3)
    - HMG6291 - Hospitality Entrepreneurship: Concept Creation to Capitalization (3)
    - HMG6449 - Smart Travel and Tourism (3)
    - HMG6476 - Feasibility Studies for the Hospitality/Tourism Enterprises (3)
    - HMG6533 - Hospitality/Tourism Industry Brand Management (3)
    - HMG6566 - Principles of Destination Marketing and Management (3)
    - HMG6757 - Advanced Theme Park and Attraction Management (3)
    - JDC6700 - Interdisciplinary Approach to Data Visualization (3)
    - IDS6267 - Understanding Humans for Modeling and Simulation (3)
    - THE5288 - Period Costumes, Architecture and Decor I (3)
    - THE5289 - Period Costumes, Architecture and Decor II (3)
    - THE6948 - Professional Internship (4)
    - TPA5346C - 3D Modeling for Theatre (2)
    - TPA5885C - Puppetry (2)
    - TPPS248C - Storytelling as a Theatrical Art Form (2)

  - Note: Acceptable Rosen electives begin with an HMG prefix and CECS courses are identified by an EIN prefix.

Critique and Evaluation
0 Total Credits

- A final critique and evaluation of student work is administered to all MS graduate students at the end of their course work. Students are permitted two attempts to successfully complete the final critique and evaluation.

Independent Learning
0 Total Credits

- Both the capstone course, TPA 6437 Careers in Themed Experience, and the internship provide independent learning experiences. The capstone course provides development of professional goals, knowledge, marketing materials, and skills for the active themed experience industry professional. The internship allows students to work with industry partners.

Grand Total Credits: 33
Program Details

Course Schedule

Year 1
Fall - 9 Credit Hours
- THE 5910 - Research Methods in Theatre 3 Credit Hours
- TPA 6158 - Small Project Studio 3 Credit Hours
- TPA 6187 - Themed Experience Seminar 3 Credit Hours

Spring - 9 Credit Hours
- TPA 6186 - Immersive Experience Studio 3 Credit Hours
- TPA 6188 - Visualizing Themed Environments 3 Credit Hours
- Restricted Elective/Internship (see list) 3 Credit Hours

Year 2
Fall - 9 Credit hours
- TPA 6921 - Collaborative Project Studio 3 Credit Hours
- Restricted Elective/Internship (see list) 3 Credit Hours
- Restricted Elective/Internship (see list) 3 Credit Hours

Spring - 6 Credit Hours
- TPA 6437 - Careers in Themed Experience 3 Credit Hours
- Restricted Elective/Internship (see list) 3 Credit Hours

College of Business Administration

Accounting MSA

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Program Website
http://business.ucf.edu/degree/accounting-msa/

Program Handbook Link
Accounting MSA

Program Contact Information

Elizabeth Altiero Poziemski PhD
Lecturer
altiero@ucf.edu
Telephone: 407-823-4420
BA 1 - 436

Is this program available 100% online?
No

Licensure Disclosure

The MSA degree, along with the appropriate prerequisite work from an undergraduate degree in accounting, satisfies the education requirements to become a licensed CPA in the state of Florida. For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CBA-Accounting-MSA.pdf.
Program Description

The Kenneth G. Dixon School of Accounting offers a Master of Science in Accounting (MSA) degree with a choice of specialization in either Assurance, Management, or Taxation. These programs prepare individuals for careers as professional accountants and consultants in public accounting industry, financial institutions, government, and nonprofit organizations.

Please scroll to the bottom of this page for further details on these Tracks.

Faculty members in the Kenneth G. Dixon School of Accounting emphasize independent learning in various ways throughout the MSA program. Cases and research projects that involve work outside the classroom are incorporated into all courses. The cases and projects are both individual and team prepared. Students are asked to do research that requires they utilize the library, internet, and resources other than the material provided by the professor. The results of independent research activity are presented in either a written report, case analysis or oral presentation. Students work to develop and enhance skills and competencies that will support them professionally throughout their careers. The approaches used in our courses encourage students toward life-long learning.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Accounting MSA - Accounting MSA, Assurance Track

Track Website
http://business.ucf.edu/degree/accounting-msa/

Track Handbook
Accounting MSA, Assurance Track

Track Contact Information

Elizabeth Altiero Poziemski PhD
Lecturer
altiero@ucf.edu
Telephone: 407-823-4420
BA 1 - 436

Online Availability

No

Licensure Disclosure

The Assurance Track, along with the appropriate undergraduate prerequisite work, satisfies the education requirements to become a licensed CPA in the state of Florida. For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CBA-Accounting-MSA.pdf.

Track Description

The Master of Science in Accounting (MSA), Assurance Track prepares individuals for careers as professional accountants and consultants in public accounting, industry, financial institutions, government, and nonprofit organizations. Students in this program will specialize in auditing and assurance skills used in a financial statement, compliance, internal control, and fraud contexts.

The MSA degree is awarded upon satisfactory completion of a minimum of 30 credit hours, and a final written exit exam. In the total program of study, a minimum of 21 credit hours of the coursework must be completed in accounting, tax, or business law courses. Students, with the assistance and approval of the program adviser, may select other courses that reflect their interests and career objectives.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Track Prerequisites

All business and accounting foundation core requirements can be completed after a student has gained admission to the program, but must be satisfied before graduate coursework can be undertaken. Applicants with a recent undergraduate accounting degree will likely have completed most, if not all, of the foundation prerequisite courses. Before taking any foundation courses, please have your undergraduate transcripts reviewed by the MSA Program Adviser.

Business Foundation Core—21 Credit Hours

The business foundation core is designed primarily to prepare students who hold a nonbusiness undergraduate degree (e.g., psychology, education, or engineering) for the accounting foundation core and graduate MSA coursework.

- ACG 2021 - Financial Accounting 3 Credit Hours
- ACG 2071 - Managerial Accounting 3 Credit Hours
- ECO 2013 - Macroeconomics 3 Credit Hours
- ECO 2023 - Microeconomics 3 Credit Hours
- QMB 3003 - Quantitative Business Tools 3 Credit Hours
- QMB 3200 - Quantitative Business Tools II 3 Credit Hours
- FIN 3403 - Business Finance 3 Credit Hours

Accounting Foundation Core—24 Credit Hours

The accounting foundation core is designed primarily to prepare students who hold either a nonbusiness undergraduate degree (e.g., psychology, education, or engineering) or an undergraduate business degree in a field other than accounting (e.g., finance, marketing, or management) for graduate MSA coursework.

- ACG 3131 - Intermediate Financial Accounting I 3 Credit Hours
- ACG 3141 - Intermediate Financial Accounting II 3 Credit Hours
- ACG 3361 - Cost Accounting I 3 Credit Hours
- ACG 4401 - Accounting Information Systems 3 Credit Hours
- ACG 4651 - Auditing 3 Credit Hours
- ACG 4803 - Advanced Issues in Financial Accounting 3 Credit Hours
- BUL 3130 - Legal and Ethical Environment of Business 3 Credit Hours
- TAX 4001 - Taxation of Business Entities and Transactions 3 Credit Hours

College of Graduate Studies Contact Information

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Online Application
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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - ACG6185 - Financial Statement Analysis (3)
  - ACG6415 - Advanced Accounting Information Systems (3)
  - ACG6805 - Accounting Theory (3)
  - ACG6835 - Ethics and Professionalism in Accounting and Auditing (3)

Required Specialization Courses
6 Total Credits

- Complete the following:
  - ACG6636 - Advanced Auditing (3)
  - ACG6675 - Operational Auditing (3)

Elective Specialization Course
3 Total Credits

- Complete at least 1 of the following:
  - ACG6305 - Advanced Managerial Accounting (3)
  - ACG6685 - Fraud Auditing (3)
  - TAX5015 - Advanced Tax Topics (3)

Restricted Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  - All tracks include 9 credit hours (3 courses) of restricted electives. MSA students can take additional ACG, TAX, or BUL courses as restricted electives (except for ACG 6425 and BUL 6444, which are not eligible for MSA credit). Most MBA electives may be taken as restricted electives. Please note that some of the MBA courses may be restricted to only those students enrolled within a specific MBA track. Up to three hours may be selected from outside the College of Business. Courses outside the College of Business must be selected with the student’s area of interest and/or career objectives in mind and with the approval of the program adviser.

Comprehensive Examination
0 Total Credits

- Satisfactory completion of an end-of-program comprehensive written examination is required. The MSA program does not require a thesis.

Grand Total Credits: 30

Track Details

Students must maintain a 3.0 GPA in the accounting foundation core. Students must earn a grade of "B-" (2.75) or higher in any undergraduate course taken after completion of the Bachelor's degree in order for that course to count as a prerequisite in or to fulfill an admissions requirements for the MSA degree.

5000-level courses taken in the undergraduate career that are used to earn the undergraduate accounting degree cannot be transferred into the MSA degree program.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The section Financial Information of the Graduate Catalog is another key resource.

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2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
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gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Accounting MSA - Accounting MSA, Management Track

Track Website
http://business.ucf.edu/degree/accounting-msa/

Track Handbook
Accounting MSA, Management Track

Track Contact Information
Elizabeth Altiero Poziemski PhD
Lecturer
altiero@ucf.edu
Telephone: 407-823-4420
BA 1 - 436

Online Availability
No

Licensure Disclosure
The Management Track, along with the appropriate undergraduate prerequisite work, satisfies the education requirements to become a licensed CPA in the state of Florida. For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CBA-Accounting-MSA.pdf.

Track Description
The Master of Science in Accounting (MSA), Management Track prepares individuals for careers as professional accountants and consultants in public accounting, industry, financial institutions, government, and nonprofit organizations. Students in this program will specialize in the use of accounting data to make managerial decisions, monitor operations, manage an effective control environment, and design effective compensation systems.

The MSA degree is awarded upon satisfactory completion of a minimum of 30 credit hours, and a final written exit exam. In the total program of study, a minimum of 21 credit hours of the coursework must be completed in accounting, tax, or business law courses. Students, with the assistance and approval of the program adviser, may select other courses that reflect their interests and career objectives.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Track Prerequisites

All business and accounting foundation core requirements can be completed after a student has gained admission to the program, but must be satisfied before graduate MSA coursework can be undertaken. Applicants with a recent undergraduate accounting degree will likely have completed most, if not all, of the foundation prerequisite courses. Before taking any foundation courses, please have your undergraduate transcripts reviewed by the MSA Program Adviser.

Business Foundation Core—21 Credit Hours

The business foundation core is designed primarily to prepare students who hold a nonbusiness undergraduate degree (e.g., psychology, education, or engineering) for the accounting foundation core and graduate MSA coursework.

- ACG 2021 - Financial Accounting 3 Credit Hours
- ACG 2071 - Managerial Accounting 3 Credit Hours
- ECO 2013 - Macroeconomics 3 Credit Hours
- ECO 2023 - Microeconomics 3 Credit Hours
- QMB 3003 - Quantitative Business Tools I 3 Credit Hours
- QMB 3200 - Quantitative Business Tools II 3 Credit Hours
- FIN 3403 - Business Finance 3 Credit Hours

Accounting Foundation Core—24 Credit Hours

The accounting foundation core is designed primarily to prepare students who hold either a nonbusiness undergraduate degree (e.g., psychology, education, or engineering) or an undergraduate business degree in a field other than accounting (e.g., finance, marketing, or management) for graduate MSA coursework.

- ACG 3131 - Intermediate Financial Accounting I 3 Credit Hours
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- ACG 3361 - Cost Accounting I 3 Credit Hours
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- BUL 3130 - Legal and Ethical Environment of Business 3 Credit Hours
- TAX 4001 - Taxation of Business Entities and Transactions 3 Credit Hours

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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - ACG6185 - Financial Statement Analysis (3)
  - ACG6415 - Advanced Accounting Information Systems (3)
  - ACG6805 - Accounting Theory (3)
  - ACG6835 - Ethics and Professionalism in Accounting and Auditing (3)

Required Specialization Courses
6 Total Credits

- Complete the following:
  - ACG6305 - Advanced Managerial Accounting (3)
  - ACG6675 - Operational Auditing (3)

Elective Specialization Course
3 Total Credits

- Complete at least 1 of the following:
  - TAX5015 - Advanced Tax Topics (3)
  - QMB6358 - Software Tools for Business Analytics (3)

Restricted Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  All tracks include 9 credit hours (3 courses) of restricted electives. MSA students can take additional ACG, TAX, or BUL courses as restricted electives (except for ACG 6425 and BUL 6444, which are not eligible for MSA credit). Most MBA electives may be taken as restricted electives. Please note that some of the MBA courses may be restricted to only those students enrolled within a specific MBA track. Up to three hours may be selected from outside the College of Business. Courses outside the College of Business must be selected with the student’s area of interest and/or career objectives in mind and with the approval of the program adviser.

Comprehensive Examination
0 Total Credits

- Satisfactory completion of an end-of-program comprehensive written examination is required. The MSA program does not require a thesis.

Grand Total Credits: 30

Track Details

Students must maintain a 3.0 GPA in the accounting foundation core. Students must earn a grade of "B-" (2.75) or higher in any undergraduate course taken after completion of the Bachelor's degree in order for that course to count as a prerequisite in or to fulfill an admissions requirements for the MSA degree.

5000-level courses taken in the undergraduate career that are used to earn the undergraduate accounting degree cannot be transferred into the MSA degree program.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Accounting MSA - Accounting MSA, Taxation Track

Track Website
http://business.ucf.edu/degree/accounting-msa/

Track Handbook
Accounting MSA, Taxation Track

Track Contact Information
Elizabeth Altiero Poziemski PhD
Lecturer
altiero@ucf.edu
Telephone: 407-823-4420
BA 1 - 436

Online Availability
No

Licensure Disclosure

The Taxation Track, along with the appropriate undergraduate prerequisite work, satisfies the education requirements to become a licensed CPA in the state of Florida. For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CBA-Accounting-MSA.pdf.

Track Description

The Master of Science in Accounting (MSA), Taxation Track prepares individuals for careers as professional accountants and consultants in public, accounting industry, financial institutions, government, and nonprofit organizations. Students in this program will specialize in tax preparation, compliance, and research skills.

The MSA degree is awarded upon satisfactory completion of a minimum of 30 credit hours, and a final written exit exam. In the total program of study, a minimum of 21 credit hours of the coursework must be completed in accounting, tax, and business law courses. Students, with the assistance and approval of the program adviser, may select other courses that reflect their interests and career objectives.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
**Track Prerequisites**

All business and accounting foundation core requirements can be completed after a student has gained admission to the program, but must be satisfied before graduate MSA coursework can be undertaken. Applicants with a recent undergraduate accounting degree will likely have completed most, if not all, of the foundation prerequisite courses. Before taking any foundation courses, please have your undergraduate transcripts reviewed by the MSA Program Adviser.

**Business Foundation Core—21 Credit Hours**

The business foundation core is designed primarily to prepare students who hold a nonbusiness undergraduate degree (e.g., psychology, education, or engineering) for the accounting foundation core and graduate MSA coursework.

- ACG 2021 - Financial Accounting 3 Credit Hours
- ACG 2071 - Managerial Accounting 3 Credit Hours
- ECO 2013 - Macroeconomics 3 Credit Hours
- ECO 2023 - Microeconomics 3 Credit Hours
- QMB 3003 - Quantitative Business Tools I 3 Credit Hours
- QMB 3200 - Quantitative Business Tools II 3 Credit Hours
- FIN 3403 - Business Finance 3 Credit Hours

**Accounting Foundation Core—24 Credit Hours**

The accounting foundation core is designed primarily to prepare students who hold either a nonbusiness undergraduate degree (e.g., psychology, education, or engineering) or an undergraduate business degree in a field other than accounting (e.g., finance, marketing, or management) for graduate MSA coursework.

- ACG 3131 - Intermediate Financial Accounting I 3 Credit Hours
- ACG 3141 - Intermediate Financial Accounting II 3 Credit Hours
- ACG 3361 - Cost Accounting I 3 Credit Hours
- ACG 4401 - Accounting Information Systems 3 Credit Hours
- ACG 4651 - Auditing 3 Credit Hours
- ACG 4803 - Advanced Issues in Financial Accounting 3 Credit Hours
- BUL 3130 - Legal and Ethical Environment of Business 3 Credit Hours
- TAX 4001 - Taxation of Business Entities and Transactions 3 Credit Hours

**College of Graduate Studies Contact Information**

- gradadmissions@ucf.edu
- Telephone: 407-823-2766
- Millican Hall 230
- Online Application
- Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

- GRE: 5233
- GMAT: RZT-HT-58
- TOEFL: 5233
- ETS PPI: 523
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - ACG6185 - Financial Statement Analysis (3)
  - ACG6415 - Advanced Accounting Information Systems (3)
  - ACG6805 - Accounting Theory (3)
  - ACG6835 - Ethics and Professionalism in Accounting and Auditing (3)

Required Specialization Courses
9 Total Credits

- Complete the following:
  - TAX5015 - Advanced Tax Topics (3)
  - TAX6065 - Tax Research (3)
  - TAX6845 - Tax Planning and Consulting (3)

Restricted Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  All tracks include 9 credit hours (3 courses) of restricted electives. MSA students can take additional ACG, TAX, or BUL courses as restricted electives (except for ACG 6425 and BUL 6444, which are not eligible for MSA credit). Most MBA electives may be taken as restricted electives. Please note that some of the MBA courses may be restricted to only those students enrolled within a specific MBA track. Up to three hours may be selected from outside the College of Business. Courses outside the College of Business must be selected with the student's area of interest and/or career objectives in mind and with the approval of the program adviser.

Comprehensive Examination
0 Total Credits

- Satisfactory completion of an end-of-program comprehensive written examination is required. The MSA program does not require a thesis.

Grand Total Credits: 30

Track Details

Students must maintain a 3.0 GPA in the accounting foundation core. Students must earn a grade of "B-" (2.75) or higher in any undergraduate course taken after completion of the Bachelor's degree in order for that course to count as a prerequisite in or to fulfill an admissions requirements for the MSA degree.

5000-level courses taken in the undergraduate career that are used to earn the undergraduate accounting degree cannot be transferred into the MSA degree program.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/
College
College of Business Administration

Department
College of Business Administration Dean's Office

Program Website
http://www.ucfmba.ucf.edu

Program Contact Information

Executive & Professional MBA
Robin Hofler
Robin.Hofler@ucf.edu

Evening MBA
Meredith Smart
cbagrad@ucf.edu

Is this program available 100% online?
No

Program Description
The College of Business Master of Business Administration (MBA) degree is accredited by AACSB International and offers four options for study: An Executive MBA, the college's flagship MBA, taught at the UCF Downtown campus; a Professional Part-Time MBA taught at the UCF Downtown campus and regional campuses; a Professional Full-Time MBA taught at the UCF Downtown campus; and a part-time Evening MBA taught at the main campus.

Please scroll to the bottom of this page for further details on these Tracks.

The MBA program allows students to apply advanced theoretical concepts and knowledge from all functional areas of business through an analytical, decision-making process that focuses on solving practical problems. Students in the MBA program also learn to efficiently access, retrieve, and analyze information through technology. The program promotes the use of networking, leadership, and interpersonal competencies to develop and sustain effective relationships with peers, and to create an appreciation for the value of a diverse workforce.

The Master's in Business Administration requires a total of 39 credit hours, of which 30 credit hours are professional core courses and 9 credit hours are electives.

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

The MBA curriculum provides a challenging and creative learning environment in an intensive program of study that has a broad-based administrative emphasis. Recognizing that the management methods of tomorrow may bear little resemblance to techniques in current use, the program emphasizes sound general principles and decision-making techniques that provide a base for continued learning and professional development.

Program Prerequisites
To help prepare you for the start of your MBA program, UCF offers online learning modules in accounting, economics, finance, and business statistics. These are offered through McGraw-Hill's Connect online learning management system and are designed to help you build the foundational knowledge needed to succeed in the MBA program at UCF. All MBA students are required to take the Initial Assessments for each of the subject areas, and possibly purchase the online learning modules depending on their Initial Assessment results. For more information on the MBA Foundation Prerequisites, click here: https://business.ucf.edu/graduate-programs/.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Business Administration MBA - Business Administration MBA, Evening Track

Track Website
http://www.ucfmba.ucf.edu

Track Handbook
Business Administration MBA, Evening Track

Track Contact Information
Kelley Dietrich
cbagrad@bus.ucf.edu

Online Availability
No

Track Description
The Evening MBA program allows students to apply advanced theoretical concepts and knowledge from all functional areas of business through an analytical, decision-making process that focuses on solving practical problems. Students in this program also learn to efficiently access, retrieve, and analyze information through technology.

The program promotes the use of networking, leadership, and interpersonal competencies to develop and sustain effective relationships with peers and to create an appreciation for the value of a diverse workforce.

The Evening MBA begins in the Spring 2023 and Fall 2023 terms.

Program highlights include:
- Evening course offerings to accommodate working professionals
- Choice of up to two elective options outside of the College of Business
- Part-time only enrollment (maximum of 6 credit hours per term)

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

The Evening MBA is targeted toward applicants who wish to obtain a MBA degree while continuing in their career path. This program offers evening courses. Students attend on a part-time basis only, taking 6 credit hours per term.

Track Prerequisites
You must show at least two years of full-time professional work experience.

Prior to being considered for admission into the Evening MBA program, applicants are required to complete a free online assessment in each of the functional areas of accounting, economics, finance, and business statistics. A score of 70 percent or higher in each area will be required in order to enroll in the associated graduate classes if accepted into the program. Applicants who do not earn a 70 percent or higher in each section and are being accepted into the program will be required to complete the online modules associated with the below 70 percent score as a restriction to admission. Click on the link for detailed information regarding the assessments and enrolling in the on-line modules. MBA Online Modules

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: UCF-College of Graduate Studies
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

MBA Professional Core I: Decision-Making Tools
18 Total Credits

- Complete all of the following
  - Complete the following:
    - ACG6425 - Managerial Accounting Analysis (3)
    - BUL5332 - Advanced Business Law Topics (3)
    - ECO6115 - Economic Analysis of the Firm (3)
    - ECO6416 - Applied Business Research Tools (3)
    - MAN6245 - Organizational Behavior and Development (3)
    - GEB6365 - International Business Analysis (3)
  - Term Offerings: ACG 6425 - Managerial Accounting Analysis 3 Credit Hours (*Spring only) BUL 5332 - Advanced Business Law Topics 3 Credit Hours (Fall only) ECO 6115 - Economic Analysis of the Firm 3 Credit Hours (Spring only) ECO 6416 - Applied Business Research Tools 3 Credit Hours (Fall only) MAN 6245 - Organizational Behavior and Development 3 Credit Hours (Fall only) GEB 6365 - International Business Analysis 3 Credit Hours (Spring only)

*Students who wish to sit for the CPA exam must substitute appropriate coursework for ACG 6425.

MBA Professional Core II: Decision Applications
12 Total Credits

- Complete all of the following
  - Complete the following:
    - FIN6406 - Strategic Financial Management (3)
    - MAR6816 - Strategic Marketing Management (3)
    - MAR6466 - Strategic Supply Chain and Operations Management (3)
    - MAN6721 - Applied Strategy and Business Policy (3)
  - Core I is a prerequisite for Core II courses. FIN 6406 and MAR 6816 must be completed prior to MAN 6721. MAR 6466 must be completed the semester after ECO 6416 is completed. Term Offerings: FIN 6406 - Strategic Financial Management 3 Credit Hours (Fall only) MAR 6816 - Strategic Marketing Management 3 Credit Hours (Fall only) MAR 6466 - Strategic Supply Chain and Operations Management 3 Credit Hours (Spring only) MAN 6721 - Applied Strategy and Business Policy 3 Credit Hours (grade of "B-" (2.75) or better is required) (Spring only)

MBA Electives
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  Electives may include approved 5000- and 6000-level courses from the College of Business or approved courses taken outside of the College of Business. At least one course must come from within the College of Business, and a maximum of two courses or six credit hours can be taken outside the College of Business with permission from the Graduate Business Programs Office and the department offering the course prior to taking the course. Check all elective course prerequisites in the graduate catalog at www.graduatecatalog.ucf.edu.

Grand Total Credits: 39
Track Details

Evening MBA Schedule

All Core I courses must be completed prior to Core II courses with the exception of MAR 6466 and GEB 6365 being taken in the same semester, and the capstone course for the program (MAN 6721) must be taken after the completion of all Core I requirements and FIN 6406 and MAR 6816. MAR 6466 must be completed the semester after ECO 6416 is completed.

Fall Start Schedule:

Year One:
- Fall: BUL 5332 and MAN 6245
- Spring: ECO 6115 and ACG 6425
- Summer: Elective #1

Year Two:
- Fall: ECO 6416 and Elective #2
- Spring: MAR 6466 and GEB 6365

Year Three:
- Fall: MAR 6816 and FIN 6406
- Spring: MAN 6721 and Elective #3

Required courses are only offered in the terms they are listed above. Any variance from this schedule will delay graduation.

Spring Start Schedule:

Year One:
- Spring: ACG 6245 and ECO 6115
- Summer: BUL 5332 and MAN 6245
- Fall: Elective #1 and ECO 6416

Year Two:
- Spring: MAR 6466 and GEB 6365
- Summer: Elective #2
- Fall: FIN 6406 and MAR 6816

Year Three:
- Spring: MAN 6721 and Elective #3

Financial Information

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Business Administration MBA - Business Administration MBA, Executive Track

**Track Website**
http://www.ucfmba.ucf.edu

**Track Handbook**
Business Administration MBA, Executive Track

**Track Contact Information**
Robin Hofler  
robin.hofler@ucf.edu  
Telephone: 407-235-3913  
DTC 304

**Online Availability**
No

**Track Description**
The UCF Executive MBA (EMBA) is accredited by AACSB International and is the college's flagship MBA program. The EMBA program is designed to prepare experienced professionals for the challenges they will face as they work and advance in their careers, teaching them skills across all functional areas of business that will make them an increasingly valuable member of their organization.

The program is a limited enrollment, cohort-based program that allows participants to continue their full-time careers while earning an MBA degree.

- A 19-month program offered on the UCF Downtown Orlando campus.
- Limited class size, cohort program
- Classes meet, one Friday and three Saturdays per month, 8:00am-5:00pm
- A week long International Residency
- Minimum of five years of professional work experience required; 10 years preferred
- Personal interview required for admission

Courses expose participants to new methods, concepts, and tools that will enhance their business and leadership skills. Innovative teaching methodologies such as team-based projects, interdisciplinary case studies, simulations, debate activities, and self-assessment exercises are used to enhance the learning experience. The EMBA also incorporates the interactions and backgrounds of the participants as an integral part of the learning experience.

All classes are held at the UCF Downtown Orlando campus. Our classrooms are specifically designed to provide the best in learning environments. The classrooms boast the latest in audio/video equipment with electrical hookup and wireless Internet access. With newly engineered acoustics, lighting and room design, every seat has an excellent view of the speaker and presentation. The UCF Executive MBA program has created the finest combination of skilled administrators, with leading faculty providing participants with a high level of personal attention from the moment they apply.

This program is a professional program with a market rate tuition and is considered a full-time program. The tuition is the same for Florida residents and nonresidents. Please visit business.ucf.edu/degree/ucf-mba/ for more information.

This program is accredited by AACSB International.

**Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**
Minimum of five years of professional work experience required; 10 years preferred.

To help prepare you for the start of your MBA program, UCF offers online learning modules in accounting, economics, finance, and business statistics. These are offered through McGraw-Hill's Connect online learning management system and are designed to help you build the foundational knowledge needed to succeed in the MBA program at UCF. All MBA students are required to take the Initial Assessments for each of the subject areas, and possibly purchase the online learning modules depending on their Initial Assessment results. For more information on the MBA Foundation Prerequisites, click here: https://business.ucf.edu/graduate-programs/.
Required Courses

30 Total Credits

- Complete the following:
  - ECO6115 - Economic Analysis of the Firm (3)
  - ACG6425 - Managerial Accounting Analysis (3)
  - ECO6416 - Applied Business Research Tools (3)
  - MAN6245 - Organizational Behavior and Development (3)
  - MAR6816 - Strategic Marketing Management (3)
  - MAR6466 - Strategic Supply Chain and Operations Management (3)
  - BUL6444 - Law and Ethics (3)
  - GEB6365 - International Business Analysis (3)
  - MAN6721 - Applied Strategy and Business Policy (3)

Restricted Elective Courses

9 Total Credits

- Earn at least 9 credits from the following types of courses:
  Students take 9 credits of graduate courses, selected by the program advisor. Approved graduate transfer courses may substitute for the MBA electives and can include non-business electives. Elective courses may include FIN 6465 Financial Analysis Seminar, MAN 6448 Conflict Resolution and Negotiation, MAN 6292 Executive Leadership, MAN 6146 Professional Leadership 1, MAN 6147 Professional Leadership 2, or pre-approved transfer courses.

Grand Total Credits: 39

Track Details

International Residency

As part of the GEB 6365 - International Business Analysis course, EMBA students are required to participate in a week long international residency. Typically the trip includes 2 countries with visits to local and multinational companies, and immersion into the countries culture.

Capstone Course

The UCF MBA capstone course, MAN 6721 - Applied Strategy and Business Policy, is required for all MBA students. This capstone course integrates the various functional disciplines in business administration. It focuses on the theories and frameworks in the field of strategic management, and requires a minimum grade of "B-" (2.75).

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
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finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Business Administration MBA - Business Administration MBA, Professional Track

Track Website
http://www.ucfmba.ucf.edu

Track Handbook
Business Administration MBA, Professional Track

Track Contact Information
Robin Hofler
robin.hofler@ucf.edu
Telephone: 407-235-3913
DTC 304

Online Availability
No

Track Description

The Professional MBA (PMBA) combines the rigor and depth of a traditional MBA program and offers two scheduling options: students can attend part-time in the evening for 24 months so as not to interrupt their full-time career, or they can attend full-time during the day for 12 months.

The 24-month part-time PMBA is offered at the UCF Downtown Campus each summer. It is also offered at a regional campus location on a rotational basis most fall terms providing a convenient location to working professionals in Central Florida.

The 12-month full-time PMBA is offered at the UCF Downtown Campus each fall.

The PMBA enrolls a limited-size group of professionals from a variety of organizations and industries to come together and challenge their intellect, enhance their capabilities and broaden their perspectives while growing their professional network. The innovative curriculum equips program participants with the analytical tools, latest business techniques, and skills needed to succeed in today's competitive marketplace while honing their business knowledge, teamwork, critical thinking and decision making skills. The program integrates the students' professional experience allowing them to immediately apply newly-acquired knowledge on the job. PMBA faculty members who share their expertise and provide insights into real-world business issues use consultative teaching approaches combining lectures, case studies, discussion forums and presentations to maximize learning. Participants will also find a high level of personal attention from PMBA administrators from the moment they apply.

- 24-month part-time or 12-month full-time options
- Minimum 3 years of work experience required for the part-time PMBA
- Minimum 1-3 years of work experience OR earned graduate degree or currently enrolled in a graduate program required for the full-time PMBA
- Limited class size, cohort program
- Innovative curriculum (consultative and case-based applied approach)
- Personal interview required for admission

This program is a professional program with a market rate tuition. The tuition is the same for Florida residents and non-residents. Please visit https://business.ucf.edu/centers-institutes/executive-development-center/ucf-mba-comparison-page/ for more information.

This program is accredited by AACSB International.

2022-2023 Graduate Catalog
Track Prerequisites

Minimum 3 years of work experience required for the part-time PMBA.

Minimum 1-3 years of work experience OR earned graduate degree or currently enrolled in a graduate program required for the full-time PMBA.

To help prepare you for the start of your MBA program, UCF offers online learning modules in accounting, economics, finance, and business statistics. These are offered through McGraw-Hill's Connect online learning management system and are designed to help you build the foundational knowledge needed to succeed in the MBA program at UCF. All MBA students are required to take the Initial Assessments for each of the subject areas, and possibly purchase the online learning modules depending in their Initial Assessment results. For more information on the MBA Foundation Prerequisites, click here: https://business.ucf.edu/graduate-programs/.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Degree Requirements

Required Courses
30 Total Credits

- Complete the following:
  - ECO6115 - Economic Analysis of the Firm (3)
  - ACG6425 - Managerial Accounting Analysis (3)
  - ECO6416 - Applied Business Research Tools (3)
  - FIN6406 - Strategic Financial Management (3)
  - MAN6245 - Organizational Behavior and Development (3)
  - MAR6816 - Strategic Marketing Management (3)
  - MAR6466 - Strategic Supply Chain and Operations Management (3)
  - BUL6444 - Law and Ethics (3)
  - MAN6721 - Applied Strategy and Business Policy (3)
  - GEB6365 - International Business Analysis (3)

Restricted Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  Students take 9 credits of graduate courses, selected by the program advisor. Approved graduate transfer courses may substitute for the MBA electives and can include non-business electives. Elective courses may include FIN 6465 Financial Analysis Seminar, MAN 6448 Conflict Resolution and Negotiation, MAN 6292 Executive Leadership, MAN 6146 Professional Leadership 1, MAN 6147 Professional Leadership 2, or pre-approved transfer courses.

Grand Total Credits: 39

Track Details

Capstone Course
The UCF MBA capstone course, MAN 6721 - Applied Strategy and Business Policy, is required for all MBA students. This capstone course integrates the various functional disciplines in business administration. It focuses on the theories and frameworks in the field of strategic management, and requires a minimum grade of "B-" (2.75).
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Business Administration PhD

College
College of Business Administration

Department
College of Business Administration Dean's Office

Program Website
http://business.ucf.edu/graduate-programs/

Program Contact Information
See individual tracks for contact information.

Is this program available 100% online?
No

Program Description
The Business Administration PhD program prepares students for careers in higher education and management. Students may choose from four tracks: Accounting, Finance, Management and Marketing. Please scroll to the bottom of this page for further details on these tracks.

The objective of the doctoral program in Business Administration is to prepare students for academic careers in higher education and management careers within profit and nonprofit organizations. Success in the program is judged by the student's understanding of the issues and methodologies essential to the advancement of knowledge.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Business Administration PhD - Business Administration PhD, Accounting Track

Track Website
http://business.ucf.edu/graduate-programs/

Track Handbook
Business Administration PhD, Accounting Track

Track Contact Information
Khim Kelly PhD
Professor
Khim.Kelly@ucf.edu
Telephone: 407-823-2150
BA1 – 409E

Online Availability
No
**Track Description**

The objective of the Accounting track in the Business Administration PhD program is to prepare students for academic careers at major research universities. Dixon School faculty guide student learning through a combination of coursework and hands-on research projects with the objective of contributing new insights to the field. Students immerse themselves in classic and cutting-edge research in accounting, theories drawn from psychology, economics and/or sociology as well as the methods used to discover and evaluate new ideas in the field. Success in the program is judged by the student's understanding of the issues and methodologies essential to the advancement of knowledge.

The program requires a full-time commitment on the part of the students supported by stipends, tuition waivers, health insurance options etc. as described in the Graduate Student Handbook and on the College of Graduate Studies website.

The Accounting track of the Business Administration PhD program requires 72 credit hours beyond the bachelor's degree. Students must complete 18 credit hours of accounting core courses, 12 credit hours of research methods/tools courses, 27 credit hours of electives, and 15 credit hours of dissertation.

**Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree (54 Credit Hours Minimum beyond the Master's Degree)**

**College of Graduate Studies Contact Information**

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Millican Hall 230  
Online Application  
Graduate Admissions

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**Institution Codes**  
GRE: 5233  
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**Degree Requirements**  
Required Courses  
30 Total Credits  
No Rules  
Accounting Core  
18 Total Credits  
- Complete all of the following  
  - Earn at least 18 credits from the following:  
    - ACG7157 - Seminar in Archival Research in Accounting (3)  
    - ACG7399 - Seminar in Behavioral Accounting Research (3)  
    - ACG7826 - Seminar in the Social and Organizational Context of Accounting (3)  
    - ACG7885 - Research Foundations in Accounting (3)  
    - ACG7887 - Accounting Research Forum (1)  
  - ACG 6908 Directed Independent Study (2 credit hours) is also required NOTE: ACG 7887 - Accounting Research Forum is a 1 credit hour workshop that will be repeated over 4 semesters.

Research Methods/Tools  
12 Total Credits  
- Complete all of the following  
  - Earn at least 12 credits from the following:  
    - PSY6216C - Research Methodology (4)  
    - PSY6308C - Psychological Testing (4)  
    - PSY7217C - Advanced Research Methodology I (4)  
    - PSY7218C - Advanced Research Methodology II (4)  
    - PSY7239C - Advanced Research Methodology III (4)  
    - PSY7315 - Psychometric Theory and Practice (3)  
    - ECO6424 - Econometrics I (3)  
    - EDF7403 - Quantitative Foundations of Educational Research (3)  
    - EDF7405 - Quantitative Methods II (3)  
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)  
    - SYA6315 - Qualitative Research Methods (3)  
    - SYA6425 - Design and Conduct of Social Surveys (3)  
- The research tools requirement is intended to ensure a thorough exposure to research methods. All candidates are
expected to demonstrate knowledge of statistical methods as well as usage of statistical packages, including design, analysis, and interpretation of results. Research tools courses should be approved by the PhD Director. Examples of courses that will satisfy this requirement included above.

Elective Courses
27 Total Credits

No Rules

Restricted
3 Total Credits

- Complete all of the following
  - Complete at least 1 of the following:
    - ACG7390 - Seminar in Managerial Accounting Research (3)
    - ACG7888 - Seminar in Critical Accounting and AIS (3)
    - ACG7917 - Advanced Research Methods in Accounting and Accounting Information Systems Research (3)
  - Other accounting electives may be added as they are developed for the program.

Unrestricted
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following types of courses:
    Students must take 6 credit hours in a minor/support area. Students must select a minimum of six credit hours in a unified area approved by the PhD Director. Each student's program of study is individually tailored to accommodate interests whenever possible. This coursework may be developed from offerings in the following areas with the advice and consent of the respective departments and the advisory committee: Marketing Economics Political Science Psychology Gender Studies Management Sociology Environmental Studies Communication Philosophy Public Affairs
    - Earn at least 18 credits from the following types of courses:
      Courses, independent study and/or research hours chosen in conjunction with the PhD program director. Students with an earned master’s degree may be waived from this 18-hour requirement with approval from the PhD program director.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  ACG 7980 Dissertation 15 credit hours (minimum)

Admission to Candidacy
0 Total Credits

- Students must complete a comprehensive candidacy examination that includes written and oral portions. Students must defend a written dissertation proposal in an oral examination conducted by the student's advisory/dissertation committee. The final defense of the dissertation will also require an oral examination. Students officially enter candidacy when the following has been accomplished: Completion of all course work, except for dissertation hours. Successful completion of the comprehensive candidacy examination.

Teaching Requirement
0 Total Credits

- The requirements for the teaching component of the degree will be developed with the doctoral program director based on the student's experience. Normally, this requirement will be satisfied through teaching a minimum of three credit hours of class instruction under the direct supervision of a faculty member. As appropriate, students will also be required to attend teaching development workshops and seminars.

Independent Learning
0 Total Credits

- The dissertation serves as the independent learning experience.

Grand Total Credits: 72

Financial Information

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UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Business Administration PhD - Business Administration PhD, Finance Track

Track Website
http://business.ucf.edu/graduate-programs/

Track Handbook
Business Administration PhD, Finance Track

Track Contact Information

Qinghai Wang PhD
Professor
Qinghai.Wang@ucf.edu
Telephone: 407-823-6453
BA 410

Online Availability
No

Track Description
The Finance track in the Business Administration PhD program prepares students for careers in higher education and management within profit and nonprofit industries.
Success in the program is judged by the student's understanding of the issues and methodologies essential to the advancement of knowledge.
The Finance track of the Business Administration PhD program requires 72 credit hours beyond the bachelor's degree. Students must complete 18 credit hours of finance core courses, 6 credit hours of a minor/support area, 12 credit hours of research methods/tools courses, 21 credit hours of electives, and 15 credit hours of dissertation.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree (54 Credit Hours Minimum beyond the Master's Degree)

Required courses for all students are indicated with an asterisk in the lists below. Specific courses from the foundation body of knowledge category are determined based on a student's background in consultation with the doctoral program coordinator. Required course work prior to beginning study includes successful completion of at least a two-course sequence of 6 credit hours of calculus and previous course work in economics, finance, and statistics. The program requires 27 hours of formal course work, exclusive of independent study, as well as 15 credit hours of dissertation research.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Degree Requirements
Required Courses
36 Total Credits
No Rules
Finance Core
18 Total Credits

- Complete all of the following
  - Complete the following:
    - FIN7935 - Finance Research Forum (3)
    - FIN7808 - Introduction to the Theory of Finance (3)
    - FIN7807 - Corporate Finance Theory (3)
    - FIN7816 - Investment Theory (3)
    - FIN7845 - Empirical Methods I (3)
    - FIN7864 - Empirical Methods II (3)
  - Other courses as deemed acceptable by the doctoral program coordinator.

Minor/Support Area
6 Total Credits

- Complete the following:
  - ECO6118 - Microeconomic Theory I (3)
  - ECO7116 - Microeconomic Theory II (3)

Research Methods/Tools
12 Total Credits

- Complete all of the following
  - Earn at least 12 credits from the following:
    - ECO6403 - Mathematical Economics (3)
    - ECO6424 - Econometrics I (3)
    - ECO7426 - Econometrics II (3)
    - ECO6404 - Games and Economic Behavior (3)
    - Course Not Found
    - ACG7157 - Seminar in Archival Research in Accounting (3)
  - Other courses as deemed acceptable by the doctoral program coordinator.

Elective
21 Total Credits

- Complete all of the following
  - Earn at least 3 credits from the following types of courses:
    - Elective course approved by the doctoral program coordinator.
  - Earn at least 18 credits from the following types of courses:
    - Courses, independent study and/or research hours chosen in conjunction with the PhD program director. Students with an earned master’s degree may be waived from this 18-hour requirement with approval from the PhD program director.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - FIN 7980 - Dissertation 15 Credit Hours minimum

Admissions to Candidacy
0 Total Credits

- Students must complete a comprehensive candidacy examination that includes written and oral portions. Students must defend a written dissertation proposal in an oral examination conducted by the student's advisory/dissertation committee. Students officially enter candidacy when the following have been accomplished: Completion of all course work, except for dissertation hours. Successful completion of the comprehensive candidacy examination. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study. Students must defend a written dissertation proposal in an oral examination conducted by the faculty, at least one semester prior to their final dissertation defense. The final defense of the dissertation will also require an oral examination.

Teaching Requirement
0 Total Credits

- The requirements for the teaching component of the degree will be developed with the doctoral graduate program director based on the student's experience. Normally, this requirement will be satisfied through teaching a minimum of three credit hours of class instruction under the direct supervision of a faculty member. As appropriate, students will also be required to attend teaching development workshops and seminars.

Independent Learning
0 Total Credits
The dissertation serves as the independent learning experience.

Grand Total Credits: 72

Financial Information

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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Business Administration PhD - Business Administration PhD, Management Track**

**Track Website**
http://business.ucf.edu/graduate-programs/

**Track Handbook**
Business Administration PhD, Management Track

**Track Contact Information**

Steven Whiting, PhD
Associate Professor
Steven.Whiting@ucf.edu
Telephone: 407-823-1714
BA1 339

**Online Availability**
No
**Track Description**

The objective of the Management track in the Business Administration PhD program is to prepare students for academic careers at major research universities. Management Department faculty members help students understand current approaches to explaining and investigating management processes and facilitate research projects aimed at contributing new insights to the field. Our students immerse themselves in the timely and timeless lessons offered by management scholars, as well as the methods used to discover and evaluate new ideas. This training also provides our students with the knowledge and critical perspective necessary to be master educators. The Management program is designed to produce well-rounded members of our profession who are well prepared to contribute to the research, education, and service missions of the Management discipline.

The program requires a full-time commitment on the part of the students, allowing no time for secondary outside employment. Stipends, tuition waivers, health insurance options, described in the Graduate Student Handbook and on the College of Graduate Studies website, provide the financial resources that support this full-time status.

The Management track of the Business Administration PhD program requires 72 credit hours beyond the bachelor's degree. Students must complete 18 credit hours of management core courses, 6 credit hours of a minor/support area, 12 credit hours of research methods/tools courses, 21 credit hours of electives, and 15 credit hours of dissertation.

**Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree (54 Credit Hours Minimum beyond the Master's Degree)**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**  
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 523

**Degree Requirements**

Required Courses  
36 Total Credits  
No Rules  
Management Core  
18 Total Credits

- Earn at least 18 credits from the following:
  - MAN7275 - Organizational Behavior (3)  
  - MAN7207 - Organization Theory (3)  
  - MAN7900 - Directed Readings in Management (3)  
  - MAN7916 - Seminar in Management Research (1 - 99)  
  - MAN7776 - Business-level Strategic Management (3)

Minor/Support Area  
6 Total Credits

- Earn at least 6 credits from the following types of courses:  
  Students may select a minimum of six credit hours, typically within a unified area, approved by the student's adviser and the program coordinator. Each student's program of study is individually tailored to accommodate student interests, and often emphasizes additional training in research methodology necessary to produce high quality scholarly research.

Research Methods/Tools  
12 Total Credits

- Complete all of the following
  - The research tools requirement is intended to ensure a thorough exposure to research methods. All candidates are expected to demonstrate knowledge of statistical methods as well as usage of statistical packages. This includes design, analysis, and interpretation of results. The student's advisory committee and the program coordinator will
recommend and/or approve specific courses for each student. Representative courses include, but are not limited to the following:

- **Earn at least 12 credits from the following:**
  - PSY6216C - Research Methodology (4)
  - PSY7217C - Advanced Research Methodology I (4)
  - PSY7217C - Advanced Research Methodology I (4)
  - PSY7218C - Advanced Research Methodology II (4)
  - PSY7219C - Advanced Research Methodology III (4)
  - GEB7911 - Structural Equation Modeling for Business Research (3)
  - MAR7626 - Multivariate Analysis for Business Research (3)
  - EDF7427 - Psychometrics (3)
  - PAF7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis (3)
  - STA6237 - Nonlinear Regression (3)
  - STA6507 - Nonparametric Statistics (3)
  - STA6707 - Multivariate Statistical Methods (3)

**Elective**

21 Total Credits

- Complete all of the following
  - Earn at least 3 credits from the following types of courses:
    - Elective course approved by the faculty adviser 3 Credit Hours
  - Earn at least 18 credits from the following types of courses:
    - Courses, independent study and/or research hours chosen in conjunction with the PhD program director. Students with an earned master’s degree may be waived from this 18-hour requirement with approval from the PhD program director.

**Dissertation**

15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - MAN 7980 - Dissertation Research 15 Credit Hours minimum

**Admission to Candidacy**

0 Total Credits

- Students must complete a comprehensive candidacy examination that includes written and oral portions. This usually takes place near the end of coursework, in the late second year or early third year of the program. Students officially enter candidacy when the following have been accomplished: Completion of all course work, except for dissertation hours. Successful completion of the comprehensive candidacy examination. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study. Students must defend a written dissertation proposal in an oral examination conducted by the faculty, at least one semester prior to their final dissertation defense. The final defense of the dissertation will also require an oral examination.

**Teaching Requirement**

0 Total Credits

- The requirements for the teaching component of the degree will be developed with the doctoral graduate program director based on the student’s experience. Normally, this requirement will be satisfied through teaching a minimum of three credit hours of class instruction under the direct supervision of a faculty member. As appropriate, students will also be required to attend teaching development workshops and seminars.

**Independent Learning**

0 Total Credits

- The dissertation satisfies the independent learning requirement.

Grand Total Credits: **72**

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information
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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Business Administration PhD - Business Administration PhD, Marketing Track

Track Website
http://business.ucf.edu/graduate-programs/

Track Handbook
Business Administration PhD, Marketing Track

Track Contact Information
Xin He PhD
Associate Professor
Xin.He@ucf.edu
Telephone: 407-823-1329
BA2 308N

Online Availability
No

Track Description
The objective of the Marketing track in the Business Administration PhD program is to prepare students for academic careers in higher education and management careers within profit and nonprofit organizations. Success in the program is judged by the student's understanding of the issues and methodologies essential to the advancement of knowledge.

The Marketing track of the Business Administration PhD program requires 72 credit hours beyond the bachelor's degree. Students must complete 18 credit hours of marketing core courses, 9 credit hours of a minor/support area, 12 credit hours of research methods/tools courses, 18 hours of electives and 15 credit hours of dissertation.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree (54 Credit Hours Minimum beyond the Master's Degree)

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Degree Requirements
Required Course
57 Total Credits
No Rules
Marketing Core
18 Total Credits

- Complete all of the following
Earn at least 18 credits from the following:

- MAR7575 - Seminar in Consumer Behavior (3)
- MAR7638 - Seminar in Marketing Theory, Scaling, and Measurement (3)
- MAR7666 - Seminar in Marketing Models I (1.5)
- MAR7667 - Seminar in Marketing Models II (1.5)
- MAR7807 - Seminar in Marketing Strategy I (1.5)
- MAR7808 - Seminar in Marketing Strategy II (1.5)
- MAR7919 - Research (1 - 99)

MAR 7638 may be substituted by an equivalent course as determined by the Department Chair in consultation with PhD coordinator.

Minor/Support Area
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  A minimum of nine hours of course work is required in a minor/support area. The course work should be from a unified area and will be planned with the advice and consent of the department's PhD coordinator in consultation with the PhD committee.

Research Methods/Tools
12 Total Credits

- Complete all of the following
  - Complete the following:
    - MAR7626 - Multivariate Analysis for Business Research (3)
  - MAR 7626 may be substituted by an alternative course as approved by the Department Chair in consultation with the PhD coordinator.
  - Earn at least 9 credits from the following types of courses:
    The department's doctoral advisory committee and the PhD Coordinator will determine the additional research tools courses. Additional courses approved by the PhD coordinator in consultation with the PhD committee 9 Credit Hours

Electives
18 Total Credits

- Earn at least 18 credits from the following types of courses:
  Courses, independent study and/or research hours chosen in conjunction with the PhD program director. Students with an earned master's degree may be waived from this 18-hour requirement with approval from the PhD program director.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  MAR 7980 - Dissertation 15 Credit Hours minimum

Admission to Candidacy
0 Total Credits

- Students must successfully pass a readiness exam in the first summer. In the second summer of the program after course work has been completed students must pass a comprehensive candidacy examination that includes written and oral portions. Students officially enter candidacy when the following have been achieved: Successful completion of all course work (excluding dissertation hours). Successful completion of the readiness exam administered in the first summer. Successful completion of the comprehensive candidacy exam administered in the second summer. Formation of the dissertation advisory committee, consisting of approved graduate faculty and graduate faculty scholars. Submission of an approved program of study. Students must defend a written dissertation proposal in an oral examination conducted by the faculty, at least one semester prior to their final dissertation defense. The final defense of the dissertation will require an oral examination.

Teaching Requirement
0 Total Credits

- The requirements for the teaching component of the doctoral degree will be developed by the Department Chair in consultation with the PhD coordinator. Normally, this requirement will be satisfied through teaching a minimum of three credit hours of class instruction under the direct supervision of the Department Chair or his/her designee. As appropriate, students will also be required to attend teaching development seminars and workshops.

Independent Learning
0 Total Credits

- The dissertation satisfies the independent learning experience.

Grand Total Credits: 72
**Financial Information**

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**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Fellowship Information**

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finaid@ucf.edu
http://finaid.ucf.edu

**Business Analytics MS**

**College**

College of Business Administration

**Department**

Department of Economics

**Program Website**

Program Website

**Program Handbook Link**

Business Analytics MS Handbook

**Program Prerequisites**

The MS in Business Analytics program is suitable for applicants with an undergraduate degree in business, economics, computer science, engineering, mathematics, statistics, and other natural sciences. It is recommended but not required that the applicants should have successfully completed the following courses or their equivalent:

- A mathematics course, such as QMB 3003 (Quantitative Methods for Business I) or MAC 2311C (Calculus with Analytic Geometry I)
- A statistics course, such as QMB 3200 (Quantitative Methods for Business I) or STA 2023 (Statistical Methods I)
- Coursework in economics, such as ECO 2023 (Principles of Microeconomics), ECO 3101 (Microeconomics)

Applicants might also have taken further courses in business analytics, including econometrics, mathematical economics, and other courses in the minor in business analytics or the business analytics track of the BSBA degree at UCF. The admissions committee, comprising the Program Director and the faculty teaching in the program, will evaluate student applications. At the discretion of the admissions committee, prospective students with undergraduate degrees in social sciences or other disciplines may be considered for acceptance into the MS in Business Analytics program, depending on the student’s performance in quantitative coursework.
College of Graduate Studies Contact Information

For questions regarding the submission of your application, payment of your application fee, application supporting documents, deadlines, or other processing related questions, please contact:

College of Graduate Studies
Graduate Admissions
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
30 Total Credits

- Complete all of the following
  Semester 1 - Fall
  - Complete the following:
    - QMB6358 - Software Tools for Business Analytics (3)
    - QMB6010 - Mathematical Tools for Business Analytics (3)
    - STA6136 - Probability and Statistics for Business Analytics (3)
    - QMB6304 - Data Visualization (3)
  Semester 2 - Spring
  - Complete the following:
    - STA5104 - Advanced Computer Processing of Statistical Data (3)
    - STA5737 - Fundamental and Advanced Data Analytical Methodology with Business Applications (6)
    - QMB6357 - Microeconomic Analysis for Business Analytics (3)
  Semester 3 - Summer
  - Complete the following:
    - ECO6935 - Capstone in Business Analytics I (3)
    - ECO6936 - Capstone in Business Analytics II (3)

Grand Total Credits: 30

Program Details

Business analytics is crucial in all organizations. As more businesses focus on bridging data and decision-making, the need for skilled analysts to collect and interpret this information continues to grow. The Master of Science in Business Analytics prepares students to become business analysts skilled in the collection, management, analysis, interpretation, and application of data to make more informed and successful business decisions.

The core of the MS in Business Analytics is the application of mathematics and statistics to solve business problems. Students will learn to collect and to organize data. They will learn to select an economic model to add structure to the analysis. The students will learn to analyze data with statistical models and to create graphical and tabular results to communicate recommendations to business stakeholders.

The program is a one-year, face-to-face program delivered over twelve months. The format is a cohort or lock-step program in which students take nine required courses, with no electives. In the first semester, students attain software proficiency, develop mathematical understanding, and learn to communicate analytical results through data visualization. In the second semester, students acquire knowledge of economic models to develop intuition, learn methods for data processing, and complete a six-credit course in data analytics. Students complete the program with a two-part capstone project, in which they design and implement a self-directed research project.

See program page for more details: https://business.ucf.edu/degree/ms-business-analytics/.

2022-2023 Graduate Catalog
Financial Information

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The Department of Economics offers a limited number of opportunities for Graduate Teaching Assistantships to assist with courses in the College of Business. These assistantships are offered on a competitive basis and depend on the candidate's qualifications and experience. Applicants to the MS in Business Analytics program are automatically considered for Graduate Teaching Assistantships. Upon review of an application, qualified candidates will be contacted should those candidates be selected for these positions.

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http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Cyber Risk Management Graduate Certificate

College
College of Business Administration

Department
Department of Management

Program Website
https://www.ucf.edu/online/degree/cyber-risk-management/

Program Contact Information
Kelley Dietrich
Director of Admissions
cbagrad@ucf.edu

Is this program available 100% online?
Yes

UCF Online

Please Note: The Cyber Risk Management Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
**Program Description**

**This program has temporarily suspended admission**

The certificate in Cyber Risk Management introduces students from various academic backgrounds to current cybersecurity and privacy matters affecting organizations and emphasizes managerial and risk-based approaches to help organizations effectively prepare for and respond to these concerns.

**Program Prerequisites**

Those applying who are NOT currently enrolled in a UCF graduate program must have a minimum of 2 years of full-time work experience after completion of the bachelor's degree.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

**Degree Requirements**

Required Courses (must be taken in the order below)
9 Total Credits

- Take the following:
  - ISM6327 - Foundations of Cybersecurity and Privacy (3)
  - ISM6328 - Cyber Risk Assessment (3)
  - ISM6375 - Cyber Management and Leadership (3)

Grand Total Credits: 9

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**Economics MS**

**College**

College of Business Administration

**Department**

Department of Economics

**Program Website**

http://business.ucf.edu/graduate-programs/

**Program Handbook Link**

Economics MS

**Program Contact Information**

Harry Paarsch PhD
Professor
harry.paarsch@ucf.edu
Telephone: 407-823-1576
BA2 - 302M

**Is this program available 100% online?**

No
Program Description

This program has temporarily suspended admission and plans to reopen for admission in Fall 2023

The Master of Science in Economics degree program prepares students as economists specializing in business analytics. The program provides students with the necessary theoretical and quantitative training to address current economic business problems in a thoughtful, rigorous manner.

Today's job market offers numerous opportunities to individuals who couple an advanced understanding of economic theory with well-developed skills in data analytics.

The Economics MS program requires a minimum of 30 credit hours beyond the bachelor’s degree.

College of Graduate Studies Contact Information

ggradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Degree Requirements

Required Courses
24 Total Credits
No Rules

Fall Term Courses
12 Total Credits

- Complete the following:
  - ECO6403 - Mathematical Economics (3)
  - ECO6118 - Microeconomic Theory I (3)
  - ECO5445 - Introduction to Business Analytics (3)
  - MAP6207 - Optimization Theory (3)

Spring Term Courses
12 Total Credits

- Complete the following:
  - ECO6244 - Econometrics I (3)
  - ECO7116 - Microeconomic Theory II (3)
  - ECO6315 - Seminar in Contemporary Economic Issues (3)
  - ECO6445 - Data Wrangling (3)

End-of-Program Requirement
6 Total Credits

- Complete all of the following
  - Complete the following:
    - ECO6935 - Capstone in Business Analytics I (3)
    - ECO6936 - Capstone in Business Analytics II (3)
  - The culminating academic experience of the program consists of a two-course capstone sequence that provides students a forum in which to develop, carry out, and write up research of a well-defined problem in business analytics using the tools developed in the program.

Independent Learning
0 Total Credits

- The capstone research project is required of all students in the program.

Grand Total Credits: 30
Entrepreneurship Graduate Certificate

College
College of Business Administration

Department
Department of Management

Program Website
https://business.ucf.edu/graduate-programs/

Program Contact Information
Cameron Ford PhD
Associate Professor
cbagrad@bus.ucf.edu
Telephone: 407-823-3700
Business Administration 345

Is this program available 100% online?
No

Program Description
The Graduate Certificate in Entrepreneurship helps students develop entrepreneurial mindsets and skillsets needed to create and lead new innovations, initiatives, and startup ventures. Participants will learn how to recognize opportunities, formulate solutions, design business models, deliver results, and sustain success. These capabilities will empower graduates to help others by providing them with access to innovations that solve important problems.

These skills are essential to professional agility, resilience, impact, and sustained success and are valued by established organizations as well as startups. This certificate is especially valuable to those interested in managing innovation, leading change, and launching startup ventures.

Total Credit Hours Required: 9 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites
Those applying who are NOT currently enrolled in a UCF graduate program must have a minimum of 2 years of full-time work experience after completion of the bachelor's degree.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses
9 Total Credits

- Complete all of the following
  - Complete the following:
    - ENT5016 - New Venture Design (3)
    - ENT5206 - New Venture Implementation (3)
  - Complete at least 1 of the following:
    - ENT6617 - Innovation and Entrepreneurship Strategy (3)
    - ENT5185 - Technological Entrepreneurship (3)

Grand Total Credits: 9

FinTech Graduate Certificate

College
College of Business Administration

Department
Department of Finance

Program Contact Information
Kelley Dietrich
cbagrad@bus.ucf.edu

Is this program available 100% online?
Yes

UCF Online

Please Note: The FinTech Graduate Certificate may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

Program suspended admission beginning Fall 2021.

FinTech is the use of technology to innovate, improve and facilitate the delivery of traditional financial services. The objective of the FinTech Certificate is to introduce students to the foundations of FinTech and employable technical skills including artificial intelligence and the development of algorithms.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Those applying who are NOT currently enrolled in a UCF graduate program must have a minimum of 2 years of full-time work experience after completion of the bachelor's degree.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: UCF-College of Graduate Studies
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - CAP5636 - Advanced Artificial Intelligence (3)
    - COT5405 - Design and Analysis of Algorithms (3)
    - FIN6515 - Analysis of Investment Opportunities (3)
  - Complete at least 1 of the following:
    - FIN6779 - FinTech in Decision Making (3)
    - FIN6778 - Foundations of FinTech (3)

Grand Total Credits: 12

FinTech MS

College

College of Business Administration

Department

Department of Finance

Program Contact Information

Christo Pirinsky, Ph.D
Associate Professor
fintech@ucf.edu
407-823-5962
BA1 Rm 420

Is this program available 100% online?

Yes

UCF Online

Please note: FinTech MS, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
**Program Description**

Students must choose only one delivery mode: Full-Time Face-To-Face or Part-Time Online. International students can opt for the online option ONLY if they are not in the US and their home country allows it (the international student application deadline will still apply).

FinTech or Financial Technology, refers to the application of technological innovation in the financial services industry. Recent developments in technology and computer science have brought about significant changes in many sectors of the financial services industry, enabling individuals and businesses to use products and services at a lower cost, with greater ease and convenience.

Technological innovations and advances facilitate the streamlining and delivery of financial services. It should be noted that, similar to other domains of business and society, the financial services sector is also facing the disruptive effects of artificial intelligence (AI). Extremely relevant to the proposed program is that UCF is an integral part of the Florida High Tech Corridor ($5 billion industry, employs 30,000, home to National Center for Simulation), which involves a significant number of modeling, simulation, and technology companies and academic institutions that produce applications that run the gamut of fields including military, flight and transportation training, virtual experiences for theme parks and interactive entertainment, and medical training utilizing patient simulators. Home to the National Center for Simulation, UCF’s Institute for Simulation and Training, all branches of the military and 10 other government agencies concentrated on simulation R&D through Team Orlando, the Florida High Tech Corridor is a veritable hub for this field. The list of companies seeking employees with technology skills is far too lengthy to include in this document, but spans across local, state, national, and international opportunities (http://www.phocuswright.com/About-Us/Our-Clients).

There is an increasing need for technology-savvy employees who can think and function uniquely in crossdisciplinary teams to solve real analytical and logistical problems in the financial services sector. The Wall Street Journal has highlighted the fourth straight year of declines nationwide of applications to study an MBA in the US and noted that “...in response, schools in recent years have launched cheaper, more flexible or more customized Master’s degrees in hot areas such as data science and supply chain management” (WSJ, 10/1/2018). The MS in FinTech will forge a new path in interdisciplinary education and contribute to burgeoning interdisciplinary research encompassing computer science, and finance. Diverging from traditional business/management degrees, the MS in FinTech will focus on prescriptive and predictive techniques to anticipate and solve problems in a forward-looking approach.

FinTech is revolutionizing how quickly and cost-effectively financial services are delivered and is disrupting traditional financial services such as banking and mobile payments, not only in the developed world but also in emerging and developing economies. The disruptive force of FinTech is changing the banking and financial services industry’s workforce. Moving forward, it is expected that many of the traditional jobs in the financial services industry will be replaced by jobs requiring FinTech skills.

FinTech is increasingly characterized by startups with venture capital investments. As reported by the Orlando Sentinel recently, Fattmerchant, an Orlando based FinTech firm received a US$5.5 million investment from a venture capital (VC) firm with the objective of hiring as many as 50 people, most of them in the Southeast. This is just a small piece of the US$16.6 billion in global venture capital raised in over 1,000 deals in 2017 (CB Insights, 2018), with most of the funding going to US companies. Last year (2018) was expected to be an even stronger year for such investments and to drive the demand for FinTech jobs, both in the US and globally. Job demand for FinTech is high (5,837 FinTech jobs are listed on LinkedIn as of December 31, 2018). By combining skills in key software and finance areas, FinTech jobs have a high median annual income of US$130,000 vs. US$105,000 for a general software developer. (Computerworld, 12/15/2017)The interdisciplinary MS in FinTech (Finance and Technology) will be offered jointly by the College of Business Administration (CBA) (Department of Finance) and College of Engineering and Computer Science (CECS) (Department of Computer Science). The degree will be housed in the CBA.

The core of the MS in FinTech is the application of technology to improve and automate the delivery of traditional financial services. This degree program will provide employable technical skills including the development of algorithms, machine learning, and computer systems. The curriculum includes required courses that ensure that students develop computing skills, build awareness of financial markets, and apply their skills to simplify services related to banking, mobile payments and transfer of funds, credit evaluations, and asset management.

The FinTech MS is a 10-course (30-credit hours) lock-step cohort program with 5 courses (15-credits) each in Finance and Computer Science and will not have any tracks or specializations. The independent learning requirement is met by successful completion of a capstone project in the required course FIN 6777 (Capstone Course), which will be an applied project in financial technologies.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor’s Degree**

**Program Prerequisites**

A Bachelor’s degree in a STEM-related discipline or business discipline from an accredited institution recognized by UCF.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Degree Requirements

Required Courses
30 Total Credits

- Complete the following:
  - FIN6406 - Strategic Financial Management (3)
  - FIN6515 - Analysis of Investment Opportunities (3)
  - FIN6778 - Foundations of FinTech (3)
  - FIN6779 - FinTech in Decision Making (3)
  - FIN6777 - FinTech Entrepreneurship (3)
  - COT5480 - Computational Methods in FinTech I (3)
  - COT6481 - Computational Methods in FinTech II (3)
  - CAP5619 - Artificial Intelligence for FinTech (3)
  - COP5818 - Full Stack Development for FinTech (3)
  - CIS5730 - Blockchains and Smart Distributed Contracts (3)

Grand Total Credits: 30
Management MSM

College
College of Business Administration

Department
Department of Management

Program Website
http://www.business.ucf.edu/graduate-programs

Program Handbook Link
Management MSM

Program Contact Information
Business Analytics, Entrepreneurship & Human Resources Tracks
Robin Hofler
robin.hofler@ucf.edu
Telephone: 407-235-3913

Integrated Business Track
cbagrad@ucf.edu or ib@ucf.edu

Is this program available 100% online?
No

Program Description
The Master of Science in Management offers 4 track options. Please scroll to the bottom of this page for further details on these Tracks.

Three tracks are a Professional MS in Management: Business Analytics Track; Human Resources Track; and Entrepreneurship track. Each are taught in a 20-month, cohort format at the UCF Downtown Orlando Campus. They are designed to allow the busy professional to work full-time while earning their degree. Classes meet two times per week and class size is limited. Each of these track options provides a blend of advanced management courses combined with specialty courses.

These professional tracks charge market rate tuition and are considered part-time. The tuition is the same for Florida residents and non-residents.

The fourth track, Integrated Business, is designed for recent non-business undergraduates and emphasizes the development of applied business skills through a team-based, active learning approach, and creates well-rounded multi-disciplinarians who will thrive in environments that require them to take on multiple roles and responsibilities for their employer. This track is a 12-month, full-time daytime program held at UCF’s main campus. This track is considered full time and tuition is based on the current graduate in-state and out-of-state graduate tuition rates.

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gradadmissions@ucf.edu
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Millican Hall 230
Online Application
Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
**Track Description**

**This track has been suspended effective Fall 2023.**

The MS in Management/Business Analytics provides students with the specialized skills necessary to respond to challenges of the new data-intensive business world of today.

The 30-credit hour, ten-course curriculum introduces students to the main quantitative methods and software tools of business analytics, a subfield of data science; namely, those used in numerical, optimization, simulation, and statistical methods. Designed for those interested in using quantitative methods to uncover economic relationships, to construct predictive models, and to communicate business intelligence, the curriculum provides students with the knowledge necessary in making informed business decisions. Specifically, students will learn how to acquire, organize, manage, and analyze data, in addition to gaining experience with software tools commonly used in the industry (such as Python, R, and SQLite). Through a combination of case studies, hands-on lectures, and group projects, students will gain valuable experience in using quantitative methods to solve business problems. The program culminates in an applied capstone project that uses these methods and tools to solve an empirical problem.

- A 20-month program offered in Downtown Orlando
- Limited class size, cohort program
- Classes meet 2 evenings per week
- No work experience requirement
- Diagnostic testing required for admission

The MS in Management/Business Analytics program is taught at UCF's Downtown Orlando campus. Students will find a high level of personal attention from program administrators from the moment they apply. Ideal candidates for this degree are students with an understanding of statistics and quantitative methods but come from a variety of degree fields such as business, economics, finance, statistics, information systems and engineering.

Prerequisites: Minimum of college-level microeconomics, statistics or quantitative methods and calculus courses required.

This program is a professional program with a market rate tuition and is considered a part-time program. The tuition is the same for Florida residents and non-residents. Please visit www.business.ucf.edu/graduate-programs for more information.

This program is accredited by AACSB International.

The Business Analytics track in the Professional Master of Science in Management provides students with the specialized skills necessary to respond to challenges of the new data-intensive, decision-making business world of today. Students become business analysts skilled in the collection, management, analysis, interpretation, and application of data to aid in more informed and successful business decisions. Skills learned in this degree are applicable across industries and organizations whether they be large or small, for-profit, or nonprofit.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**
College of Graduate Studies Contact Information

For questions regarding the submission of your application, payment of your application fee, application supporting documents, deadlines, or other processing related questions, please contact:

College of Graduate Studies
Graduate Admissions
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
30 Total Credits

- Complete the following:
  - QMB6010 - Mathematical Tools for Business Analytics (3)
  - QMB6358 - Software Tools for Business Analytics (3)
  - STA6136 - Probability and Statistics for Business Analytics (3)
  - QMB6357 - Microeconomic Analysis for Business Analytics (3)
  - QMB6304 - Data Visualization (3)
  - MAN6721 - Applied Strategy and Business Policy (3)
  - QMB6912 - Capstone Project in Business Analytics (3)
  - STA5104 - Advanced Computer Processing of Statistical Data (3)
  - STA5735 - Fundamental Data Analytical Methodology with Business Applications (3)
  - STA5736 - Advanced Data Analytical Methodology with Business Applications (3)

Grand Total Credits: 30

Track Details

Course Sequence

The MSM Business Analytics is a 10-course program. The courses are pre-selected and set in a lock-step sequence in the order below.

- QMB 6010 - Mathematical Tools for Business Analytics 3 Credit Hours
- QMB 6358 - Software Tools for Business Analytics 3 Credit Hours
- QMB 6357 - Microeconomic Analysis for Business Analytics 3 Credit Hours
- QMB 6304 - Data Visualization 3 Credit Hours
- STA 5104 - Advanced Computer Processing of Statistical Data 3 Credit Hours
- STA 6136 - Probability and Statistics for Business Analytics 3 Credit Hours
- STA 5735 - Fundamental Data Analytical Methodology with Business Applications 3 Credit Hours
- MAN 6721 - Applied Strategy and Business Policy 3 Credit Hours
- STA 5736 - Advanced Data Analytical Methodology with Business Applications 3 Credit Hours
- QMB 6912 - Capstone Project in Business Analytics 3 Credit Hours

Capstone Course

The MSM Business Analytics capstone course, QMB 6911, Capstone Project in Business Analytics is required for all students. This capstone course integrates all the tools developed in the program to solve an empirical problem and gives students practical experience.

- QMB 6912 - Capstone Project in Business Analytics 3 Credit Hours
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Management MSM - Management MSM, Entrepreneurship Track

Track Website
http://www.business.ucf.edu/graduate-programs

Track Handbook
Management MSM, Entrepreneurship Track

Track Contact Information
Robin Hofler
Robin.Hofler@ucf.edu
Telephone: 407-235-3913
DTC 304

Online Availability
No

Track Description
This track has suspended admission

The Entrepreneurship Track in the Professional Master of Science in Management program is designed for students, working professionals and aspiring entrepreneurs who are interested in developing and implementing new programs, projects, or ventures within their organizations and industries. The program is organized to mirror the phases of startup processes – discovery, planning, and implementation – so that students can work on developing their own startup venture proposals while earning a valuable graduate degree.

This program is a professional program with a market rate tuition and is considered a part-time program. The tuition is the same for Florida residents and non-residents. Please visit www.business.ucf.edu/graduate-programs for more information.

This program is accredited by AACSB International.

This 30-hour experiential program provides an alternative to the MBA degree for students who desire specialized study in creative and entrepreneurial thinking.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Restricted Core Courses
15 Total Credits

- Earn at least 15 credits from the following:
  - GE6895 - Business Intelligence (3)
  - MAN6245 - Organizational Behavior and Development (3)
  - MAN6915 - Applied Field Project (3 - 6)
  - MAN6325 - Applied Research Tools (3)
  - QMB6010 - Mathematical Tools for Business Analytics (3)
  - MAN6305 - Human Resources Management (3)
  - MAN6721 - Applied Strategy and Business Policy (3)
  - MAN6311 - Advanced Topics in Human Resources Management (3)

Specialization Courses
12 Total Credits

- Complete the following:
  - ENT5619 - Creativity and Entrepreneurship (3)
  - ENT5016 - New Venture Design (3)
  - ENT5206 - New Venture Implementation (3)
  - ENT6617 - Innovation and Entrepreneurship Strategy (3)

Capstone Course
3 Total Credits

- Complete all of the following
  - Complete the following:
    - ENT6900 - Entrepreneurship Portfolio (3)
  - ENT 6900, the capstone course portfolio, is required for all students. This portfolio course provides students with an opportunity to achieve new venture development milestones, demonstrate specific entrepreneurial competencies associated with those milestones, and connect with community experts tasked with assessing their efforts.

Grand Total Credits: **30**

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Management MSM - Management MSM, Human Resources Track

Track Website
http://www.business.ucf.edu/graduate-programs

Track Handbook
Management MSM, Human Resources Track

Track Contact Information
Robin Hofler
Robin.Hofler@ucf.edu
Telephone: 407-235-3913
DTC 304

Online Availability
No
Track Description

The next available term for this program is Summer 2023.

The Human Resources Track in the Professional Master of Science in Management curriculum is formally aligned with the Society of Human Resources Management (SHRM). It is designed for working professionals who aspire to become leaders in human resource management or general management.

This 30-hour program provides an alternative to the MBA degree for students who desire specialized study in management and human resources and seek employment or career advancement in the areas of human resources, strategic planning, organizational effectiveness, staffing, compensation, and employee relations.

- 20-month program offered in downtown Orlando
- Limited class size, cohort program
- Classes meet Monday and Wednesday evenings
- Minimum two-year professional work experience requirement
- Personal interview required for admission

The innovative curriculum combines general management and strategic business classes with advanced coursework in management of human resources. It provides students with the latest business techniques and knowledge required to succeed in today’s competitive marketplace. One main component of the program is a focus on developing practices and methods that align human resources activities with organizational strategies and provide students with the knowledge required to successfully anticipate, plan, and carry out changes.

Students with a wide variety of backgrounds, including those with degrees in business, education, hospitality, nursing, and psychology are encouraged to apply.

This program is a professional program with a market rate tuition, and is considered a part-time program. The tuition is the same for Florida residents and nonresidents. Please visit www.business.ucf.edu/graduate-programs for more information.

This program is accredited by AACSB International.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor’s Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Earn at least 15 credits from the following:

- MAN6325 - Applied Research Tools (3)
- MAN6305 - Human Resources Management (3)
- MAN6915 - Applied Field Project (3 - 6)
- MAN6245 - Organizational Behavior and Development (3)
- GEB6895 - Business Intelligence (3)
- QMB6010 - Mathematical Tools for Business Analytics (3)
- MAN6311 - Advanced Topics in Human Resources Management (3)
- MAN6311 - Advanced Topics in Human Resources Management (3)

Restricted Specialization Courses

Complete at least 4 of the following:

- MAN6385 - Strategic Human Resources Management (3)
- MAN6285 - Change Management (3)
- MAN6448 - Conflict Resolution and Negotiation (3)
- MAN6066 - Ethical Leadership (3)
- BUL6444 - Law and Ethics (3)
- GEB6518 - Strategic Innovation (3)
- MAN6395 - Leadership Development and Coaching (3)

Capstone Course

Complete all of the following

- Earn at least 3 credits from the following:
  - MAN6915 - Applied Field Project (3 - 6)

The Professional Master of Science in Management/Human Resources (PMSM/HR) capstone course, MAN 6915 - Applied Field Project, is required for all students. This capstone course applies concepts, theories and methods learned earlier in the program to organizational problems in business settings.

Grand Total Credits: 30

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Management MSM - Management MSM, Integrated Business Track

Track Website

http://www.business.ucf.edu/graduate-programs

Track Handbook

Management MSM, Integrated Business Track

Track Contact Information

Carlos Valdez, PhD
Program Director
ib@ucf.edu

College of Business Graduate Programs Office
cbagrad@ucf.edu

2022-2023 Graduate Catalog
Online Availability

No

Track Description

The Integrated Business track in the Master of Science in Management (MSM/IB) provides students who have a recent, non-business undergraduate degree and limited professional work experience with an introduction to critical, in-demand business processes and helps them develop a wide range of transferable skills that employers value highly. Skills learned in this degree program are applicable across industries and organizations whether they be large or small, for-profit or nonprofit.

This is a full-time, lock-step, one-year program offered on the main campus.

The 30-credit hour, a 10-course curriculum introduces students to business operations from a managerial perspective and to a variety of important business processes that are useful across industries and job titles, including data analysis, human resources management, project management, and sales. In addition, a wide variety of important transferable skills are emphasized, including conflict resolution, critical thinking, data-driven decision making, ethics, leadership, negotiation, oral presentation, teamwork, and written communication. The fully face-to-face program uses a unique flipped-classroom design, which involves providing access to students to online course materials prior to in-class meetings during which students engage in team-based active learning that requires integrating the activities with course materials in practical ways. In this pedagogical model, the instructor serves as a facilitator, consultant, coach, and mentor to the team, rather than a talking head who lectures at the front of the room. The program is designed for recent graduates from non-business disciplines who wish to enter into a professional business career but who do not feel workplace ready. The program culminates in a business strategy class coupled with either an internship or a team-based applied field project.

Highlights:

- A 12-month, full-time program
- 12-hour course load in each of the first two semesters, 6-hour load in the third (final) semester.
- Offered at UCF’s main campus
- Cohort (lock-step) program
- Each class meets once per week
- No work experience requirement

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor’s Degree

Track Prerequisites

A Bachelor's degree in a non-business discipline from an accredited institution.

College of Graduate Studies Contact Information

gradmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses
30 Total Credits

- Earn at least 30 credits from the following:
  - GEB6037 - Business Foundations and Career Development (3)
  - ENT6418 - Small Business Accounting and Finance (3)
  - GEB6895 - Business Intelligence (3)
  - MAN6245 - Organizational Behavior and Development (3)
  - MAN6305 - Human Resources Management (3)
  - MAN6448 - Conflict Resolution and Negotiation (3)
  - MAN6581 - Project Management (3)
  - MAN6721 - Applied Strategy and Business Policy (3)
  - MAR6416 - Sales and Marketing Strategies (3)
  - MAN6915 - Applied Field Project (3 - 6)

Grand Total Credits: 30

Track Details

Timeline

First Semester

- GEB 6037 – Business Foundations and Career Development. 3 credit hours. Students will study the concepts, principles, and operations of private enterprise. They will be introduced to the essential functions of modern business management, including marketing, finance, accounting, operations, economics, and human resource management. They will learn how to identify the knowledge, skills, and abilities (KSAs, also known as competencies) associated with success in various job titles and how to map their interests and past educational, work, and life experiences to those KSAs.
- GEB 6895 – Business Intelligence. 3 credit hours. Provides an introduction to a critical thinking process designed to solve business problems that incorporate careful data analysis and persuasive writing.
- MAN 6425 – Organizational Behavior. 3 credit hours. Students learn to analyze human behavior in organizations in terms of the individual, small group, and intergroup relationships, and the total organization.
- MAR 6416 – Sales and Marketing Strategies. 3 credit hours. Students will study strategic issues faced by firms when they seek to market and sell their goods and services. The course will cover the basic principles of marketing and include coverage of digital marketing. Students will also be introduced to the sales process, in both business-to-business (B2B) and business-to-consumer (B2C) markets.

Second Semester

- ENT 6418 – Small Business Accounting and Finance. 3 credit hours. Students will learn concepts of accrual accounting, the contents and uses of financial statements and how they relate to one another, ratio analysis, business structure and valuation, time value of money, cash flow management and budgeting, forecasting, funding courses for various types of businesses, the cost of capital, and capital budgeting.
- MAN 6305 – Human Resources Management. 3 credit hours. Students learn to contribute to the development and implementation of human resource policies and practices. Legal issues and relationships with other business functions are emphasized.
- MAN 6448 – Conflict Resolution and Negotiation. 3 credit hours. The student will come to recognize the pervasiveness and importance of negotiation and acquire a repertoire of negotiating skills. They will develop a systematic and positive approach to negotiating with colleagues, bosses, clients, other stakeholders, and external groups of all kinds—in ways that equip them to deal also with all kinds of conditions and circumstances.
- MAN 6581 – Project Management. 3 credit hours. Students will be introduced to key project management skills and strategies with a focus on methods needed to initiate and manage projects efficiently and effectively. They will study the project management life cycle, defining project parameters, matrix management challenges, effective project management tools and techniques, and the role of a project manager.

Third Semester

- MAN 6915 – Applied Field Project. 3 credit hours.
- MAN 6721 – Applied Strategy and Business Policy. 3 credit hours.

Capstone Course

The Master of Science in Management/Integrated Business (MSM/IB) capstone course, MAN 6915 - Applied Field Project, is required for all MSM/IB students. This capstone course applies concepts, theories and methods learned earlier in the program to organizational problems in business settings.

With the permission of the program director, during the third (final) semester in the program a student may substitute a professional internship of no less than 192 hours for MAN 6915 Applied Field Project.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded to highly qualified students based on academic merit. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what students should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Real Estate MSRE

College
College of Business Administration

Department
Department of Finance

Program Website
http://www.business.ucf.edu/graduate-programs

Program Handbook Link
Real Estate MSRE

Program Contact Information

Robin Hofler
robin.hofler@ucf.edu
Telephone: 407-235-3913
DTC 304

Is this program available 100% online?
No
Program Description

The Professional Master of Science in Real Estate (PMRE) program was designed by the Dr. P. Phillips School of Real Estate as a flaghip graduate program that prepares students to pursue careers in commercial real estate brokerage and appraisal, real estate development, mortgage brokerage, institutional real estate investment management, capital markets, and asset management. Students receive Argus Software training providing eligibility to earn their ARGUS Software Certification (exam fees are included in the program). Students are eligible for the fast track to CCIM designation and credit towards MAI designation upon graduation. Graduates are also well prepared to sit for the Florida real estate brokerage and licenses.

- 20-month program offered in Downtown Orlando
- Limited class size, cohort program
- Classes meet 2 evenings per week
- Offered every other fall term

Students advance through all courses together as a cohort using their professional experience as an important addition to the learning process. The program's 30-credit-hour curriculum combines a professional business core with courses in finance, accounting and advanced coursework in real estate.

This program is a professional program with a market rate tuition and is considered a part-time program. The tuition is the same for Florida residents and non-residents. Please visit www.business.ucf.edu/graduate-programs for more information.

This program is accredited by AACSB International.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523
Degree Requirements

Required Courses
30 Total Credits
No Rules
Finance Core
12 Total Credits
  - Complete the following:
    - ACG6425 - Managerial Accounting Analysis (3)
    - FIN6406 - Strategic Financial Management (3)
    - PAD5336 - Introduction to Urban Planning (3)
    - REE6380 - Financial Analysis of Real Estate Firms (3)

Real Estate Core
18 Total Credits
  - Complete the following:
    - REE6006 - Real Estate Markets and Institutions (3)
    - REE6147 - Real Estate Market Analysis and Appraisal (3)
    - REE6209 - Real Estate Finance and Investment Analysis (3)
    - REE6418 - Real Estate Contracts and Negotiations (3)
    - REE6455 - Real Estate Law (3)
    - REE6737 - Real Estate Development (3)

Capstone Course
0 Total Credits
  - The UCF PMRE capstone course, REE 6737 - Real Estate Development, is required by all students. Students will create a comprehensive development project that covers the real estate development process, regulatory considerations, financial and market feasibility, management and control, and environmental aspects of real estate development.

Grand Total Credits: 30

Sport Business Management MSBM

College
College of Business Administration

Department
DeVos Sport Business Management

Program Website
http://business.ucf.edu/devos/

Program Handbook Link
Sport Business Management MSBM

Program Contact Information
Ashley Turner
Director, External Affairs & Partnerships
devos@ucf.edu
Telephone: 407-823-1475
Business Administration II 205D

Is this program available 100% online?
No
Program Description

This program is the only sport business management program emphasizing diversity, moral, ethical, and social issues in sports, as well as focusing on sports leadership while giving the students a rigorous business education. The DeVos Sport Business Management Program is ranked as one of the top five programs in America by the *Wall Street Journal, New York Times*, and *ESPN the Magazine*. In 2015, the Program was named the number two program in the world by *SportsBusiness International*. Students are required to perform 21 hours of service per semester for a Central Florida organization that works with underserved youth. Students will also spend a minimum of two weeks helping to rebuild homes in post-Katrina New Orleans. A major emphasis of the DeVos Program is to have our students leave understanding the power of sport to build communities in addition to learning strong business skills for a successful career in sports management.

Students in the DeVos Sport Business Management master's program gain hands-on experience in the business of sports management, work in teams with fellow students on sports business projects from conception through implementation and develop a network in the sports industry.

Graduates of the program will understand the relationship between sport and social issues, the business of sport both nationally and internationally, and how the legal system impacts sports business. They will understand and embrace the strengths and complexities of a diverse workforce and the importance of multicultural marketing as an actual component of overall business strategy and will be prepared to lead organizations to be corporate good citizens in the community. Graduates will also be able to develop and implement integrated business and marketing plans, optimize the use of the technology, and design and carry out research necessary to make successful management and business decisions.

Job opportunities for graduates in sport management include areas such as intercollegiate and professional sport, event and facilities management, corporate and international sport, and marketing. The DeVos Sport Business Management Program develops professionals who have critical sports business management knowledge and skills, a commitment to using sport to improve life in society, well-developed leadership abilities, and uncompromising ethical standards. Students in the Sport Business Management program have the opportunity to be admitted to the MBA program and receive an MBA as an additional degree. Please note that a student admitted to the MSBM program with provisional admission to the MBA program will take 13.5 hours of coursework in the first semester, 12 of which are coursework hours that count toward both the MSBM and MBA degrees. The student must earn a grade of B (3.0) or higher in all MBA courses taken, otherwise, the student's provisional admission to the MBA program will be revoked.

The DeVos Sport Business Management MSBM program requires a minimum of 45 credit hours beyond the bachelor's degree. The program includes 18 credit hours of professional core courses, 24 credit hours of sport business management core courses, and 3 credit hours of an internship. This is a nonthesis program in which the internship serves as a capstone experience.

**Total Credit Hours Required: 45 Credit Hours Minimum beyond the Bachelor's Degree**

The two-year full-time curriculum includes the College of Business Administration's foundation core; selected required courses from the college's professional core for solid business skills and knowledge; and required sport business management courses that will create a unique knowledge base for our students.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 522
Degree Requirements

Required Courses
45 Total Credits
No Rules

Professional Core
18 Total Credits

- Complete the following:
  - MAN6245 - Organizational Behavior and Development (3)
  - MAR6466 - Strategic Supply Chain and Operations Management (3)
  - ACG6425 - Managerial Accounting Analysis (3)
  - FIN6406 - Strategic Financial Management (3)
  - ECO6416 - Applied Business Research Tools (3)
  - ECO6115 - Economic Analysis of the Firm (3)

Sport Business Management Core
24 Total Credits

- Complete the following:
  - SPB6506 - Moral and Ethical Issues in Sport (1.5)
  - SPB6606 - Diversity and Social Issues in Sport Business Management (1.5)
  - SPB6725 - Leadership in Sport (1.5)
  - SPB6716C - Strategic Sport Marketing (3)
  - SPB6406 - Sport Law (3)
  - SPB6806 - Business of Sport Media (3)
  - SPB6735 - The Global Environment of Sport (3)
  - SPB6715C - Professional Selling in Sport (1.5)
  - SPB6706 - Sport Analytics (3)
  - GEB6156 - The Business of Hip-Hop Innovation and Entrepreneurship (3)

Internship
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  An internship equivalent to three credit hours with a designated sport organization is required. It would normally be a full-time, 15-week internship taken after the completion of all academic courses. The internship is an independent learning activity that takes place in authentic settings (settings are professional sports, collegiate sports, etc.) in which students must apply, reflect upon, and refine knowledge and skills acquired in the program.

MBA Option: 51 Total Credit Hours Required
0 Total Credits

- If accepted into the MBA program, students must complete MAN 6721 - Applied Strategy and Business Policy (3 credit hours) (grade of B- or better is required for MAN 6721) and MAR 6816 - Strategic Marketing Management (3 credit hours). Please note that a student admitted to the MSBM program with provisional admission to the MBA program will take 13 credit hours of coursework in the first semester, 12 of which are courses that count toward both the MSBM and MBA degrees. The student must earn a grade of B (3.0) or higher in all MBA courses taken, otherwise, the student's provisional admission to the MBA program will be revoked.

Independent Learning
0 Total Credits

- All students are required to participate in an internship in professional sport settings in which students must apply, reflect upon, and refine knowledge and skills acquired throughout the curriculum.

Grand Total Credits: 45
Technology Ventures Graduate Certificate

College

College of Business Administration

Department

Department of Management

Program Website

business.ucf.edu/graduate-programs/

Program Contact Information

Cameron Ford PhD
Associate Professor
cbagrad@bus.ucf.edu
Telephone: 407-823-3700
Business Administration 345

Program Description

This program has been temporarily suspended and is no longer accepting applications effective Summer 2017.

The Graduate Certificate in Technology Ventures is designed for those interested in creating and growing technology-based business ventures, including startups, corporate ventures and spin outs. The associated courses offer insight into opportunity assessment, innovation diffusion, intellectual property issues, university-industry collaboration, technology business strategies, and business plan formulation.

Total Credit Hours Required: 9 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Those applying who are NOT currently enrolled in a UCF graduate program must have a minimum of 2 years of full-time work experience after completion of the bachelor's degree.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Degree Requirements

Required Courses
9 Total Credits

- Complete the following:
  - GEB6518 - Strategic Innovation (3)
  - GEB5516 - Technological Entrepreneurship (3)
  - GEB6116 - Business Plan Formation (3)

Grand Total Credits: 9

College of Community Innovation and Education

Academic Advising Graduate Certificate
Academic Advising Graduate Certificate
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education
Program Website
https://ccie.ucf.edu/elhe/higher-education/
Program Contact Information
Thomas Cox EdD
thomas.cox@ucf.edu
ED 315Q
Is this program available 100% online?
No
Program Description
The academic advising graduate certificate prepares professionals entering the field of academic advising to expand their knowledge of topics relevant to academic advising. Topics include learning theory, student development theory, retention theories, diversity issues, career development, and leadership in higher education. All students will complete a practical internship. The program also provides a benefit to practicing academic advisors, administrators and faculty interested in becoming more knowledgeable in these areas.
Total Credit Hours Required: 16 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions
Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112
Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - EDH6047 - Theories of College Student Development (3)
  - EDH6105 - Retention Strategies in Colleges and Universities (3)

Elective Courses
9 Total Credits

- Complete at least 3 of the following:
  - EDH6081 - Contemporary Issues in Colleges (3)
  - EDH6204 - Leadership in College Organizations (3)
  - EDH6305 - Teaching and Learning in Colleges and Universities (3)
  - SDS6347 - Career Development (3)

Internship
1 Total Credits

- Complete all of the following
  - Earn at least 1 credits from the following:
    - EDH6946 - Internship (1 - 99)
  - Students will complete a 1 credit hour internship (15-20 hours) in an advising office or position approved by the faculty advisor. The literature on the subject of advising and retention concludes that college student success improves when college students make progress toward educational and career goals and when they are satisfied with the quality of educational programs, services, and environment. The changing structure of the university, the addition of faculty and the growing number of program and degree offerings demand more academic advisors.

Grand Total Credits: 16

Advanced Quantitative Methodologies Graduate Certificate

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/methodology-measurement-and-analysis/

Program Contact Information
Debbie L. Hahs-Vaughn PhD
Professor
debbie@ucf.edu
ED 222M

Is this program available 100% online?
No
Program Description

The Advanced Quantitative Methodologies graduate certificate provides advanced coursework for admitted UCF doctoral students and post-docs from any discipline to use quantitative data to answer complex research problems with sophisticated statistical procedures.

The coursework for the Advanced Quantitative Methodologies graduate certificate is broad-based enough to be useful for anyone interested in advancing their research and quantitative statistical skills, including students in other UCF colleges and local community service providers (e.g., evaluators, data analysts).

The graduate certificate in Advanced Quantitative Methodologies requires 12 credit hours of courses selected from a list of approved courses.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Master's Degree

Program Prerequisites

Admission is open to those with a master's degree from an accredited institution recognized by UCF. Pre-requisite(s) for the courses selected for the certificate program must be met or receive approval from the instructor to enroll without the pre-requisite.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Orlando, FL 32816-0112

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TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete at least 4 of the following:
  - EDF7405 - Quantitative Methods II (3)
  - EDF7406 - Multivariate Statistics in Education (3)
  - EDF7410 - Application of Nonparametric and Categorical Data Analysis in Education (3)
  - EDF7415 - Latent Variable Modeling in Education (3)
  - EDF7427 - Psychometrics (3)
  - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
  - EDF7474 - Multilevel Data Analysis in Education (3)
  - EDF7476 - Advanced Research Methods (3)
  - EDF7488 - Monte Carlo Simulation Research in Education (3)
  - EDF7489 - Quantitative Research Synthesis (3)

Grand Total Credits: 12

Applied Behavior Analysis Graduate Certificate

College

College of Community Innovation and Education

Department

School of Teacher Education
Program Website
https://ccie.ucf.edu/teachered/exceptional-student-education/

Program Contact Information
Kelly D. Schaffer
Research Associate and Associate Director Toni Jennings Exceptional Education Institute
College of Community Innovation and Education
kelly.schaffer@ucf.edu

Eleazar Vasquez
Professor and Director Toni Jennings Exceptional Education Institute
College of Community Innovation and Education
eleazar.vasquez@ucf.edu

Is this program available 100% online?
No

Licensure Disclosure
The ABA Certificate does not directly certify individuals in Applied Behavior Analysis; however, it can be listed as a Graduate Certificate in ABA as part of one’s credentials. Completion of the certificate meets the coursework requirements for eligibility for National Board Certification as a Behavior Analyst.

This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Applied-Behavior-Analysis-GC.pdf.

Program Description
The Graduate Certificate in Applied Behavior Analysis (ABA) is housed within the Special Education program in the School of Teacher Education. The ABA graduate certificate program is designed to provide specialized coursework for students in Education, Psychology, Communication Disorders, and related fields. The program fulfills the coursework requirements of the Behavior Analyst Certification Board®.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree.

Program Prerequisites
Prerequisite or Corequisite
- EEX 6612 - Methods of Behavioral Management 3 Credit Hours

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Degree Requirements

Required Courses
18 Total Credits

- Complete the following:
  - EEX6608 - Concepts and Principles in Applied Behavior Analysis (3)
  - EEX6619 - Advanced Behavior Analysis (3)
  - EEX6618 - Single Case Research Methodology (3)
  - EEX6668 - Radical Behaviorism (3)
  - EEX6669 - Supervision and Personnel Management in Applied Behavior Analysis (3)
  - EEX6747 - Ethics and Legal Issues in Applied Behavior Analysis (3)

Grand Total Credits: 18

Applied Learning and Instruction MA

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/lser/applied-learning-and-instruction/

Program Handbook Link
Applied Learning and Instruction MA

Program Contact Information

Bobby Hoffman PhD
Associate Professor
bobby.hoffman@ucf.edu

Is this program available 100% online?
Yes

UCF Online

Please note: The Applied Learning and Instruction (MA) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

The Master of Arts in Applied Learning and Instruction program is designed for students from diverse academic majors who have an interest in the application of psychological theories and research to improve learning, instruction, and training in a variety of instructional contexts.

Graduates of the program are prepared for a wide range of professional education, government, and industry positions, and for conducting activities such as instruction, training, evaluation, and consulting.

Students can tailor the program to meet their needs and interests by choosing among a large variety of courses for their concentration, including courses in teaching, instructional design, program evaluation, and psychological foundations. Courses are available in mixed mode (M) or fully online (W). The degree can be completed in the fully online mode.

Specialization and core courses are offered in the areas of the psychology of teaching and learning, motivation, human development, measurement, and research methodology. Both a thesis and a non-thesis option are available. All non-thesis students will be required to complete a comprehensive examination before completing the program.

Applications are accepted only for Fall admission. There are no Spring or Summer applicants accepted.

The Applied Learning and Instruction MA (ALIMA) program requires a minimum of 33 credit hours beyond the bachelor’s degree including 15 credit hours of core courses, 12 credit hours of specialization, and 6 credit hours of a research component. The research component can be completed by choosing the thesis or nonthesis option, which requires a 6-credit hour Capstone research course. The program of study can be tailored to meet the specific needs of each student. The degree program can be completed in mixed mode (M) or fully online (W) formats.

Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor’s Degree

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Degree Requirements

Required Courses
27 Total Credits

Details

Core
15 Total Credits

- Complete the following:
  - EDF6481 - Fundamentals of Graduate Research in Education (3)
  - EDP6213 - Seminar in Applied Learning and Instruction I (3)
  - EDP6217 - Seminar in Applied Learning and Instruction II (3)
  - EDF6216 - Motivation in Learning and Performance (3)
  - EDF6155 - Lifespan Human Development and Learning (3)

Specialization (See Program Details For Further Information)
12 Total Credits

- Earn at least 12 credits from the following:
  - DEP5057 - Developmental Psychology (3)
  - EDF6259 - Learning Theories Applied to Leadership in Teaching Practice (3)
  - EDF6141 - Human Intelligence (3)
  - SPS6225 - Behavioral and Observational Analysis of Classroom Interactions in Schools (3)
  - SPS6700 - Advanced Psychoeducation and Data-Based Decision Making (3)
  - EGC6431 - Guiding Human Relationships I (3)
  - EGC6432 - Guiding Human Relationships II (3)
  - INP6317 - Work Motivation and Job Attitudes (3)
  - PSY6216C - Research Methodology (4)
  - MAN6245 - Organizational Behavior and Development (3)
  - MAN6285 - Change Management (3)
  - EME6607 - Planned Change in Instructional Technology (3)
  - EME6602 - Integration of Technology into the Learning Environments (3)
  - EME6601 - Instructional Simulation Design for Training and Education (3)
  - EME6457 - Distance Education: Technology Process Product (3)
  - EME6613 - Instructional System Design (3)
  - EME6405 - Adapting and Integrating Innovative Technologies in Education (3)
  - EME6614 - Instructional Game Design for Training and Education (3)
  - EME6705 - Administration of Instructional Systems (3)
  - EME6055 - Current Trends in Instructional Technology (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6233 - Introduction to Action Research and Analysis of Classroom Practice (3)
  - ESE6217 - Curriculum Design (3)
  - EME5053 - Electronic Resources for Education (3)
  - EDF6401 - Statistics for Educational Data (3)
  - EDF6432 - Measurement and Evaluation in Education (3)
  - EDG6285 - Evaluation of School Programs (3)
  - ESE6416 - Curriculum Evaluation (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
  - Earn at least 6 credits from the following types of courses:
    - EDF 6971 - Thesis
    - See “Program Details” section below for more information
  - Nonthesis Option
  - Earn at least 6 credits from the following types of courses:
    - EDP 6936 - Capstone in Applied Learning and Instruction
    - Six credit hours of Capstone coursework is required to give the student a foundation in conducting research.

Grand Total Credits: 33

Program Details

Specialization

Students have the choice of taking specialization courses in multiple areas. Specialization courses may be taken within one specialization, or from multiple specializations. The purpose of this choice is to provide course offerings which appeal to student interest, but concurrently facilitate depth of knowledge in a particular discipline.

The student and program director determine a course of study to meet the student's needs while simultaneously developing core knowledge in a specific area. In addition, the program director may approve courses taken as part of a UCF certificate program for this

2022-2023 Graduate Catalog
area of the MA (up to 12 credit hours). The adviser must approve all specialization courses, not listed below.

**Psychological Foundations**

Other electives to be determined by adviser with program approval.

- DEP 5057 - Developmental Psychology **3 Credit Hours**
- EDF 6259 - Learning Theories Applied to Leadership in Teaching Practice **3 Credit Hours**
- EDF 6141 - Human Intelligence **3 Credit Hours**
- SPS 6225 - Behavioral and Observational Analysis of Classroom Interactions in Schools **3 Credit Hours**
- EGC 6431 - Guiding Human Relationships I **3 Credit Hours**
- EGC 6432 - Guiding Human Relationships II **3 Credit Hours**

**Business/Training**

Other electives to be determined by adviser with program approval.

- INP 6317 - Work Motivation and Job Attitudes **3 Credit Hours**
- PSY 6216C - Research Methodology **4 Credit Hours**
- MAN 6245 - Organizational Behavior and Development **3 Credit Hours**
- MAN 6285 - Change Management **3 Credit Hours**

**Instructional Design**

Other electives to be determined by adviser with program approval.

- EME 6607 - Planned Change in Instructional Technology **3 Credit Hours**
- EME 6602 - Integration of Technology into the Learning Environments **3 Credit Hours**
- EME 6601 - Instructional Simulation Design for Training and Education **3 Credit Hours**
- EME 6457 - Distance Education: Technology Process Product **3 Credit Hours**
- EME 6613 - Instructional System Design **3 Credit Hours**
- EME 6405 - Adapting and Integrating Innovative Technologies in Education **3 Credit Hours**
- EME 6614 - Instructional Game Design for Training and Education **3 Credit Hours**
- EME 6705 - Administration of Instructional Systems **3 Credit Hours**
- EME 6055 - Current Trends in Instructional Technology **3 Credit Hours**

**Teaching**

Other electives to be determined by adviser with program approval.

- EDF 6237 - Principles of Learning and Introduction to Classroom Assessment **3 Credit Hours**
- EDF 6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education **3 Credit Hours**
- EDG 6415 - Principles of Instruction and Classroom Management **3 Credit Hours**
- EDF 6233 - Introduction to Action Research and Analysis of Classroom Practice **3 Credit Hours**
- ESE 6217 - Curriculum Design **3 Credit Hours**
- EME 5053 - Electronic Resources for Education **3 Credit Hours**

**Program Evaluation**

Other electives to be determined by adviser with program approval.

- EDF 6401 - Statistics for Educational Data **3 Credit Hours**
- EDF 6432 - Measurement and Evaluation in Education **3 Credit Hours**
- EDG 6285 - Evaluation of School Programs **3 Credit Hours**
- ESE 6416 - Curriculum Evaluation **3 Credit Hours**

**Steps for Completing a Master's Thesis**

1. Submit a 2–3 page thesis prospectus and preliminary bibliography on a topic to their thesis adviser. Prior to enrollment into thesis credit hours, the student will identify a Thesis Committee to be further approved by the College Graduate Dean and the College of Graduate Studies. This committee is chaired by the adviser and includes two or more additional faculty members (minimum of 3 committee members required).

2. The formal thesis is initiated by the preparation of a proposal that meets both departmental and university requirements for the thesis. The members of the student's thesis committee review the proposal as the preliminary step to beginning the thesis. Students are responsible for sending their proposal to all committee members at least three weeks before the end of the semester. This committee must approve the Thesis Proposal before academic credit can accrue.

3. Once the proposal is approved by both the committee and the UCF Institutional Review Board, students should begin collecting and analyzing their data. Students should expect to defend their proposal during the semester in which they are enrolled for thesis credits.

4. The thesis is a formal written document. The introduction cites similar, related, and antecedent work. The body explains the purposes of the project, the method of its production, and any evaluation that was performed. The conclusion includes plans for future work. The thesis also includes an archival copy of the resulting creative product. Both the thesis and the creative product must be delivered in digital form, acceptable by the College of Graduate Studies and UCF library according to standards for digital dissertations and theses.

**Scholarly Product Requirement (Review 1)**
Before graduation from the ALIMA program, students are required to submit evidence of their ability to conduct a scholarly examination of research in a chosen area in the field of educational psychology or another discipline as agreed upon with their advisor. They will demonstrate this ability by producing a scholarly review of literature to present a thorough overview of research surrounding a particular problem involving learning and/or instruction. As part of the review, students will present a list of research and theory-based potential solutions to the identified problem. This project will be introduced in the Seminar in Applied Learning and Instruction I and completed the following semester in Seminar in Applied Learning and Instruction II.

**Comprehensive Exams (Review II)**

The comprehensive exams serve as the culminating experience of the ALIMA program. The comprehensive exam must be completed no later than one month before the end of the semester in which the student graduates. Exams are offered at regularly scheduled times determined by the program coordinator.

**Nonthesis Option**

For students electing not to write a thesis, the comprehensive exam will consist of three questions. The student will have one week to answer the questions in a take-home, extended essay file format. Students must cite all instances where their ideas are directly or indirectly related to outside sources. Students may not consult with other students or use Wikipedia or other online sources to complete their exams. Exams will be graded based on a pass or fail basis. Students who fail the exam marginally may be asked to rewrite specific questions. Students who fail the exam may be requested by their adviser to retake courses in areas of deficiency and will not be eligible to receive their master's degree until the exam is passed.

**Thesis Option**

For students electing to submit a thesis, their comprehensive exam will take place as an oral exam no less than 3 weeks after the final version of their thesis is submitted to their committee. During the oral exam, students will be asked to defend their thesis, as well as respond to questions that require them to integrate and synthesize information learned in their core courses.

**Independent Learning**

The MA program requires the completion of a research project. Research projects are independent learning activities in which students must apply, reflect upon, and refine knowledge and skills required in the program. Before graduation from the program, each student must satisfy a scholarly product requirement (Review I). This requirement can be met in one of two ways: students can submit a research study to a refereed journal (with faculty assistance), or submit a proposal for a presentation at an annual conference of a national or local organization (from an approved list of resources). The student must be primarily responsible for conceptualizing, carrying out, and reporting the results in both options. The student is responsible for obtaining approval of the product from his or her advisor.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://graduate.ucf.edu/funding/

**Autism Spectrum Disorders Graduate Certificate**

**College**

College of Community Innovation and Education

**Department**

Department of Counselor Education & School Psychology
Program Website
https://ccie.ucf.edu/teachered/exceptional-student-education/

Program Contact Information
Kelly D. Schaffer, PhD  
Research Associate and Associate Director Toni Jennings Exceptional Education Institute  
kelly.schaffer@ucf.edu

Eleazar Vasquez, PhD  
Professor and Director Toni Jennings Exceptional Education Institute  
eleazar.vasquez@ucf.edu  
Telephone: 407-823-6705

Is this program available 100% online?
Yes

UCF Online
Please note: Autism Spectrum Disorders Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure
The Autism Spectrum Disorders (ASD) graduate certificate program is state-approved by the Florida Department of Education as meeting requirements for adding an ASD endorsement to existing teacher certification (Administrative Rule 6A-4.01796). The Autism Spectrum Disorders Graduate Certificate has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Autism-Spectrum-GC.pdf.

Program Description
The Graduate Certificate in Autism Spectrum Disorders (ASD) provides additional training for professionals with a specific focus on knowledge, skills, and competencies for working with students with ASD.

The program is composed of four graduate courses that can be incorporated into a master’s program of study in Exceptional Student Education or taken as an add-on to an undergraduate or graduate degree. Each course includes a field-based component. Students may complete field-based assignments in their own classrooms or schools if they serve students with ASD. There are also opportunities to complete these assignments at Project ASD demonstration sites.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

Institution Codes
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - EEX6246 - Nature of Autism: Theory and Educational Practice (3)
  - SPA6437 - Communication Foundations and Assistive/Instruction Technology for Communication (3)
  - EEX6297 - Assessment, Diagnosis, and Curriculum Prescriptions for Students with Autism (3)
  - EEX6612 - Methods of Behavioral Management (3)

Grand Total Credits: **12**

Program Details

*As per Graduate Certificate Program Policies, students may substitute electives as approved by the program director if they have already taken EEX 6297 and EEX 6246 in the Severe or Profound Disabilities Certificate.*

Career and Workforce Education MA

College

College of Community Innovation and Education

Department

Department of Educational Leadership & Higher Education

Program Website

https://ccie.ucf.edu/elhe/career-and-workforce-education/

Program Handbook Link

Career and Workforce Education MA

Program Contact Information

Lisa Martino, PhD
Lecturer, Academic Program Coordinator
lisa.martino@ucf.edu
Telephone: 407-823-6184
ED 220C

Is this program available 100% online?

Yes

UCF Online

**Please note:** Career and Workforce Education (MA) may be completed fully online, although not all elective course options or course prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF Online may enroll with a reduction in campus-based fees.

This program is not an initial teacher professional education certificate program.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/.

UCF is authorized to provide online courses or instruction to students in all states. Refer to State Authorizations for current information.
Program Description

The Career and Workforce Education MA program prepares students pursuing leadership and administrative positions in career and technical education (CTE) as well as workforce education, talent development, and corporate/industrial training. This program is designed for individuals whose goal is to become a manager, coordinator, director, curriculum specialist, dean, or lead faculty in career and workforce education programs in various disciplines located in the following institutions: secondary and post-secondary schools (technical centers, community colleges, state colleges, and universities); vocational rehabilitation colleges; corporations and industry; military; and professional associations and organizations.

The six Career Education Core classes combine to provide students with an in-depth analysis of career education from its inception to future trends. These courses will provide a solid foundation in career and technical/workforce education. With 18 credit hours (six courses) in career education graduate courses and 18 credit hours (six courses) in a discipline-specific field of study, the student will be considered a subject matter expert in career and technical education AND a subject matter expert in a discipline-specific field.

This program provides the flexibility of choosing electives for subject matter expertise in Career and Workforce Education (CWE), in Educational Foundation, or in a discipline-specific graduate certificate that allows for a personalized degree program.

CTE Graduate Program Vision Statement: All CTE leaders are academic scholars.

CTE Graduate Program Mission Statement: To provide opportunities for system leaders to critically analyze career and workforce history, programs, issues, and trends.

Our Goal: The Career and Workforce Education graduate programs place an emphasis on the students' development of academic research and scholarly writing that contribute to strong leadership skills in their individual fields of study.

The Career and Workforce Education MA program requires a minimum of 39 credit hours beyond the bachelor's degree, including 18 credit hours of career education core courses and 18 credit hours of advisor-approved courses focused on specialization within a discipline. The program also requires an internship/directed-field experience course (3 CH) OR a research report course (3 CH). Passing a comprehensive examination at the end of the program is a graduation requirement.

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Bachelor's degree from an accredited institution recognized by UCF with a 3.0 GPA or above.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses - Career Education
18 Total Credits

- Complete the following:
  - ECW5561 - Student Guidance in the Career/Workforce Program (3)
  - ECW6067 - History of Career Education in the United States (3)
  - ECW6105 - Career Education Curriculum Planning and Implementation (3)
  - ECW6268 - School, College, and Career Readiness (3)
  - ECW6666 - Issues in Career Education (3)
  - ECT6791 - Research in Career Education (3)

Elective Courses in Specialization
18 Total Credits

- Complete 1 of the following
  - Choose six courses (18 CH) from the following lists (any combination or add a graduate certificate). Area of specialization may include career and technical education (CTE), health, technical training, corporate training, adult education, business education, graduate certificates, or another area approved by the advisor. Please note: Some elective courses shown may be applied to the Local Director for Career and Technical Education Certification through the State of Florida. For more information, please review the Florida Department of Education teacher certification website. Consult with an advisor to complete the Graduate Plan of Study.
  - Career and Technical Education (CTE) Elective Courses
    - Complete all of the following
      - Students who wish to specialize in career and technical education may choose from the following list of CTE elective courses. Other courses/graduate certificates may be considered upon approval of the advisor.
      - Complete the following:
        - BTE6935 - Seminar in Business Education (3)
        - ECW5207 - Management of Career Education Programs (3)
        - ECW6205 - Administration of Local Career Education Programs (3)
        - ECW6206 - Supervision in Local Career and Technical Education Programs (3)
        - ECW6695 - School/Community Relations for Career and Technical Education Programs (3)
        - ECW5265 - Experiential Learning in Career and Workforce Education Programs (3)
  - Education Foundation Electives
    - Complete all of the following
      - Students may choose courses from this list if planning to work in a traditional educational institution and wish to work with postsecondary students at the administrative level. Other courses/graduate certificates may be considered upon approval of the advisor.
      - Earn at least 18 credits from the following:
        - IDS6504 - Adult Learning (3)
        - EDF6155 - Lifespan Human Development and Learning (3)
        - EDF6401 - Statistics for Educational Data (3)
        - EDF6432 - Measurement and Evaluation in Education (3)
        - EDF6481 - Fundamentals of Graduate Research in Education (3)
        - EDF6886 - Multicultural Education (3)
        - ECW5265 - Experiential Learning in Career and Workforce Education Programs (3)

Research Report/Internship Option
3 Total Credits

- Complete 1 of the following
  - The research report course is an option for students who wish to go onto to a doctorate program. The course consists of further study into research and scholarly writing. The internship course is a learning activity that takes place in a face-to-face or web-based authentic setting in which students must apply, reflect upon, and refine knowledge and skills acquired in the program.
  - Research Report Option
    - Earn at least 3 credits from the following:
      - ECT6909 - Research Report
  - Internship Option
    - Earn at least 3 credits from the following:
      - ECT6946 - Graduate Internship (0 - 99)

Grand Total Credits: 39

Program Details

The internship/directed-field experience course takes place in a face-to-face or web-based authentic setting in which students must apply and reflect upon knowledge and skills acquired in the program. The internship experience gives students insight and hands-on experience while being observed and mentored by a supervising teacher and UCF faculty member. In lieu of the internship, students may choose the research report course option, which may be helpful if considering an educational pathway to a doctorate.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Career Counseling Graduate Certificate

College

College of Community Innovation and Education

Department

Department of Counselor Education & School Psychology

Program Website

https://www.ucf.edu/catalog/graduate/#/programs/S1tmRxOiO

Program Contact Information

Stacy Van Horn PhD
Stacy.VanHorn@ucf.edu
Telephone: 407-823-2401
ED 322M

Is this program available 100% online?

No

Program Description

The Graduate Certificate in Career Counseling is housed within the Counselor Education Program in the College of Community Innovation and Education. The certificate program is designed to provide advanced training to students in the Counselor Education program and for practicing counselors, therapists, student advisors and career coaches who want to provide career counseling or consultation services.

The certificate requires the completion of three graduate courses addressing foundations, theories, assessment, techniques, and applications of career counseling and development. SDS 6347 - Career Development and SDS 6622 - Career and College Readiness in Schools PK-12 are both prerequisites for the final capstone course, SDS 6308- Applied Practice in Career Services. The fourth course is a graduate-level specialization elective in a specific academic discipline that can be taken at any point within the career certificate program.
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete the following:
  - SDS6347 - Career Development (3)
  - SDS6622 - Career and College Readiness in Schools PK-12 (3)
  - SDS6308 - Applied Practice in Career Services (3)

Elective Course (Students may choose to specialize in a specific academic discipline or tailor their own areas of concentration)
3 Total Credits

- Complete all of the following
  - Complete at least 1 of the following:
    - EDH6635 - Organization and Administration of Higher Education (3)
    - MHS6020 - Mental Health Care Systems (3)
    - MAN6305 - Human Resources Management (3)
    - SDS6620 - Coordination of Comprehensive Professional School Counseling Programs (3)
    - EDH6081 - Contemporary Issues in Colleges (3)
  - Rule Not Selected

Grand Total Credits: 12

Collaborative Intervention Specialist Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Program Website
https://ccie.ucf.edu/exceptional-student-education/

Program Contact Information
Mary Little PhD
Professor
mary.little@ucf.edu
Telephone: 407-823-3275
ED 315J

Is this program available 100% online?
No
Program Description

The Collaborative Intervention Specialist graduate certificate provides advanced coursework for educational leaders to use school-based and classroom instructional data to meet the instructional and intervention needs of all students, including at-risk and struggling students, beyond the typical, initial classroom instruction within a multi-tiered system of supports.

This certificate will provide an advanced, multi-disciplinary theoretical approach and applied knowledge base to experienced educators.

Coursework focuses on knowledge, skills and competencies for working with students within an intervention framework. The Collaborative Intervention Specialist certificate is multi-disciplinary and includes coursework in exceptional student education, school psychology, reading education, and math education. The graduate courses provide an opportunity for students to complete the Intervention Specialist certificate beyond the undergraduate degree. Should a student wish to earn a master's degree, the courses in the certificate could be applied to one of several Master of Education degree programs in the College of Community Innovation and Education.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - EEX6218 - Diagnostic Assessment and Intervention Planning in Exceptional Education (3)
  - SPS6700 - Advanced Psychoeducation and Data-Based Decision Making (3)

Elective Courses
6 Total Credits

- Complete 1 of the following
  Option 1
  - Complete the following:
    - SPS5605 - Building and Improving Relationship and Emotional Intelligence (3)
    - EEX6061 - Instructional Strategies Pre-K-6 (3)
  Option 2
  - Complete the following:
    - MAE6517 - Diagnosis/Remediation of Difficulties in Mathematics for the Classroom Teacher (3)
    - RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)

Grand Total Credits: 12

College Teaching and Leadership Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

2022-2023 Graduate Catalog
Program Website
https://www.ucf.edu/degree/college-teaching-and-leadership-certificate/

Program Contact Information
Thomas Cox EdD
thomas.cox@ucf.edu
ED 220Q

Is this program available 100% online?

Yes

UCF Online

Please note: College Teaching and Leadership Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The College Teaching and Leadership Graduate Certificate prepares students to become campus leaders at all organizational levels of colleges, state colleges, and universities, as well as the college-level classroom.

The certificate consists of five graduate courses that cover all facets of community college education. The courses are available completely online in a web-based format.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete the following:
  - EDH6053 - The Community College in America  (3)
  - EDH6081 - Contemporary Issues in Colleges  (3)
  - EDH6204 - Leadership in College Organizations  (3)
  - EDH6215 - The College Curriculum  (3)
  - EDH6305 - Teaching and Learning in Colleges and Universities  (3)

Grand Total Credits: 15

Conflict Resolution and Analysis Graduate Certificate

College

College of Community Innovation and Education
Department
Department of Legal Studies

Program Website
https://ccie.ucf.edu/legalstudies/programs/certificates/#grad

Program Contact Information
Christy L. Foley, J.D.
Visiting Lecturer
Office: DPAC 430
Phone: 407-823-1670
Christy.Foley@ucf.edu

Sean Donovan
Office: DPAC 430
Phone: 407-823-0558
Sean.Donovan@ucf.edu

Is this program available 100% online?
Yes

UCF Online

Please note: Conflict Resolution and Analysis Graduate Certificate may be completed online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

This program is not open to international students. If you have questions, please consult UCF Global at 407-823-2337.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information

Program Description
The graduate certificate in Conflict Resolution and Analysis provides a deeper understanding of the origins and root causes of conflict. Conflict is rampant in society, ranging from personal and workplace conflicts to global conflicts. Students will learn strategies for managing and resolving interpersonal and community conflicts, which are essential in the community and workplace. This certificate will be attractive to students planning to attend law school, legal professionals, social workers, law enforcement, business professionals, and those in education, to name a few.

Total Credit Hours Required: 15 Credit Hours

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - PLA6247 - Conflict Resolution Theory (3)
  - PLA6515 - Understanding Human Behavior and Conflict (3)

Electives
6 Total Credits

- Complete at least 2 of the following:
  - COM6046 - Interpersonal Communication (3)
  - COM6047 - Interpersonal Support in the Workplace (3)
  - COM6145 - Organizational Communication (3)
  - Course Not Found
  - COM6463 - Studies in Intercultural Communication (3)
  - COM6467 - Studies in Persuasion (3)
  - COM6468 - Communication and Conflict (3)
  - MAN6448 - Conflict Resolution and Negotiation (3)
  - PAD6397 - Managing Emergencies and Crises (3)
  - PAD6439 - Leadership in Public Service (3)
  - PAD6705 - Public Sector Communications (3)
  - PLA6245 - Advanced Applied Negotiation and Conflict Resolution (3)
  - PLA6486 - Administrative Law (3)

Required Practicum Experience
3 Total Credits

- Students must complete the two required courses (PLA 6247 and PLA 6515 ) before enrolling in the practicum experience. In addition, practicum must be taken in the last semester.

Course
3 Total Credits

- Complete the following:
  - PLA6246 - Advanced Mediation and Conflict Resolution Practicum (3)

Grand Total Credits: 15

Program Details

Minimum grades of B- required in each class used to satisfy the certificate and overall GPA of 3.0 required to graduate from the certificate program.

Corrections Leadership Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Program Website
https://ccie.ucf.edu/criminaljustice/

Program Contact Information

Eugene Paoline, III PhD
Professor
Eugene.Paoline@ucf.edu
Telephone: 407-823-2603
HS1, RM 321

Elexis Ritz
elexis.ritz@ucf.edu
Telephone: 407-823-6093
HS1 311
Is this program available 100% online?
Yes

UCF Online

Please note: Corrections Leadership Graduate Certificate may be completed fully online, although not all elective options may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters and be part of another degree seeking program. Only 3 of the 9 credit hours may be taken in a completely online format. International applicants should be aware the program may not offer sufficient on-campus courses for F or J visa holders. Please contact the program for more information before applying. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Corrections Leadership is designed to provide a theoretical and practical knowledge base for correctional practitioners in the areas of criminal justice, public administration, and social work.

Corrections Leadership is a rapidly growing area of criminal justice. Private, state, and federal agencies are seeking qualified managers and leaders to meet the changing needs of the twenty-first century. Leaders of correctional facilities and programs should be prepared to meet the challenges of changing policies and effectively deal with the management of budgets, grants, cooperative agreements, and other inter-governmental projects.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - CJC5020 - Foundations of Corrections (3)
  - CQ5456 - The Administration of Justice (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - CCJ6051 - Community Justice (3)
  - CCJ6106 - Policy Analysis in Criminal Justice (3)
  - CCJ6335 - Criminal Justice Sentencing and Punishment Policy (3)
  - CCJ6431 - Leadership and Ethics in Criminal Justice (3)
  - CCJ6118 - Criminal Justice Organizations (3)
  - CCJ5015 - The Nature of Crime (3)
  - CJL6568 - Law and Social Control (3)
  - PAD6417 - Human Resource Management (3)
  - SOW6712 - Clinical Social Work Practice with Substance Addictions (3)

Grand Total Credits: 12
Program Details

PAD 6417 - Human Resource Management 3 Credit Hours

This course has a prerequisite of PAD 6700. Contact the School of Public Administration for a possible override.

Counselor Education MEd

College

College of Community Innovation and Education

Department

Department of Counselor Education & School Psychology

Program Website

https://ccie.ucf.edu/cesp/counselored/

Program Handbook Link

Counselor Education MEd

Program Contact Information

Stacy Van Horn, PhD
Associate Lecturer
Stacy.VanHorn@ucf.edu
Telephone: 407-823-2401
ED 322M

Is this program available 100% online?

No

Licensure Disclosure

For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/licensure-programs/.

Program Description

The CACREP Accredited Counselor Education Master of Education, School Counseling track, is designed for the student planning to seek certification as a professional school counselor in pre-K through postsecondary school settings. This track (as opposed to the Counselor Education Master’s of Arts, School Counseling track) is for students who have a bachelor's degree in education and have completed course work for teaching certification and plan to seek certification in school counseling.

As part of the program's pragmatic approach to preparing counselors, in addition to classroom studies, all students complete clinical experiences in the UCF Community Counseling and Research Center and field-based experiences in the community. The UCF Community Counseling and Research Center serves as a hub for training and research in the program, with graduate students providing counseling services to children, adolescents, and adults through the provision of individual, couples, and family therapy. The CCRC serves more than 1400 individuals, couples, and families in the central Florida community.

This degree has 1 track: School Counseling. Please scroll to the bottom of this page for further details on this Track.
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**  
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**  
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**  
Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student’s graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**  
Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

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**Counselor Education MEd - Counselor Education MEd, School Counseling Track**

**Track Website**

https://ccie.ucf.edu/cesp/counselored/school-counseling

**Track Handbook**

Counselor Education MEd, School Counseling Track

**Track Contact Information**

**Stacy Van Horn, PhD**  
Senior Lecturer  
Stacy.VanHorn@ucf.edu  
Telephone: 407-823-2401  
ED 322M

**Online Availability**

No

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2022-2023 Graduate Catalog
**Licensure Disclosure**

Students enrolled in the CACREP accredited School Counseling track should remain in close contact with their advisor to keep informed of any programmatic changes implemented to comply with new state requirements. The Counselor Education MEd, School Counseling track has potential ties to professional certification in the field. For more information on how this program may prepare you in that regard, please visit [https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Counselor-Ed-School-Counseling-MEd.pdf](https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Counselor-Ed-School-Counseling-MEd.pdf).

**Track Description**

The CACREP Accredited Counselor Education Master of Education, School Counseling track, is designed for the student planning to seek certification as a professional school counselor in pre-K through postsecondary school settings. This track (as opposed to the Counselor Education Master’s of Arts, School Counseling track) is for students who have a bachelor's degree in education and have completed course work for teaching certification and plan to seek certification in school counseling.

As part of the program's pragmatic approach to preparing counselors, in addition to classroom studies, students in the School Counseling track may complete their first clinical experience (practicum) in either a public school or in the UCF Community Counseling and Research Center. All School Counseling track students will complete their final internship clinical experiences in a K-12 school setting earning 600 total hours. The UCF Community Counseling and Research Center serves as a hub for training and research in the program, with graduate students providing counseling services to children, adolescents, and adults through the provision of individual, couples, and family therapy. The CCRC serves more than 1400 individuals, couples, and families in the central Florida community.

The Counselor Education Master of Education, School Counseling track requires a minimum of 60 credit hours beyond the bachelor's degree, including 6 credit hours of core courses, 33 credit hours of specialization, 9 credit hours of professional clinical experiences, and 12 credit hours of electives.

**Total Credit Hours Required: 60 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

Students must have, or be eligible for, the Florida Professional Teaching Certificate.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
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ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  Four approved elective courses.

Required Courses
39 Total Credits

- Details

Core
6 Total Credits

- Complete the following:
  - EDF6155 - Lifespan Human Development and Learning (3)
  - EDF6481 - Fundamentals of Graduate Research in Education (3)

Specialization
33 Total Credits

- Complete the following:
  - MHS5005 - Introduction to the Counseling Profession (3)
  - MHS6220 - Individual Psychoeducational Testing I (3)
  - MHS6400 - Theories of Counseling and Personality (3)
  - MHS6401 - Techniques of Counseling (3)
  - MHS6420 - Foundations of Multicultural Counseling (3)
  - MHS6500 - Group Procedures and Theories in Counseling (3)
  - SDS6347 - Career Development (3)
  - SDS6411 - Counseling with Children and Adolescents (3)
  - SDS6620 - Coordination of Comprehensive Professional School Counseling Programs (3)
  - SP56815 - Legal and Ethical Issues in Professional School Counseling (3)
  - SDS6622 - Career and College Readiness in Schools PK-12 (3)

Professional Clinical Experience
9 Total Credits

- Complete all of the following
  - The clinical experiences are comprised of two sections, Practicum and Internship. Both are experiential in nature and are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program to their work with actual clients and students. The practicum is conducted either on campus in the UCF Community Counseling and Research Center or at one of the CCRC's partner schools in the community. Internship, which is usually completed in one semester (for 6-credit hours) is conducted at various schools around central Florida. The Internship can be divided into two semesters.
  - Complete the following:
    - MHS6803 - Practicum in Counselor Education (3)
  - Prerequisites for MHS 6803 - Practicum in Counselor Education are the following: MHS 5005, MHS 6400, MHS 6401, MHS 6500, and SPS 6815. MHS 6420 and SDS 6411 are also pre or co-requisites for MHS 6803. A minimum of 27 credit hours are required prior to beginning the practicum.
  - Earn at least 6 credits from the following:
    - SDS6947 - Internship in Professional School Counseling (1 - 6)
    - The prerequisites for SDS 6947 - Internship in Professional School Counseling include SDS 6620 and earning a "B" or better in MHS 6803.

Grand Total Credits: 60
Track Details

Additional Program Requirements

- Achieve at least a GPA of 3.0 throughout the degree program.
- Achieve a "B" or better in MHS 5005, MHS 6401, MHS 6803 and SDS 6947.
- Complete a total of 700 hours of clinical experiences, 100 of which will be in the UCF Community Counseling and Research Center (or an area school) and 600 of which are field-based experiences to take place in a K-12 school in Central Florida.
- Complete a portfolio and receive approval by Counselor Education faculty.
- Complete a professional exit examination.
- Given the experiential, competency, and performance-based nature of the courses taken by Counselor Education students, students are limited to taking a maximum of three (3) courses per semester (with 2 semesters in the School Counseling Track that do include 4 courses). However, if students believe that they can verify a need to take more than three courses, they should consult with their academic advisor for guidance on the procedure. Students who have not received prior approval and who register for more than three courses per semester will be administratively dropped from any courses over the maximum load.

Independent Learning

Practica and internships are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program. The internship experience provides students with the practical experience of facilitating a comprehensive, professional school counseling program in a school setting (e.g., leading classroom guidance lessons, facilitating group counseling, providing individual counseling services). All clinical experiences are performed under the direct supervision of an onsite certified school counselor.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Counselor Education MA

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Program Website
https://ccie.ucf.edu/cesp/counselored/

Program Handbook Link
Counselor Education MA
Is this program available 100% online?

No

Licensure Disclosure

Applicants considering this program should contact their State Licensure Board to verify the courses required. For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/licensure-programs/.

Program Description

The College of Community Innovation and Education offers CACREP accredited graduate degrees in Counselor Education (with tracks in Clinical Mental Health Counseling and School Counseling) and Marriage, Couple, and Family Therapy. The Clinical Mental Health Counseling track prepares students for licensure in mental health counseling and to practice in agencies, private practices, and other settings. The School Counseling track prepares students for certification as a professional school counselor in Pre-K through post-secondary school settings. The Marriage, Couple, and Family Therapy program prepares students for licensure in marriage and family therapy and to practice in agencies, private practices, and other settings.

Please scroll to the bottom of this page for further details on these Tracks.

As part of the program's pragmatic approach to preparing counselors, in addition to classroom studies, all students complete clinical experiences in the UCF Community Counseling and Research Center and field-based experiences in the community. The UCF Community Counseling and Research Center serves as a hub for training and research in the program, with graduate students providing counseling services to children, adolescents, and adults through the provision of individual, couples, and family therapy. The CCRC serves more than 1400 individuals, couples, and families in the central Florida community.

Because the programs in Counselor Education (Clinical Mental Health Counseling and School Counseling Tracks) and Marriage, Couple, and Family Therapy are CACREP accredited and prepare students for licensure and/or certification as professional counselors, students must be formally admitted to the program in order to take any program area courses. There are three exceptions to this restriction: (1) non-degree seeking students interested in exploring the program prior to admission may take MHS 5005 - Introduction to the Counseling Profession, pending available space after admitted students have been placed in the course; (2) individuals who already possess a master's degree (or above) in counseling or a related field (i.e. psychology or social work) and are taking courses toward Florida licensure in (a) MHC, and thus may take MHS 6020 - Mental Health Care Systems, MHS 6070 - Diagnosis and Treatment in Counseling, MHS 6450 - Addictions Counseling, and/or MHS 6470 - Human Sexuality and Relationships, or; (b) MFT, and thus may take MHS 6430 - Family Counseling I, MHS 6431 Family Counseling II (MHS 6430 is the pre-requisite), and/or MHS 6440 Couples Counseling - enrollment in any of these courses is pending available space after admitted students have been enrolled.

The Master's of Arts in Counselor Education--School Counseling MA track is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

Please note that Marriage, Couple, and Family Therapy MA Program is a separate degree but still part of the Counselor Education program.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Counselor Education MA - Counselor Education MA, Clinical Mental Health Counseling Track

Track Website
https://ccie.ucf.edu/cesp/counselored/

Track Handbook
Counselor Education MA - Clinical Mental Health Counseling Track

Track Contact Information

Dalena Dillman-Taylor, PhD
Associate Professor
Dalena.Taylor@ucf.edu
Telephone: 407-823-2401
ED 322R

Online Availability
No

Licensure Disclosure

The CACREP accredited Clinical Mental Health Counseling track in the Counselor Education MA program prepares students for licensure in Florida as a Mental Health Counselor in order to practice in agencies, private practices, and other settings. Applicants considering this program should contact their State Licensure Board to verify the courses required. The Counselor Education MA, Clinical Mental Health Counseling track has potential ties to professional licensure or certification in the field.

For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Counselor-Ed-Clinical-Mental-Health-MA.pdf.
Track Description

The CACREP accredited Clinical Mental Health Counseling track in the Counselor Education MA program prepares students for licensure in Clinical Mental Health Counseling and to practice in agencies, private practices, and other settings.

As part of the program's pragmatic approach to preparing counselors, in addition to classroom studies, all students complete clinical experiences in the UCF Community Counseling and Research Center and field-based experiences in the community. The UCF Community Counseling and Research Center serves as a hub for training and research in the program, with graduate students providing counseling services to children, adolescents, and adults through the provision of individual, couples, and family therapy. The CCRC serves more than 1400 individuals, couples, and families in the central Florida community.

The Clinical Mental Health Counseling track requires a minimum of 63 credit hours beyond the bachelor's degree, including 6 credit hours of core courses, 39 credit hours of specialization (including a 3 credit hour elective), 12 credit hours of professional clinical experiences, and 6 credit hours of electives in either the nonthesis or thesis option.

Total Credit Hours Required: 63 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

45 Total Credits

- Core and Specialization

**Core**

6 Total Credits

- Complete the following:
  - EDF6155 - Lifespan Human Development and Learning (3)
  - EDF6481 - Fundamentals of Graduate Research in Education (3)

**Specialization**

39 Total Credits

- Complete all of the following
  - Complete the following:
    - MHS5005 - Introduction to the Counseling Profession (3)
    - MHS6020 - Mental Health Care Systems (3)
    - MHS6070 - Diagnosis and Treatment in Counseling (3)
    - MHS6220 - Individual Psychoeducational Testing I (3)
    - MHS6400 - Theories of Counseling and Personality (3)
    - MHS6401 - Techniques of Counseling (3)
    - MHS6420 - Foundations of Multicultural Counseling (3)
    - MHS6450 - Addictions Counseling (3)
    - MHS6470 - Human Sexuality and Relationships (3)
    - MHS6500 - Group Procedures and Theories in Counseling (3)
    - MHS6702 - Ethical and Legal Issues (3)
    - SDS6347 - Career Development (3)
  - Earn at least 3 credits from the following types of courses:
    Elective approved by adviser.

**Thesis/Nonthesis Option**

6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EGC 6971 - Thesis
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Two approved electives.

**Professional Clinical Experience**

12 Total Credits

- Complete all of the following
  - The clinical experiences are comprised of two sections, Practicum and Internship. Both are experiential in nature and are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program to their work with actual clients. The practicum is conducted on campus in the UCF Community Counseling and Research Center and the internship is conducted at various clinical sites around central Florida.
  - Earn at least 6 credits from the following:
    - MHS6803 - Practicum in Counselor Education (3)
  - Prerequisites for MHS 6803 - Practicum in Counselor Education are the following: MHS 5005, MHS 6070, MHS 6400, MHS 6401, MHS 6500, and MHS 6702. A minimum of 27 credit hours are required prior to beginning the practicum.
  - Earn at least 6 credits from the following:
    - MHS6830 - Counseling Internship (1 - 6)
  - The prerequisites for MHS 6830 Counseling Internship include MHS 6420 and earning a "B" or better in all sections of MHS 6803.

Grand Total Credits: **63**

2022-2023 Graduate Catalog
Track Details

Additional Program Requirements

- Achieve at least a GPA of 3.0 throughout the degree program.
- Achieve a “B” or better in MHS 5005, MHS 6401, MHS 6803 and MHS 6830.
- Complete a total of 800 hours of clinical experiences, 200 of which will be in the UCF Community Counseling and Research Center and 600 of which are field-based experiences in the community.
- Complete a portfolio and receive approval by Counselor Education faculty.
- Complete a professional exit examination.
- Given the experiential, competency, and performance-based nature of the courses taken by Counselor Education students, students are limited to taking a maximum of three (3) courses per semester. However, if students believe that they can verify a need to take more than three courses, they should consult with their academic adviser for additional guidelines. Students who have not received prior approval and who register for more than three courses per semester will be administratively dropped from any courses over the maximum allowed.

Independent Learning

Practica and internships are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program. The internship experience provides students with the practical experience of providing hands-on services for a variety of clients and presenting concerns. Such services may include, but are not limited to, individual, couple, family, and group counseling with children, adolescents, and adults. Client concerns range from developmental and relational concerns to more severe pathology. All clinical experiences are performed under the direct supervision of an onsite licensed clinician.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Counselor Education MA - Counselor Education MA, School Counseling Track

Track Website
https://ccie.ucf.edu/cesp/counselored/

Track Handbook
Counselor Education MA - School Counseling Track

Track Contact Information

Stacy Van Horn, PhD
Senior Lecturer
counsel@ucf.edu
Telephone: 407-823-2401
ED 322M

Online Availability
No
Licensure Disclosure

The Counselor Education MA, School Counseling program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Counselor-Ed-School-Counseling-MA.pdf.

Track Description

The CACREP Accredited School Counseling track in the Master of Arts in Counselor Education is designed for the student planning to seek certification as a professional school counselor in pre-K through postsecondary school settings.

The CACREP Accredited School Counseling track in the Counselor Education MA program is designed for students who have a bachelor’s degree in a discipline other than education and plan to seek certification as a professional school counselor in pre-K through postsecondary school settings.

As part of the program's pragmatic approach to preparing counselors, in addition to classroom studies, students in the School Counseling track may complete their first clinical experience (practicum) in either a public school or in the UCF Community Counseling and Research Center. All School Counseling track students will complete their final internship clinical experiences in a K-12 school setting earning 600 total hours.

The Master of Arts in Counselor Education-School Counseling track is a state-approved initial teacher/educator preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in Counselor Education-School Counseling should remain in close contact with their advisor to keep informed of any programmatic changes implemented to comply with new state requirements.

The CACREP accredited School Counseling track in the Counselor Education MA program prepares students for certification as a professional school counselor. As such, students must be formally admitted to the program in order to take any program area courses. The program requires a minimum of 60 credit hours beyond the bachelor's degree, including 6 credit hours of core courses, 30 credit hours of specialization, 9 credit hours of DOE required certification courses, 9 credit hours of professional clinical experiences, and 6 credit hours of electives in either the nonthesis or thesis option.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Bachelor’s Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
Online Application
Graduate Admissions

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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
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2022-2023 Graduate Catalog
**Degree Requirements**

**Required Courses**
48 Total Credits

- Core, Specialization, and DOE Certification.

**Core**
6 Total Credits

- Complete the following:
  - EDF6155 - Lifespan Human Development and Learning (3)
  - EDF6481 - Fundamentals of Graduate Research in Education (3)

**Specialization**
33 Total Credits

- Complete the following:
  - MHS5005 - Introduction to the Counseling Profession (3)
  - MHS6220 - Individual Psychoeducational Testing I (3)
  - MHS6400 - Theories of Counseling and Personality (3)
  - MHS6401 - Techniques of Counseling (3)
  - MHS6420 - Foundations of Multicultural Counseling (3)
  - MHS6500 - Group Procedures and Theories in Counseling (3)
  - SD6347 - Career Development (3)
  - SD6411 - Counseling with Children and Adolescents (3)
  - SD6620 - Coordination of Comprehensive Professional School Counseling Programs (3)
  - SP6815 - Legal and Ethical Issues in Professional School Counseling (3)
  - SD6622 - Career and College Readiness in Schools PK-12 (3)

**DOE Certification**
9 Total Credits

- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - RED5147 - Developmental Reading (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

**Elective Course**
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - One approved elective course.

**Professional Clinical Experience**
9 Total Credits

- Complete all of the following
  - The clinical experiences are comprised of two sections, Practicum and Internship. Both are experiential in nature and are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program to their work with actual clients and students. The practicum is conducted either on campus in the UCF Community Counseling and Research Center or at one of the CCRC's partner schools in the community. Internship, which is usually completed in one semester (for 6-credit hours) is conducted at various schools around central Florida. The Internship can be divided into two semesters.
  - Complete the following:
    - MHS6803 - Practicum in Counselor Education (3)
  - Prerequisites for MHS 6803 - Practicum in Counselor Education are the following: MHS 5005, MHS 6400, MHS 6401, MHS 6500, and SPS 6815. MHS 6420 and SDS 6411 are also pre or co-requisites for MHS 6803. A minimum of 27 credit hours are required prior to beginning the practicum.
  - Earn at least 6 credits from the following:
    - SDS6947 - Internship in Professional School Counseling (1 - 6)
  - The prerequisites for SDS 6947 - Internship in Professional School Counseling include SDS 6620 and earning a "B" or better in MHS 6803.

Grand Total Credits: **60**
**Track Details**

**Additional Program Requirements**

- Achieve at least a GPA of 3.0 throughout the degree program.
- Achieve a "B" or better in MHS 5005, MHS 6401, MHS 6803 and SDS 6947.
- Complete a total of 700 hours of clinical experiences, 100 of which will be in the UCF Community Counseling and Research Center (or an area school) and 600 of which are field-based experiences to take place in a K-12 school in Central Florida.
- Complete a portfolio and receive approval by Counselor Education faculty.
- Complete a professional exit examination.
- Given the experiential, competency, and performance-based nature of the courses taken by Counselor Education students, students are typically limited to taking a maximum of three (3) courses per semester (with 2 semesters in the School Counseling Track that do include 4 courses). However, if students believe that they can verify a need to take more than three courses, they should consult with their advisor for additional guidance. Students who have no received prior approval and who register for more than three courses per semester will be administratively dropped from any courses over the maximum allowed.

**Independent Learning**

Practica and internships are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program. The internship experience provides students with the practical experience of facilitating a comprehensive, professional school counseling program in a school setting (e.g., leading classroom guidance lessons, facilitating group counseling, providing individual counseling services). All clinical experiences are performed under the direct supervision of an onsite certified school counselor.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Crime Analysis Graduate Certificate**

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Program Website**
https://ccie.ucf.edu/criminaljustice/
Is this program available 100% online?

Yes

UCF Online

Please note: Crime Analysis Graduate Certificate may be completed fully online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters and be part of another degree seeking program. Only 3 of the 9 credit hours may be taken in a completely online format. International applicants should be aware the program may not offer sufficient on-campus courses for F or J visa holders. Please contact the program for more information before applying. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Crime Analysis provides students with the essential skills needed by law enforcement agencies to meet the new demands for sophisticated crime analysis and mapping products.

The Graduate Certificate in Crime Analysis provides information for data-driven management, investigative support, and general crime analysis. The certificate addresses the needs of traditional criminal justice graduate students and non-traditional criminal justice practitioners. Theoretical aspects of crime pattern analysis are combined with practical applications to understand the development of data-driven crime prevention strategies. Crime pattern recognition and examination are emphasized.

Students learn to synthesize theory and application in order to produce the knowledge base necessary to fully utilize available technologies to develop and perform complex crime analysis and mapping; perform advanced spatial analyses of crime and understand the essentials of creating customized crime analysis and mapping applications that are agency-specific.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - CCJ6073 - Data Management Systems for Crime Analysis (3)
  - CCJ6079 - Crime Mapping and Analysis in Criminal Justice (3)
  - CCJ6077 - Advanced Crime Mapping and Analysis in Criminal Justice (3)
  - CCJ6717 - CJ Theories of Crime Analysis and Prevention (3)

Grand Total Credits: 12

Program Details

This sequence of courses can only be started in the Fall semester. Contact department for details on semester offerings.

Criminal Justice Executive Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Program Website
https://ccie.ucf.edu/criminaljustice/

Program Contact Information

Eugene Paoline, III PhD
Professor
Eugene.Paoline@ucf.edu
Telephone: 407-823-2603
HS1, RM 321

Elexis Ritz
elexis.ritz@ucf.edu
Telephone: 407-823-6093
HS1 311

Is this program available 100% online?
No

Program Description

The Graduate Certificate in Criminal Justice Executive prepares criminal justice professionals for contemporary executive roles within their organizations in the areas of self-awareness, operations, logistics, human capital, vision and current industry trends.

This certificate is designed to develop innovative executives who care about people and results and who are preparing themselves and their agencies for the challenges of tomorrow. This certificate assists executives in developing the competencies and skills to successfully adapt to new and unforeseen realities.

This certificate program is only available to students in the Valencia College Public Safety Leadership Development Certification Program (PSLDCP).

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

This certificate program is only available to students in the Valencia College Public Safety Leadership Development Certification Program (PSLDCP).
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**  
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**  
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

Required Courses  
9 Total Credits

- Complete the following:
  - CJE6120 - Personnel Management in Criminal Justice Organizations (3)
  - CCJ6489 - Professionalism in Criminal Justice Organizations (3)
  - CCJ5931 - Contemporary Criminal Justice Strategies (3)

Elective Course  
3 Total Credits

- Complete at least 1 of the following:
  - CCJ5456 - The Administration of Justice (3)
  - CCJ5931 - Contemporary Criminal Justice Strategies (3)
  - CCJ6118 - Criminal Justice Organizations (3)

Grand Total Credits: **12**

**Program Details**

*CCJ 5931 can be taken twice in this certificate program as the content of the course changes for each offering.*

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**Criminal Justice MS**

**College**

College of Community Innovation and Education

**Department**

Department of Criminal Justice

**Program Website**

https://ccie.ucf.edu/criminaljustice/

**Program Handbook Link**

Criminal Justice MS

**Program Contact Information**

**Eugene Paoline, III PhD**  
Professor  
Eugene.Paoline@ucf.edu  
Telephone: 407-823-2603  
HS1, RM 321

**Elexis Ritz**  
elexis.ritz@ucf.edu  
Telephone: 407-823-6093  
HS1 311
Is this program available 100% online?
Yes

UCF Online

Please note: Criminal Justice (MS) may be completed fully online, although not all elective options may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. International applicants should be aware the program may not offer sufficient on-campus courses for F or J visa holders. Please contact the program for more information before applying. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Master of Science in Criminal Justice is designed to meet the needs of students preparing for careers in the field of criminal justice. The curriculum focuses on the traditional issues such as management, administrative and criminal justice theory, as well as basic research methods and descriptive statistics.

The Master of Science in Criminal Justice core and elective courses focus on the complex and changing world in which criminal justice systems operate in this country and abroad. This plan of study is designed to equip future criminal justice leaders to be critical consumers of criminal justice research.

The benefits of an advanced graduate degree in criminal justice are self-evident and are being increasingly recognized by employers in central Florida and throughout the United States. Federal, state, and local criminal justice agencies benefit from an informed and innovative workforce that is aware of the complex issues and problems faced by the system regardless of geographic locale. Furthermore, graduates of the program are grounded in the latest theories and learn how these theories affect each individual or organization within the system.

This degree has 1 track: Public Administration MPA Dual Degree. Please scroll to the bottom of this page for further details on this Track.

International applicants should be aware the program may not offer sufficient on-campus courses for F or J visa holders. Please contact the program for more information before applying.

The Criminal Justice MS program currently offers limited face-to-face courses. The program is offered primarily online. Contact the program for additional information.

The Master of Science in Criminal Justice requires 36 credit hours, including 21 credit hours of core courses, 6 credit hours of restricted electives, 9 credit hours of general electives, and a final written examination within the Proseminar or capstone course. For students electing to complete a thesis, 6 credit hours of the general elective requirements will be thesis hours.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements
Core
18 Total Credits

- Complete the following:
  - CCJ5015 - The Nature of Crime (3)
  - CCJ5456 - The Administration of Justice (3)
  - CCJ6704 - Research Methods in Criminal Justice (3)
  - CCJ6706 - Data Analysis in Criminal Justice I (3)
  - CCJ6106 - Policy Analysis in Criminal Justice (3)
  - CCJ6118 - Criminal Justice Organizations (3)

Capstone
3 Total Credits

- Complete the following:
  - CJE6718 - Proseminar in Criminal Justice (3)

Electives
15 Total Credits

- The combined total of Restricted and Unrestricted 5000 level electives may not exceed 12 credit hours.

Restricted
6 Total Credits

- Complete at least 2 of the following:
  - CJC5020 - Foundations of Corrections (3)
  - CJE5021 - Foundations of Law Enforcement (3)
  - CJ6020 - The Juvenile Justice System (3)
  - CJL6568 - Law and Social Control (3)
  - CJL6520 - American Criminal Courts (3)

Unrestricted
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  - Additional Elective Coursework Students should consult with the Criminal Justice adviser for approval of general electives outside of the Criminal Justice program prior to enrolling. Criminal Justice courses at the 5000 or 6000 level, not used toward core or restricted electives, are pre-approved general electives.

Grand Total Credits: 36

Program Details

Students must achieve a grade of "B" (3.0) or higher in every course listed under core requirements and in the capstone course CJE 6718.

Thesis Option: 6 Credit Hours of the general elective requirements may be thesis hours

All MSCJ students are automatically placed into the nonthesis option. Students electing to complete a thesis should consult the program adviser. The thesis option will consist of 6 hours of thesis credit and a successful defense of the research. Students should select a faculty adviser, form a thesis committee, and complete core/restricted elective requirements before enrolling in thesis hours. A thesis proposal must also be submitted to an approved committee before enrolling thesis hours. Students who elect to write a thesis should become familiar with the university's requirements and deadlines for organizing and submitting the thesis.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Tangible projects such as advanced research projects, scholarly papers, internships, practicum, and presentations at professional conferences also contribute to the self-development of our students. The culminating experience for students is completion of the CJE 6718 - Proseminar in Criminal Justice, which serves as the capstone for the program.
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information
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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Criminal Justice MS - Criminal Justice MS, Public Administration MPA Dual Degree Track

Track Website
https://ccie.ucf.edu/criminaljustice/

Track Handbook
Criminal Justice MS, Public Administration MPA Dual Degree Track

Track Contact Information
Eugene Paoline, III PhD
Professor
Eugene.Paoline@ucf.edu
Telephone: 407-823-2603
HS1, RM 321

Elexis Ritz
elexis.ritz@ucf.edu
Telephone: 407-823-6093
HS1 311

Online Availability
Yes

Track Description
The Public Administration MPA - Criminal Justice MS Dual Degree Track provides the opportunity for students to earn graduate degrees from two academic programs, the Master of Public Administration and the Master of Science in Criminal Justice, concurrently.

Students successfully completing this MPA/MS dual degree program will have the skills and analytical techniques for successful careers in both public administration and criminal justice. After successful completion of the MPA/MS dual degree program, students will receive two diplomas, one for the Public Administration MPA and one for the Criminal Justice MS.

The dual degree track (Master of Criminal Justice / Master of Public Administration) consists of 51 credit hours. Each student completes a core of 11 courses (33 credit hours), two research methods and statistics courses (6 credit hours), two electives (6 credit hours), and a capstone experience of two courses (6 credit hours).

Total Credit Hours Required: 51 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
39 Total Credits

Core
33 Total Credits

- Complete the following:
  - CCJ5015 - The Nature of Crime (3)
  - CCJ5456 - The Administration of Justice (3)
  - CCJ6106 - Policy Analysis in Criminal Justice (3)
  - CCJ6118 - Criminal Justice Organizations (3)
  - PAD6035 - Public Administration in the Policy Process (3)
  - PAD6037 - Public Organization Management (3)
  - PAD6053 - Public Administrators in the Governance Process (3)
  - PAD6207 - Public Financial Management (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6335 - Strategic Planning and Management (3)
  - PAD6417 - Human Resource Management (3)

Research Methods/Statistics
6 Total Credits

- Complete 1 of the following
  - Option 1
    - Complete the following:
      - PAD6700 - Research Methods in Public Administration (3)
      - CCJ6706 - Data Analysis in Criminal Justice I (3)
  - Option 2
    - Complete the following:
      - CCJ6704 - Research Methods in Criminal Justice (3)
      - PAD6701 - Analytical Techniques for Public Administration (3)

Capstone
6 Total Credits

- Complete the following:
  - PAD6062 - Advanced Concepts and Applications in Public Administration (3)
  - CJE6718 - Proseminar in Criminal Justice (3)

Electives
6 Total Credits

- Complete at least 2 of the following:
  - CJC5020 - Foundations of Corrections (3)
  - CJE5021 - Foundations of Law Enforcement (3)
  - Cj6020 - The Juvenile Justice System (3)
  - CJL5658 - Law and Social Control (3)
  - CJL5520 - American Criminal Courts (3)

Grand Total Credits: 51
Track Details

Additional Program Requirements

Students must achieve a grade of "B" or higher in every CCJ/CJE course and a grade of "B-" or higher in every PAD course in the core courses, research methods/statistics courses, and the Capstone courses. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Independent Learning

Independent learning is demonstrated throughout the curriculum, through the process of inquiry and dialogue. Tangible projects, such as scholarly research, papers, internships, and the capstone experience also contribute to the self-development of students. The capstone courses, PAD 6062 and CJE 6718, provide the independent learning experience.

Financial Information

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http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Criminal Justice PhD

College

College of Community Innovation and Education

Department

Department of Criminal Justice

Program Website

https://ccie.ucf.edu/criminaljustice/

Program Handbook Link

Criminal Justice PhD

Program Contact Information

Eugene Paoline, III PhD
Professor
Eugene.Paoline@ucf.edu
Telephone: 407-823-2603
HS1, RM 321

Elexis Ritz
elexis.ritz@ucf.edu
Telephone: 407-823-6093
HS1 311

Is this program available 100% online?

No
Program Description

The Doctoral Program in Criminal Justice is a post-master's program of study and research. The program is composed of a substantive core focused on criminal justice theory and institutions, a research methods core that prepares social scientists in the scientific method and social-science statistics, and a selection of substantive criminal justice concentrations (policing, corrections, and juvenile justice).

The program focuses on criminal justice and takes advantage of the city of Orlando and surrounding cities and counties to examine criminal justice issues from multiple angles and levels.

The program is intended to serve many purposes. Chief among them are:

- Prepare disciplinary stewards capable of advancing scholarship in criminal justice;
- Prepare a qualified workforce to assume criminal justice instructional responsibilities in postsecondary institutions;
- Prepare analysts competent to staff federal, state, and local criminal justice agencies; and
- Improve safety and justice in communities through research partnerships with neighborhood, city, county and state agencies and associations.

Students completing the program will be well prepared to pursue academic positions in universities, research positions in criminal justice agencies, and consultancies in program evaluation and needs assessment.

The Doctoral Program in Criminal Justice is a 57-credit-hour, post-master's program of study and research. Substantive emphasis is placed on core coursework in criminal justice theory and institutions, and on in-depth concentrations in policing, corrections or juvenile justice. Students complete a minimum of 42 credit hours of doctoral coursework and 15 credit hours of dissertation research.

Total Credit Hours Required: 57 Credit Hours Minimum beyond the Master's Degree

Program Prerequisites

Applicants are expected to have a master's degree in criminal justice or a closely related discipline. Applicants' transcripts will be reviewed for successful completion of a sufficient number of fundamental criminal justice classes. Applicants may be required to complete master's-level courses in certain topics before being admitted to the program or permitted to take classes.

Students must have completed master's-level courses in advanced research methods and advanced quantitative methods and be familiar with SPSS, SAS, STATA, or R prior to enrolling in the Methodological Core courses. Students who do not meet this requirement may be required to complete remedial coursework prior to enrolling in CCJ 7708 - Advanced Quantitative Methods for Criminal Justice Research and CCJ 7727 - Advanced Research Methods in Criminal Justice. It is recommended students have completed master's level courses in the concentration area they choose prior to taking courses in that area (policing, corrections, or juvenile justice).

College of Graduate Studies Contact Information

gradmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
36 Total Credits

- A grade of B (3.0) or better is required for all courses listed in the Substantive Core and Methodological Core.

Substantive Core
15 Total Credits

- Complete the following:
  - CCJ7019 - Seminar in the Nature of Crime (3)
  - CCJ7457 - Seminar in Criminal Justice Theory (3)
  - CCJ7096 - Seminar in Criminal Justice Systems (3)
  - CCJ7785 - Teaching Criminal Justice (3)
  - CCJ7775 - Criminal Justice Research in the Community (3)
12 Total Credits

- Complete all of the following
  - Complete the following:
    - CCJ7727 - Advanced Research Methods in Criminal Justice (3)
    - CCJ7708 - Advanced Quantitative Methods for Criminal Justice Research (3)
  - Select two courses from the list below or another methodological course with adviser approval: Students selecting CCJ 7725 must complete CCJ 6073
  - Complete at least 2 of the following:
    - CCJ7725 - The Geography of Crime: Theory and Methods (3)
    - CCJ6073 - Data Management Systems for Crime Analysis (3)
    - CCJ6079 - Crime Mapping and Analysis in Criminal Justice (3)
    - CCJ7747 - Hierarchical Linear Modeling in Criminal Justice Research (3)
    - CCJ7752 - Structural Equation Modeling in Criminal Justice Research (3)
    - CCJ6902 - Qualitative Criminal Justice Research Methods (3)

Concentration Area
9 Total Credits

- Complete 1 of the following
  - Students select an area of concentration and complete the assigned 9 credit hours of coursework. It is recommended entering doctoral students have completed a master's-level precursor in their chosen area (e.g., master's-level survey course in policing if the area chosen is Policing Theory and Research). A grade of B (3.0) or better is required for all courses listed in the selected concentration area. Areas of concentration are:
    - Policing Theory and Research
      - Complete the following:
        - CJE6320 - Seminar in Police Administration (3)
        - CJE6456 - Seminar in Policing Urban Communities (3)
        - CJE6706 - Seminar in Police Socialization and Culture (3)
    - Correctional Theory and Research
      - Complete the following:
        - CJC6135 - Seminar in Institutional Corrections (3)
        - CJC6165 - Seminar in Community Corrections (3)
        - CJC6486 - Seminar in Correctional Effectiveness (3)
    - Juvenile Justice Theory and Research
      - Complete the following:
        - CJ6124 - Seminar in Prosecuting Juvenile Offenders (3)
        - CJ6126 - Seminar in Juvenile Corrections (3)
        - CJ6546 - Seminar in Policing and Prevention in the Juvenile Justice System (3)
  - Elective Courses
    - 6 Total Credits
      - Earn at least 6 credits from the following types of courses:
        Students select two additional courses (3 credit hours each) in consultation with program adviser and mentor.

Examinations
0 Total Credits

- Students must successfully complete a series of cumulative examinations to ensure expertise in the substantive, methodological and concentration areas. Students will take an exam on the core criminal justice coursework, a research methods and statistics proficiency exam, and an exam in the student's concentration area. Students may enroll in doctoral research (CCJ 7919) during the period of study preceding the examinations if all coursework is complete. Students will be given two attempts at each exam. If unsuccessful on the second attempt the student will be dismissed from the program.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - CCJ 7980 Upon successful completion of all examinations, students will enter candidacy and complete a dissertation. The dissertation topic should be grounded in the student's selected concentration area. Dissertation committees will contain a minimum of four faculty members, at least three of which (including the chair) will be from the Department of Criminal Justice. The fourth member must be from outside the Department of Criminal Justice and may be from outside the university. All dissertation committee members must be approved graduate faculty or graduate faculty scholars.

Grand Total Credits: 57
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Curriculum and Instruction EdD

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/lser/curriculum-and-instruction/edd/

Program Handbook Link
Curriculum and Instruction EdD

Program Contact Information

Michele Gill PhD
Professor
eddcurriculum@ucf.edu
Telephone: 407-823-1771
ED 222R

Is this program available 100% online?
Yes
**Program Description**

The Curriculum and Instruction EdD program is intended for individuals engaged in the practice of education in various settings, including schools, colleges, universities, businesses and industry. The program prepares students for engaging in the study of practice-based problems in education and data-driven decision-making to generate real-world solutions.

The Curriculum and Instruction EdD program is designed for experienced practicing educators and practitioners who wish to gain advanced skills in:

1. Evaluating the effectiveness of educational and clinical programs and identifying impediments to effective practice and program improvement;
2. Analyzing and synthesizing educational and clinical research and scholarship to identify research-based practices and solutions to complex problems of the practice;
3. Leading the change process through the implementation of data and evidence-based decisions and solutions.

The Doctor of Education program culminates with the Dissertation in Practice.

The Doctor of Education (EdD) program is a professional practice doctorate. It is problem-based and designed for practitioners who aspire to positions of influence through their engagement in the development of others. The program builds that expertise from a core of courses in learning, development, and motivation; data, accountability, and leadership; organizational contexts and the use of research to drive decision-making. Students will work with a team of faculty and field advisers who will support their specialization area.

This program is intended for professionals interested in teaching in a college, university, or community college, or leading instructional, training, and/or program improvement in a school or school district, higher education organization, social service agencies, military, or industry settings.

The EdD in Curriculum and Instruction consists of three distinct program areas, all with an emphasis on professional practice: core, specialization, and dissertation. Three milestones assess students’ progress through the program.

**Total Credit Hours Required: 54 - 57 Credit Hours Minimum beyond the Master’s Degree**

**Program Prerequisites**

Master's degree in a closely related field.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Required Courses

- **33 Total Credits**
  - Details

Core

- **18 Total Credits**
  - Complete all of the following
    - The Core courses include courses on learning theory, organizational theory, and research courses designed to teach students how to identify, analyze and evaluate complex problems of practice.
    - Complete the following:
      - EDP7517 - Facilitating Learning, Development and Motivation (3)
      - EDF7457 - Data, Assessment, and Accountability (3)
      - EDA7101 - Organizational Theory in Education (3)
      - EDF7494 - Identifying Complex Problems of Practice (3)
      - EDF7478 - Analysis of Data for Complex Problems of Practice (3)
      - EDG7985 - Proposing and Implementing Data-Driven Decisions (3)

**Area of Specialization(s)**
Total Credits

- Complete all of the following
  - Earn at least 12 credits from the following types of courses:
    The area of specialization is comprised of a minimum of 12 credit hours of specialization courses and 3 credit hours of a Laboratory of Practice. However, students choosing to complete an eligible graduate certificate with their chosen specialization may be required to complete an additional 3 hours to meet certificate requirements. Students must select an area of specialization before being admitted to the program. Each specialization area has its own advisor, so that students have someone to guide their doctoral studies. The specialization courses are designed to enhance the student's professional practice by extending the knowledge base earned through the master's degree and work experience. Specialization areas are subject to the discretion of the College based on course and faculty availability. Applicants are advised to review the various specializations offered on the CIEDD website (https://ccie.ucf.edu/wp-content/uploads/sites/12/2018/07/Specialization-Areas.pdf). Examples of concentration areas are provided below in the "Program Details" Section; however, these are only examples and do not represent specific requirements. Students should be aware that not every specialization course is offered every semester and concessions will need to be considered based on the availability of coursework, faculty, course prerequisites, and other institutional factors.
  - Complete the following:
    - EDG7947 - Laboratory of Practice (3)
  - Students must complete a 3-credit-hour Laboratory of Practice experience. The Laboratory of Practice is a field-based experience where students begin the research process. This is not a "work for credit" experience; instead, it places the student in a professional setting to gain practical leadership and research experience.

Restricted Research Elective
3 Total Credits

- Upon completion of the core research continuum courses, students, with the guidance of their dissertation chairs, will select a fourth research course that will best support their dissertation research. Options include ONE of the following courses:

3 Total Credits

- Complete at least 1 of the following:
  - EDG6285 - Evaluation of School Programs (3)
  - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
  - EDF7403 - Quantitative Foundations of Educational Research (3)
  - EDF7475 - Qualitative Research in Education (3)

Program Milestones
0 Total Credits

- Program milestones are observable demonstrations of competency administered in place of comprehensive exams. Milestones are designed to monitor student progress and clear the student for continuation to the next program level. There are three program milestones, beginning in Year 2 of the program. Successful completion of all three is one of the requirements for candidacy. To enter EDG 7987 - Dissertation in Practice, students must have an overall 3.0 GPA on all graduate work in the program, complete a mandatory 0 credit summer webcourse, and successfully complete the three required program milestones.

Dissertation in Practice
18 Total Credits

- Earn at least 18 credits from the following types of courses:
  EDG 7987 - Dissertation in Practice The dissertation in practice is the culmination of coursework and field experience related to complex problems of educational practice. The dissertation is the final demonstration of competency in the Curriculum and Instruction EdD. It is a rigorous academic project and is expected to demonstrate the skills and knowledge the student has acquired throughout the program as applied in an authentic professional environment. The dissertation is completed in partnership with the student, university faculty, and the student's mentor/advisor. The dissertation in practice is presented in a thorough and comprehensive written report and must address a complex problem of educational practice. The dissertation in practice will be evaluated on the thoroughness, applicability and appropriateness of the work.

Grand Total Credits: **54**
Program Details

Examples of concentration areas are provided below; however, these are only examples and do not represent specific requirements. Students should be aware that not every specialization course is offered every semester and concessions will need to be considered based on the availability of coursework, faculty, course prerequisites, and other institutional factors.

Example I: Curriculum and Instruction

The Curriculum and Instruction option provides students with a broad understanding of the factors affecting education and approaches to addressing systemic problems. For example, a student interested in curriculum design and development and contemporary instructional practice may select the following specialization to include:

- EDG 7692 Issues in Curriculum 3 Credit Hours
- EDG 7221 - Advanced Curriculum Theory 3 Credit Hours
- EDF 7232 Analysis of Learning Theories in Instruction 3 Credit Hours
- EDG 7325 - Models of Teaching and Instructional Theory 3 Credit Hours

Example II: Instructional Design and Technology

- EME 6055 - Current Trends in Instructional Technology 3 Credit Hours
- EME 6507 - Multimedia for Education and Training 3 Credit Hours
- EME 6417 - Interactive Online and Virtual Teaching Environments 3 Credit Hours
- EME 6458 - Virtual Teaching and the Digital Educator 3 Credit Hours

Financial Information

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UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Curriculum and Instruction MEd

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/lser/curriculum-and-instruction/

Program Contact Information

Graduate Affairs Office
cciegrad@ucf.edu
Telephone: 407-823-5369
ED 115

Is this program available 100% online?
No
Program Description

****This program has temporarily suspended admissions effective Summer 2021***

The Master of Education (MEd) program in Curriculum and Instruction is designed for professionally certified and experienced educators who want to extend their influence beyond the walls of the classroom and improve their knowledge and skills in the area of leadership. Students also engage in the development of expertise in leading other educators in curriculum and instructional improvement across subject areas and grade levels.

This degree does not prepare students for initial, administrative, or supervisory certification.

The Curriculum and Instruction program addresses teacher empowerment and leadership in the expanded roles and responsibilities of educators in schools, including data-driven assessment for school improvement, professional learning communities, applying research to practice, improving instruction and student learning outcomes, and collaboration with families and communities.

During the admission process, students will select a track in the following content areas that do not require specific certification beyond the professional teaching certificate: Curriculum Leadership, Educational Technology*, Gifted Education*, Global, International and Comparative Education*, Intervention Specialist, and Supporting High Needs Populations. Please scroll to the bottom of this page for further details on these Tracks.

*These program areas also include a certificate, which must be applied for separately.

The Master of Education in Curriculum and Instruction program requires a minimum of 30 credit hours beyond the bachelor's degree; minimum credit hour requirements vary by track. Students from all tracks must complete the required 15-18 credit hours of core courses. The Master of Education in Curriculum and Instruction requires, depending on the track, that all students complete a Thesis (6 credit hours) or Capstone Research Project (3 credit hours). The Capstone is a course-based action research study (i.e., application and analysis of the effectiveness of research-based best practices in the classroom). Additional course requirements vary by track.

Total Credit Hours Required: 30-39 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

2022-2023 Graduate Catalog
Curriculum and Instruction MEd - Curriculum and Instruction MEd, Art Education Track

**Track Website**
https://ccie.ucf.edu/ser/curriculum-and-instruction/

**Track Contact Information**
Debra McGann EdD
Lecturer
debra.mcgann@ucf.edu
ED 122C

**Online Availability**
No

**Track Description**
This program has temporarily suspended admissions effective Summer 2021.
You can however, get a MAT in Art Education: please follow this link: MAT - Art Education.
The Art Education track in the Curriculum and Instruction MEd program is designed to meet the expanding needs of the art teacher.
The MEd degree is designed to meet the expanding needs of the art teacher. Students in the program examine contemporary problems in art education, review recent curriculum developments, study innovations in art education, explore interdisciplinary concepts, and become involved in research problems specific to the art teacher. This degree requires previous certification in art.
The Art Education track in the Curriculum and Instruction MEd program requires 15 credit hours of core courses, including completion of a capstone research project or thesis. In addition, students take 21 credit hours of specialization courses.

**Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**
Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

**College of Graduate Studies Contact Information**
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core (See Program Details Below)
15 Total Credits

- Complete the following:
  - EDG6935 - Introductory Seminar in Teacher Leadership (3)
  - EDG6223 - Curriculum Theory, Organization, and Policy (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EDF6233 - Introduction to Action Research and Analysis of Classroom Practice (3)
  - EDF6635 - Capstone: Action Research in Teacher Leadership (3)

Specialization
18 Total Credits

- Complete all of the following
  - Complete the following:
    - ARE6450 - K-12 Instructional Materials (3)
    - ARE6666 - Arts Advocacy (3)
    - ARE6748 - Advanced Research Seminar in Art Education (3)
    - Course Not Found
    - ARE6905 - Research Trends in Art Education (3)
  - Complete at least 2 of the following:
    - ARE5251 - Art for Exceptionalities (3)
    - ARE5454 - Studio Experiences in Art Education (3)
    - ARE6195 - Teaching Art Appreciation with Interdisciplinary Strategies (3)
    - ARE6748 - Advanced Research Seminar in Art Education (3)
    - ARE6905 - Research Trends in Art Education (3)
  - ART studio courses approved by adviser may also be taken.

Grand Total Credits: 33

Track Details

Core: 15 Credit Hours

* Must be taken in first semester in the program.

**Prerequisites to the Capstone.

Students complete a Capstone Action Research Project EDF 6635 at the end of the program. Students must complete an Intent to Graduate form the semester prior to enrolling in EDF 6635.

- EDG 6935 - Introductory Seminar in Teacher Leadership 3 Credit Hours *
- EDG 6223 - Curriculum Theory, Organization, and Policy 3 Credit Hours
- EDF 6472 - Data-Driven Decision-Making for Instruction 3 Credit Hours **
- EDF 6233 - Introduction to Action Research and Analysis of Classroom Practice 3 Credit Hours **
- EDF 6635 - Capstone: Action Research in Teacher Leadership 3 Credit Hours

Financial Information

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Appointment Line: 407-823-5285
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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

2022-2023 Graduate Catalog
Curriculum and Instruction MEd - Curriculum and Instruction MEd, Curriculum Leadership Track

**Track Website**

https://ccie.ucf.edu/lser/curriculum-and-instruction/

**Track Contact Information**

David Boote PhD
David.Boote@ucf.edu
Telephone: 407-823-4160
ED 222P

**Online Availability**

No

**Track Description**

****This program has temporarily suspended admissions effective Summer 2021****

The Curriculum Leadership track in the Curriculum and Instruction MEd program is designed to meet the advanced knowledge and skill needs of educators in curriculum planning and management.

The Curriculum and Leadership track in the Master of Education (MEd) Curriculum and Instruction program requires 15 credit hours of core courses, including completion of a capstone research project (3 credit hours). In addition, students take 18 credit hours of specialization courses.

**Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

Core (See Program Details Below)
15 Total Credits

- Complete the following:
  - EDG6935 - Introductory Seminar in Teacher Leadership (3)
  - EDG6223 - Curriculum Theory, Organization, and Policy (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EDF6233 - Introduction to Action Research and Analysis of Classroom Practice (3)
  - EDF6635 - Capstone: Action Research in Teacher Leadership (3)

Specialization
18 Total Credits

- Complete all of the following
  - Complete the following:
    - ESE6217 - Curriculum Design (3)
    - ESE6416 - Curriculum Evaluation (3)
    - EGI6245 - Curriculum and Instruction for Teaching Advanced, Gifted, and Talented Learners (3)
    - EDF6259 - Learning Theories Applied to Leadership in Teaching Practice (3)
  - Complete at least 2 of the following:
    - EDF6517 - Perspectives on Education (3)
    - EME5050 - Fundamentals of Technology for Educators (3)
    - EME6602 - Integration of Technology into the Learning Environments (3)
    - EDF6886 - Multicultural Education (3)
  - Other electives as approved by adviser and program coordinator (up to 6 credit hours)

Grand Total Credits: **33**

**Track Details**

**Core: 15 Credit Hours**

* Must be taken in first semester in the program.

** Prerequisites to the Capstone.

Students complete a Capstone Research Project (EDF 6635) at the end of the program. Students must complete an Intent to Graduate form the semester prior to enrolling in EDF 6635.

- EDG 6935 - Introductory Seminar in Teacher Leadership **3 Credit Hours** *
- EDG 6223 - Curriculum Theory, Organization, and Policy **3 Credit Hours**
- EDF 6472 - Data-Driven Decision-Making for Instruction **3 Credit Hours** *
- EDF 6233 - Introduction to Action Research and Analysis of Classroom Practice **3 Credit Hours** **
- EDF 6635 - Capstone: Action Research in Teacher Leadership **3 Credit Hours**

**Independent Learning**

The MEd requires a course-based action research study and completion of a capstone experience.

**Financial Information**

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http://finaid.ucf.edu

2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Curriculum and Instruction MEd - Curriculum and Instruction MEd, Educational Technology Track

Track Website
https://ccie.ucf.edu/lser/curriculum-and-instruction/

Track Contact Information

Glenda Gunter PhD
Associate Professor
glenda.gunter@ucf.edu
ED 322P

Online Availability
No

Track Description

***This program has temporarily suspended admissions effective Summer 2021***

The Educational Technology track in the Curriculum and Instruction MEd program is designed for certified and experienced educators who want to increase their technological skills and become highly skilled at successfully integrating technology into the curriculum as well as develop leadership skills necessary to become site-based technology coordinators in K-12 schools, colleges and universities.

The Educational Technology track in the Master of Education (MEd) in Curriculum and Instruction program requires 15 credit hours of core courses, including completion of a capstone research project (3 credit hours). In addition, students take 15 credit hours of specialization courses.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core (See Program Details Below)
15 Total Credits

- Complete the following:
  - EDG6935 - Introductory Seminar in Teacher Leadership (3)
  - EDG6223 - Curriculum Theory, Organization, and Policy (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EDF6233 - Introduction to Action Research and Analysis of Classroom Practice (3)
  - EDF6635 - Capstone: Action Research in Teacher Leadership (3)

Specialization
15 Total Credits

- Complete all of the following
  - Complete the following:
    - EME6405 - Adapting and Integrating Innovative Technologies in Education (3)
    - EME6507 - Multimedia for Education and Training (3)
    - EME6602 - Integration of Technology into the Learning Environments (3)
    - EME6053 - Teaching and Learning with Emerging Technologies (3)
  - Complete at least 1 of the following:
    - EME6055 - Current Trends in Instructional Technology (3)
    - EME6062 - Research in Instructional Technology (3)
    - EME6613 - Instructional System Design (3)
    - EME6417 - Interactive Online and Virtual Teaching Environments (3)
    - EME6458 - Virtual Teaching and the Digital Educator (3)
    - EME6457 - Distance Education: Technology Process Product (3)

Grand Total Credits: 30

Track Details

Core: 15 Credit Hours

* Must be taken in first semester in the program.

**Prerequisites to the Capstone.

Students complete a Capstone Action Research Project EDF 6635 at the end of the program. Students must complete an Intent to Graduate form the semester prior to enrolling in EDF 6635.

- EDG 6935 - Introductory Seminar in Teacher Leadership 3 Credit Hours *
- EDG 6223 - Curriculum Theory, Organization, and Policy 3 Credit Hours
- EDF 6472 - Data-Driven Decision-Making for Instruction 3 Credit Hours **
- EDF 6233 - Introduction to Action Research and Analysis of Classroom Practice 3 Credit Hours **
- EDF 6635 - Capstone: Action Research in Teacher Leadership 3 Credit Hours

Independent Learning

The MEd requires a course-based action research study and completion of a capstone experience.

Financial Information

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finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Curriculum and Instruction MEd - Curriculum and Instruction MEd, Gifted Education Track

Track Website
https://ccie.ucf.edu/lser/curriculum-and-instruction/

Track Contact Information

Gillian Eriksson PhD
Gillian.Eriksson@ucf.edu
Telephone: 407-823-6493
Education 223M

Online Availability
No

Licensure Disclosure
This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Curriculum-Instruction-Gifted-Ed-MEd.pdf.

Track Description

***This program has temporarily suspended admissions effective Summer 2021***

The Gifted Education track in the Curriculum and Instruction MEd program is designed to meet the advanced knowledge and skill needs of educators who teach diverse gifted and talented students.

The Gifted Education track in the Master of Education (MEd) in Curriculum and Instruction program requires 15-18 credit hours of core courses, including completion of a capstone research project or the thesis option. In addition, students take 18 credit hours of specialization courses.

Total Credit Hours Required: 33-36 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites
Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

Core (See Program Details Below)
12 Total Credits

- Complete the following:
  - EDG6935 - Introductory Seminar in Teacher Leadership (3)
  - EDG6223 - Curriculum Theory, Organization, and Policy (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EDF6233 - Introduction to Action Research and Analysis of Classroom Practice (3)

Specialization
18 Total Credits

- Complete the following:
  - EGI6051 - Understanding the Gifted/Talented Student (3)
  - EGI6245 - Curriculum and Instruction for Teaching Advanced, Gifted, and Talented Learners (3)
  - EGI6246 - Education of Special Populations of Gifted Students (3)
  - EGI6247 - Developing Advanced Programs and Services: Acceleration and Enrichment for Academically and Intellectually Gifted Learners (3)
  - EGI6417 - Guidance and Counseling Strategies for Teachers of Gifted and Talented Individuals (3)
  - EGI6305 - Theory and Development of Creativity (3)

Thesis/Capstone Option
3 - 6 Total Credits

- Complete 1 of the following
  - Thesis
  - Earn at least 6 credits from the following types of courses:
    - IDS 6971 - Thesis Option Student must complete an Intent to Graduate form the semester prior to enrolling in IDS 6971 or EDF 6635.
  - Capstone
  - Complete all of the following
    - Complete the following:
      - EDF6635 - Capstone: Action Research in Teacher Leadership (3)
      - Student must complete an Intent to Graduate form the semester prior to enrolling in IDS 6971 or EDF 6635.

Grand Total Credits: 33 - 36

**Track Details**

* Should be taken in first semester in the program, if possible.

** Prerequisites for enrolling in the Thesis Option (IDS 6971) or Capstone (EDF 6635). Students complete a Thesis Option (6 credit hours) or a Capstone Research Project (3 credit hours) at the end of the program. Student must complete an Intent to Graduate form the semester prior to enrolling in IDS 6971 or EDF 6635.

- EDG 6935 - Introductory Seminar in Teacher Leadership **3 Credit Hours** *
- EDG 6223 - Curriculum Theory, Organization, and Policy **3 Credit Hours**
- EDF 6472 - Data-Driven Decision-Making for Instruction **3 Credit Hours**
- EDF 6233 - Introduction to Action Research and Analysis of Classroom Practice **3 Credit Hours**

**Independent Learning**

The MEd requires a course-based action research study and completion of a capstone experience.

**Financial Information**

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http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Curriculum and Instruction MEd - Curriculum and Instruction MEd, Global, International and Comparative Education Track

Track Website
https://ccie.ucf.edu/lsr/curriculum-and-instruction/

Track Contact Information

Karen Biraimah PhD
karen.biraimah@ucf.edu
Telephone: 407-823-2428
ED 320H

Online Availability

No

Track Description

***This program has temporarily suspended admissions effective Summer 2021***

The Global, International and Comparative Education track in the Curriculum and Instruction MEd is designed for educators who wish to expand their knowledge and skill in international and cross-cultural education setting.

The Global, International and Comparative Education track in the Master of Education (MEd) in Curriculum and Instruction program requires 15 credit hours of core courses, including completion of a capstone research project (3 credit hours). In addition, students take 21 credit hours of specialization courses.

Total Credit Hours Required: 36-39 Credit Hours Minimum beyond the Bachelor’s Degree

Track Prerequisites

Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
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Graduate Admissions

Mailing Address

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core (See Program Details Below)
12 Total Credits

- Complete the following:
  - EDG6935 - Introductory Seminar in Teacher Leadership (3)
  - EDG6223 - Curriculum Theory, Organization, and Policy (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EDF6233 - Introduction to Action Research and Analysis of Classroom Practice (3)

Specialization
21 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF6809 - Introduction to Comparative and International Education (3)
    - SSE5391 - Global Education: Theory and Practice (3)
    - EDS6365 - Education and National Development (3)
    - EDF6886 - Multicultural Education (3)
  - Earn at least 6 credits from the following types of courses:
    - EDG 6775 - Exploring Global Educational Issues in International Contexts 1-3 Credit Hours
    - EEC 6606 - Global Issues in Early Childhood 3 Credit Hours
    - Other graduate courses with the program director’s approval

Thesis/Capstone Option
3 - 6 Total Credits

- Complete 1 of the following
  - Thesis
  - Earn at least 6 credits from the following types of courses:
    - IDS 6971 - Thesis Option Student must complete an Intent to Graduate form the semester prior to enrolling in IDS 6971 or EDF 6635.
  - Capstone
  - Complete all of the following
    - Complete the following:
      - EDF6635 - Capstone: Action Research in Teacher Leadership (3)
      - Student must complete an Intent to Graduate form the semester prior to enrolling in IDS 6971 or EDF 6635.

Grand Total Credits: 36 - 39

Track Details

* Should be taken in first semester in the program, if possible.

** Prerequisites for enrolling in the Thesis Option (IDS 6971) or Capstone (EDF 6635). Students complete a Thesis Option (6 credit hours) or a Capstone Research Project (3 credit hours) at the end of the program. Student must complete an Intent to Graduate form the semester prior to enrolling in IDS 6971 or EDF 6635.

- EDG 6935 - Introductory Seminar in Teacher Leadership 3 Credit Hours *
- EDG 6223 - Curriculum Theory, Organization, and Policy 3 Credit Hours
- EDF 6472 - Data-Driven Decision-Making for Instruction 3 Credit Hours **
- EDF 6233 - Introduction to Action Research and Analysis of Classroom Practice 3 Credit Hours **

Independent Learning

The MEd requires a course-based action research study and completion of a capstone experience.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

2022-2023 Graduate Catalog
**Fellowship Information**

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**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Curriculum and Instruction MEd - Curriculum and Instruction MEd, Intervention Specialist Track**

**Track Website**
https://ccie.ucf.edu/lser/curriculum-and-instruction/

**Track Contact Information**

Mary Little PhD
Professor
mary.little@ucf.edu
Telephone: 407-823-3275
ED 315J

**Online Availability**

No

**Track Description**

***This program has temporarily suspended admissions effective Summer 2021***

The Intervention Specialist Track in the Curriculum and Instruction MEd program provides advanced coursework for educational leaders to use school-based and classroom instructional data to meet the instructional and intervention needs of all students, including at-risk and struggling students, beyond typical, initial classroom instruction within a multi-tiered system of supports.

In addition, this track will provide an advanced multi-disciplinary theoretical approach and applied knowledge base to experienced educators. Coursework focuses on knowledge, skills and competencies for working with students within an intervention framework.

The Intervention Specialist Track is multi-disciplinary and includes coursework in exceptional student education, school psychology, reading education, and math education. The graduate courses provide an opportunity for students to complete the Intervention Specialist track, as well as a graduate certificate, with separate applications required to each program.

The Intervention Specialist track in the Master in Education Teacher Leadership program requires 15 credit hours of core courses, including completion of a capstone research project (3 credit hours). In addition, students take 18 credit hours of specialization courses.

**Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Core (See Program Details Below)
15 Total Credits
- Complete the following:
  - EDG6935 - Introductory Seminar in Teacher Leadership (3)
  - EDG6223 - Curriculum Theory, Organization, and Policy (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EDF6233 - Introduction to Action Research and Analysis of Classroom Practice (3)
  - EDF6635 - Capstone: Action Research in Teacher Leadership (3)

Specialization
15 Total Credits
- Complete all of the following
  - Complete the following:
    - EEX6218 - Diagnostic Assessment and Intervention Planning in Exceptional Education (3)
    - MAE6517 - Diagnosis/Remediation of Difficulties in Mathematics for the Classroom Teacher (3)
    - RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)
    - SPS6700 - Advanced Psychoeducation and Data-Based Decision Making (3)
    - EGI6246 - Education of Special Populations of Gifted Students (3)
  - One elective as approved by the program adviser maybe also be taken

Grand Total Credits: 30

Track Details

Core: 15 Credit Hours
* Must be taken in first semester in the program.
**Prerequisites to the Capstone.

Students complete a Capstone Action Research Project EDF 6635 at the end of the program. Students must complete an Intent to Graduate form the semester prior to enrolling in EDF 6635.
- EDG 6935 - Introductory Seminar in Teacher Leadership 3 Credit Hours *
- EDG 6223 - Curriculum Theory, Organization, and Policy 3 Credit Hours
- EDF 6472 - Data-Driven Decision-Making for Instruction 3 Credit Hours **
- EDF 6233 - Introduction to Action Research and Analysis of Classroom Practice 3 Credit Hours **
- EDF 6635 - Capstone: Action Research in Teacher Leadership 3 Credit Hours

Independent Learning

The MEd requires a course-based action research study and completion of a capstone experience.

Financial Information

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Curriculum and Instruction MEd - Curriculum and Instruction MEd, Supporting High Needs Populations Track

**Track Website**

https://ccie.ucf.edu/lser/curriculum-and-instruction/

**Track Contact Information**

Martha Lue-Stewart PhD
Professor
martha.stewart@ucf.edu
Telephone: 407-823-2036
ED 315S

**Online Availability**

No

**Track Description**

***This program has temporarily suspended admissions effective Summer 2021***

The Supporting High Needs Populations track in the Curriculum and Instruction MEd program is designed to meet the advanced knowledge and skill needs of educators who work in urban settings.

The Supporting High Needs Populations track in the Master of Education Curriculum and Instruction program requires 15 credit hours of core courses, including completion of a capstone research project. In addition, students take 18 credit hours of specialization courses.

**Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

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Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
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TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core (See Program Details Below)
15 Total Credits

- Complete the following:
  - EDG6935 - Introductory Seminar in Teacher Leadership (3)
  - EDG6223 - Curriculum Theory, Organization, and Policy (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EDF6233 - Introduction to Action Research and Analysis of Classroom Practice (3)
  - EDF6635 - Capstone: Action Research in Teacher Leadership (3)

Specialization
18 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF6725 - Critical Issues in the Study of High Needs Populations (3)
    - EDF6155 - Lifespan Human Development and Learning (3)
  - Complete at least 4 of the following:
    - CCJ6485 - Issues in Justice Policy (3)
    - ECW6067 - History of Career Education in the United States (3)
    - EDF6206 - Challenges of Classroom Diversity (3)
    - EDF6886 - Multicultural Education (3)
    - EDG6636 - Impact of Social Contexts on Teaching and Learning (3)
    - EEX6342 - Seminar-Critical Issues in Special Education (3)
    - EGI6246 - Education of Special Populations of Gifted Students (3)
    - RED5147 - Developmental Reading (3)
    - SPS5605 - Building and Improving Relationship and Emotional Intelligence (3)
    - SPS6700 - Advanced Psychoeducation and Data-Based Decision Making (3)

Grand Total Credits: 33

Track Details

Core: 15 Credit Hours

* Must be taken in first semester in the program.
**Prerequisites to the Capstone.

Students complete a Capstone Action Research Project EDF 6635 at the end of the program. Students must complete an Intent to Graduate form the semester prior to enrolling in EDF 6635.

- EDG 6935 - Introductory Seminar in Teacher Leadership 3 Credit Hours *
- EDG 6223 - Curriculum Theory, Organization, and Policy 3 Credit Hours
- EDF 6472 - Data-Driven Decision-Making for Instruction 3 Credit Hours **
- EDF 6233 - Introduction to Action Research and Analysis of Classroom Practice 3 Credit Hours **
- EDF 6635 - Capstone: Action Research in Teacher Leadership 3 Credit Hours

Independent Learning

The MEd requires a course-based action research study and completion of a capstone experience.

Financial Information

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http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Dual Language Graduate Certificate

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/teachered/k-12/world-languages-education/

Program Contact Information
Joyce Nutta, PhD
Professor
joyce.nutta@ucf.edu
Telephone: 407-4823-4341
ED 122M

Is this program available 100% online?
No

Program Description
The Dual Language Graduate Certificate in Teaching and Leadership prepares students with specialized knowledge and skills to teach in a dual language setting. The purpose of this certificate is to provide K-12 teacher and other education professionals with specialized coursework in Dual Language programming. This construct is aimed for students to develop competencies in bilingualism, biliteracy, and multiculturalism. The design of this program is to develop leadership among teachers working or planning to work in a dual language or two-way immersion programs in a K-12 setting. The coursework in this certificate program will allow teachers and administrators to develop expertise in philosophical/ideological principles, pedagogy, and curriculum and program processes for effective biliteracy program development.

The Dual Language Graduate Certificate can be completed in one or more semesters, depending on the semester of entrance. It can also be completed fully online.

Students must consult with their adviser or the program director prior to selecting the six courses for their program. No course substitutions are allowed.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses
18 Total Credits

- Complete at least 6 of the following:
  - SPN6940 - Teaching Methods for the Spanish Classroom (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
  - TSL6143 - Curriculum and Instruction in Dual Language Programs (3)
  - TSL6250 - Applied Linguistics in ESOL (3)
  - TSL6377 - Bilingualism, Multiculturalism, and Biliteracy in the Dual Language Classroom (3)
  - TSL6443 - Assessment in Dual Language Programs (3)
  - TSL6526 - Interdependencies of Language, Culture, and Education for Dual Language Learners (3)

Grand Total Credits: 18

e-Learning Design, Development, and Delivery Graduate Certificate

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/

Program Contact Information
Glenda Gunter PhD
Associate Professor
glenda.gunter@ucf.edu
ED 322P

Is this program available 100% online?
Yes

UCF Online

Please Note: The e-Learning Design, Development and Delivery Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.international.ucf.edu. If you have questions, please consult International Affairs and Global Strategies at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in e-Learning Design, Development and Delivery is designed for educators in K-12 and higher education, trainers, and instructional designers.

The e-Learning Design, Development and Delivery certificate focuses on teaching the design, delivery, and evaluation of high-quality e-learning materials for in-service, preservice teacher and online trainers.

For the Graduate Certificate in e-Learning Professional Development, students complete 15 credit hours of required courses. For the recommended plan of study, noting when each course is offered, refer to the Instructional Technology program website under Plans of Study for graduate certificates.

International students who are in the U.S. and maintaining a U.S. Student Visa are not eligible for this certificate.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
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ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete all of the following
  - EME6613 - Instructional System Design (3)
  - EME6507 - Multimedia for Education and Training (3)
  - EME6457 - Distance Education: Technology Process Product (3)
  - EME6417 - Interactive Online and Virtual Teaching Environments (3)
  - EME6458 - Virtual Teaching and the Digital Educator (3)

- *EME 6417 (fall) must be taken before EME 6458 (spring).

Grand Total Credits: 15

Early Childhood Development and Education MS

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/early-childhood-education/

Program Handbook Link
Early Childhood Development and Education MS

Program Contact Information
Judith Levin, Ed.D.
Senior Lecturer
judith.levin@ucf.edu
Telephone: 407-823-4615
Education 122

Is this program available 100% online?
No
**Program Description**

The Master of Science program in Early Childhood Development and Education (ECDE) is designed to meet the needs of professionals who want to work with young children and their families. The ECDE program delivers relevant, rigorous course work and related academic experiences.

The program is designed for candidates with undergraduate degrees in a wide range of areas either related to early childhood development and education, such as child development, psychology, communication disorders, sociology, nursing, theatre, music or other degrees. The program of study includes advanced professional development in early child development and education for careers with direct and indirect services for young children and families. Direct early education services to young children and families can include homes, schools, and other community settings, such as child care and Head Start. Indirect services can include: child assessment, program evaluation, child care resource and referral, early learning coalitions, community college instruction, and child advocacy. Graduates of this program are encouraged to serve as a bridge among schools and community agencies and to nurture leadership skills in these areas.

In addition to fostering the professional development of previously certified early childhood teachers, this program will also serve as a connection between schools, families, and community agencies and will provide the educational experiences to nurture educational leaders who will work within and across these areas.

The Early Childhood Development and Education MS program requires a minimum of 36 credit hours beyond the bachelor's degree, including 6 credit hours of core courses, 18 credit hours of specialization courses, 6 credit hours of electives, and 6 credit hours of a capstone experience in the form of a thesis or nonthesis/practicum or additional graduate course credit options.

**Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
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Online Application  
Graduate Admissions

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Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

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ETS PPI: 5233
Degree Requirements

Required Courses
24 Total Credits

- Details

Core
6 Total Credits
- Complete the following:
  - EDF6481 - Fundamentals of Graduate Research in Education (3)
  - EDF6401 - Statistics for Educational Data (3)

Specialization
18 Total Credits
- Complete the following:
  - EEC5205 - Programs and Trends in Early Childhood Education (3)
  - EEC6269 - Play Development, Intervention, and Assessment (3)
  - EEC6405 - Home-School-Community Interaction in Early Childhood Education (3)
  - EEC6406 - Guiding and Facilitating Social Competence (3)
  - EEC6606 - Global Issues in Early Childhood (3)
  - EEX6222 - Observation and Assessment of Young Children (3)

Elective Courses (Other courses of interest with consent of faculty may be selected)
6 Total Credits
- Complete at least 2 of the following:
  - EEC6216 - Communicative Arts in Early Childhood Education (3)
  - EEX6017 - Typical and Atypical Applied Child Development (3)
  - EEX5702 - Planning Curriculum for Pre-Kindergarten Children with Disabilities (3)
  - EEX5750 - Communication with Parents and Agencies (3)
  - MHS6403 - Family Play Therapy (3)
  - MHS6421 - Foundations of Play Therapy Theories and Techniques for Individuals and Groups (3)
  - SOW6726 - Social Work Practice with Children from Birth to Age Five and their Families (3)

Thesis/Nonthesis Option
6 Total Credits
- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EEC 6971 Thesis
  - Nonthesis Option
    - Complete 1 of the following
      - Earn at least 6 credits from the following:
        - EEC6947 - Practicum in Child, Family, and Community Sciences (6 - 99)
      - Earn at least 6 credits from the following types of courses:
        - 6 Credit Hours of approved electives with a written comprehensive examination

Grand Total Credits: 36

Program Details

Independent Learning
A thesis, practicum, or a written comprehensive examination is required as the culminating experience for the program.

Financial Information
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2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education EdS

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Program Contact Information

Graduate Affairs
cciegrad@ucf.edu
Telephone: 407-823-5369
ED 115

Is this program available 100% online?
No

Program Description

The Specialist in Education program is designed with two tracks for students: the Master’s + 30 Track and the School Counseling Track. The specialist program provides a foundation of advanced graduate course work but is not a "terminal" academic degree. The Education EdS is an advanced graduate program providing opportunities for master's graduates to enhance their professional preparation and/or preparation for the doctorate (either the EdD or the PhD) by completing additional graduate coursework that results in an earned degree.

The Master’s + 30 Track is an advanced graduate program for post master’s students. It is designed for professionals who wish to increase their knowledge to prepare for doctoral work, to add expertise in their current field of teaching, or to add an additional field of expertise.

The Specialist in Education (EdS)-School Counseling track in the CACREP accredited Counselor Education Program prepares students for certification as a professional school counselor in pre-K through postsecondary school settings. The Specialist in Education (EdS)-School Counseling track is designed for practicing educators/students who have a master's degree in education. The EdS in Education School Counseling Track prepares students to work as professional school counselors in Pre-K through postsecondary school settings.

Please scroll to the bottom of this page for further details on these Tracks.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Education EdS - Education EdS, Master's +30 Track**

**Track Website**
https://ccie.ucf.edu/teachered/secondaryed/

**Track Handbook**
Education EdS

**Track Contact Information**

Randall Hewitt PhD
Associate Professor
randall.hewitt@ucf.edu
Telephone: 407-823-4949
ED 122-P

**Online Availability**

No

**Track Description**

This program has temporarily suspended admissions effective Summer 2020

The Education EdS, Master's +30 Track is an advanced graduate program for post-master's students. It is designed for professionals who wish to increase their knowledge to prepare for doctoral work, add expertise in their current field of teaching, or add an additional field of expertise.

The program prepares educators who are interested in teaching in a college, university or community college, or in leading curriculum and instructional improvement in a school or school district, higher education, or military or business settings.

The Master's + 30 track in the Education EdS program requires 30-33 credit hours beyond the master's degree, including advanced foundational core courses, specialization courses, and a capstone seminar.

**Total Credit Hours Required: 30-33 Credit Hours Minimum beyond the Master's Degree**

**Track Prerequisites**

A master's degree in a related field of study.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
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2022-2023 Graduate Catalog
Track Details

Required Courses: 30-33 Credit Hours
Advanced Foundational Core: 13-16 Credit Hours

* Must be taken in the first semester of the program.

** Student completes either a Capstone Research Project or Thesis at the end of the program.

- EDE 6933 - Introductory Seminar in Elementary Education 1 Credit Hours * For students with a specialization in Elementary Education or Reading Education
- ESE 6935 - Introductory Seminar in Secondary Education 1 Credit Hours * For students with other specializations
- EDP 7517 - Facilitating Learning, Development and Motivation 3 Credit Hours
- EDF 7457 - Data, Assessment, and Accountability 3 Credit Hours
- EDA 7101 - Organizational Theory in Education 3 Credit Hours
- EDF 6635 - Capstone: Action Research in Teacher Leadership 3 Credit Hours ** or
- IDS 6971 - Thesis 6 Credit Hours

Capstone: 2 Credit Hours

- EDE 6935 - Capstone Seminar in Elementary Education 2 Credit Hours For students with a specialization in Elementary Education or Reading Education
- ESE 6936 - Capstone Seminar in Secondary Education 2 Credit Hours For students with other specializations

Specialization: 15 Credit Hours

For the specialization, students must complete 15 credit hours of specialization courses from one of the following UCF College of Community Innovation and Education programs. Courses are selected with approval of the student's adviser.

- One of the tracks in the Curriculum and Instruction MEd program
- The specialization or electives in another MEd program
- The concentration in the Education EdD program
- One of the tracks in the Education PhD program

Independent Learning

The EdS requires a small-scale research study (if co-enrolled in a doctoral program) or completion of a capstone experience such as an internship, research report, or thesis (if this is a "terminal" program for the student).

Financial Information

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education EdS - Education EdS, School Counseling Track

Track Website
https://ccie.ucf.edu/cesp/counselored/school-counseling/
Track Contact Information

Stacy Van Horn, PhD
Senior Lecturer
Stacy.VanHorn@ucf.edu
Telephone: 407-823-2401
ED 322M

Online Availability
No

Licensure Disclosure
The Specialist in Education (EdS)-School Counseling track has potential ties to state-regulated professional certification in the field. Students enrolled in the School Counseling track should remain in close contact with their advisor to keep informed of any programmatic changes implemented to comply with new state requirements. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Education-School-Counseling-EdS.pdf.

Track Description
The Specialist in Education (EdS)-School Counseling track in the CACREP accredited Counselor Education Program prepares students for certification as a professional school counselor in pre-K through postsecondary school settings. The Specialist in Education (EdS)-School Counseling track is designed for practicing educators/students who have a master's degree in education. As part of the program's pragmatic approach to preparing counselors, in addition to classroom studies, students in the School Counseling track may complete their first clinical experience (practicum) in either a public school or in the UCF Community Counseling and Research Center.

The UCF Community Counseling and Research Center serves as a hub for training and research in the program, with graduate students providing counseling services to children, adolescents, and adults through the provision of individual, couples, and family therapy. The CCRC serves more than 1400 individuals, couples, and families in the central Florida community. The Specialist in Education (EdS)-School Counseling track requires a minimum of 60 credit hours beyond the bachelor's degree, including 6 credit hours of core courses, 33 credit hours of specialization, 12 credit hours of professional clinical experiences, and 6 credit hours of electives.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
Evidence of a master's degree in education.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses
39 Total Credits

- Details

Core
6 Total Credits

- Complete the following:
  - EDF6155 - Lifespan Human Development and Learning (3)
  - EDF6481 - Fundamentals of Graduate Research in Education (3)

Specialization
33 Total Credits

- Complete the following:
  - MHS6220 - Individual Psychoeducational Testing I (3)
  - MHS6400 - Theories of Counseling and Personality (3)
  - MHS6401 - Techniques of Counseling (3)
  - MHS6420 - Foundations of Multicultural Counseling (3)
  - MHS6500 - Group Procedures and Theories in Counseling (3)
  - SDS6347 - Career Development (3)
  - SDS6411 - Counseling with Children and Adolescents (3)
  - SDS6620 - Coordination of Comprehensive Professional School Counseling Programs (3)
  - SPS6815 - Legal and Ethical Issues in Professional School Counseling (3)
  - MHS5005 - Introduction to the Counseling Profession (3)
  - SDS6622 - Career and College Readiness in Schools PK-12 (3)

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  Students must select four electives in their specialization as approved by their adviser.

Professional Clinical Experiences
9 Total Credits

- Complete all of the following
  - The clinical experiences are comprised of two sections, Practicum and Internship. Both are experiential in nature and are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program to their work with actual clients and students. The practicum is conducted either on campus in the UCF Community Counseling and Research Center or at one of the CCRC's partner schools in the community. Internship, which is usually completed in one semester (for 6-credit hours) is conducted at various schools around central Florida. The Internship can be divided into two semesters.
  - Complete the following:
    - MHS6803 - Practicum in Counselor Education (3)
  - Prerequisites for MHS 6803 - Practicum in Counselor Education are as follows: MHS 5005, MHS 6400, MHS 6401, MHS 6500, and SPS 6815. MHS 6420 and SDS 6411 are also pre or co-requisites for MHS 6803. A minimum of 27 credit hours are required prior to beginning the practicum.
  - Earn at least 6 credits from the following:
    - SDS6947 - Internship in Professional School Counseling (1 - 6)
  - The prerequisites for SDS 6947 - Internship in Professional School Counseling include SDS 6620 and earning a "B" or better in MHS 6803.

Grand Total Credits: 60
Additional Program Requirements

- Achieve at least a GPA of 3.0 throughout the degree program.
- Achieve a "B" or better in MHS 5005, MHS 6401, MHS 6803, and SDS 6947.
- Complete a total of 700 hours of clinical experiences, 100 of which will be in the UCF Community Counseling and Research Center (or an area school) and 600 of which are field-based experiences to take place in a K-12 school in Central Florida.
- Complete a portfolio and receive approval by Counselor Education faculty.
- Complete a professional exit exam.
- Given the experiential, competency, and performance-based nature of the courses taken by Counselor Education students, students are typically limited to taking a maximum of three (3) courses per semester (with 2 semesters in the School Counseling Track that do include 4 courses). However, if students believe that they can verify a need to take more than three courses, they should consult with their advisor for additional guidance. Students who have not received prior approval and who register for more than three courses per semester will be administratively dropped from any courses over the maximum allowed.

DOE Certification - 9 Credit Hours

(EdS students need to have a Master's in Education (MEd) degree in order to waive the following education courses):

- TSL 5085 - Teaching Language Minority Students in K-12 Classrooms 3 Credit Hours
- RED 5147 - Developmental Reading 3 Credit Hours
- EDG 6415 - Principles of Instruction and Classroom Management 3 Credit Hours

Independent Learning

Practica and internships are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program. The internship experience provides students with the practical experience of facilitating a comprehensive, professional school counseling program in a school setting (e.g., leading classroom guidance lessons, facilitating group counseling, providing individual counseling services).

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education PhD

College

College of Community Innovation and Education

Department

Learning Sciences & Educational Research

Program Website

https://ccie.ucf.edu/education-phd/

Program Handbook Link

Education PhD
Program Contact Information

Graduate Affairs
cciegrad@ucf.edu
Telephone: 407-823-5369
ED 115

Is this program available 100% online?
No

Program Description

The Education PhD program prepares students for careers in teaching positions in research universities. The program offers the following tracks: Counselor Education, Exceptional Education, Instructional Design and Technology, Learning Sciences, Mathematics Education, Methodology, Measurement and Analysis, TESOL, and Teaching, Learning and Development. Please scroll to the bottom of this page for further details on these tracks.

The PhD in Education is a research-oriented degree appropriate for those who seek positions in the professoriate or in school districts, businesses, industry, educational agencies and other educational settings that require a strong research base. It is the intent of this program to be interdisciplinary, allowing flexibility for students who will work in research clusters and learning communities with faculty on education-related research.

Programs of study can be designed for those who seek faculty positions in a research university or research-oriented education positions in business and industry.

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Program Details

This section describes the elements of the curriculum that are in common for all of the tracks. The internship requirement is common to most of the tracks but not all, and more detail is provided on the internship in each specialization section.

Required Courses
Core: 24 Credit Hours

- IDS 7501 - Issues and Research in Education 3 Credit Hours
- IDS 7500 - Seminar in Educational Research 1-3 Credit Hours
  (variable credit, repeated for a total of 6 credit hours)
- EDF 7475 - Qualitative Research in Education 3 Credit Hours
- EDF 7403 - Quantitative Foundations of Educational Research 3 Credit Hours
- EDF 7463 - Analysis of Survey, Record, and Other Qualitative Data 3 Credit Hours
- IDS 7502 - Case Studies in Research Design 3 Credit Hours or one of the approved research electives from group A:
  - EDF 7406 - Multivariate Statistics in Education 3 Credit Hours

Group A

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling in Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours

Group B

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling in Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours

Specialization and elective hours vary by track.
Internship: 3 Credit Hours

Specialization in all tracks may include a professional internship.

Dissertation: 15 Credit Hours

Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Candidacy

To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. Students must be enrolled in the university during the semester an examination is taken.

The following are required to be admitted to candidacy and enroll in dissertation hours:

- Completion of all course work, except for dissertation hours.
- Successful completion of the candidacy examination.
- Successful defense of the written dissertation proposal.
- The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars.
- Submission of an approved program of study.

Candidacy Examinations

All PhD candidates will be required to complete two examinations.

- Research in the Specialization—8-hour written examination.
- Specialization—3-hour oral examination.

Independent Learning

The dissertation fulfills the independent learning requirement.

Education PhD - Education PhD, Communication Sciences and Disorders Track
**Track Contact Information**

N/A

**Online Availability**

No

**Track Description**

**This program is no longer accepting applications effective Summer 2017.**

The Communication Sciences and Disorders track in the Education PhD program is designed specifically for those who wish to pursue careers as scholars, teachers and leaders in the area of school speech-language pathology with a content focus on language disorders and literacy.

The Communication Sciences and Disorders track in the Education PhD program is designed specifically for those who wish to pursue careers as scholars, teachers and leaders in the area of school speech-language pathology with a content focus on language disorders and literacy. The program prepares doctoral-level professionals to serve as university professors in academic or clinical course work and supervisors or directors of school programs at district, state or national levels. The emphasis is on developing expertise in conducting research to promote evidence-based practice and in collaborating with professionals from a variety of related disciplines.

The Communication Sciences and Disorders track in the Education PhD program requires a minimum of 81 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 18 credit hours of specialization courses, 9 credit hours of electives, and 24 credit hours of dissertation. In addition, the internship in this track requires 2 credit hours in university teaching, 2 credit hours in clinical supervision, and 2 credit hours of professional development. All students must complete the candidacy examination.

**Total Credit Hours Required: 81 Credit Hours Minimum beyond the Master's Degree**

**College of Graduate Studies Contact Information**

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### Degree Requirements

#### Required Courses
39 Total Credits

- **Details**

  - **Core**
    24 Total Credits
    - Complete all of the following
      - Earn at least 6 credits from the following:
        - IDS7500 - Seminar in Educational Research (1 - 99)
      - Complete the following:
        - IDS7501 - Issues and Research in Education (3)
        - EDF7475 - Qualitative Research in Education (3)
        - EDF7403 - Quantitative Foundations of Educational Research (3)
        - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
        - IDS7502 - Case Studies in Research Design (3)
        - EDF7406 - Multivariate Statistics in Education (3)
    - IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Program Details
    - EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Program Details

  - **Specialization**
    15 Total Credits
    - Complete all of the following
      - Complete the following:
        - SPA6843 - Severe Language-Based Reading and Writing Disabilities (3)
        - SPA7490 - Advanced Studies in Language Disorders (3)
        - Course Not Found
        - SPA7495 - Doctoral Seminar II: Spoken and Written Language Disorders (3)
        - IDS7657 - Professional Collaboration Around Language Issues (3)
      - Earn at least 3 credits from the following types of courses:
        - SPA 7493 - Advanced Studies in School Speech-Language Pathology

#### Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  - Advanced course work in Reading - 3 Credit Hours
  - Advanced course work in Exceptional Education - 3 Credit Hours
  - Additional course work in Teaching English to Speakers of Other Languages - 3 Credit Hours

#### Dissertation
24 Total Credits

- Earn at least 24 credits from the following types of courses:
  - Dissertation Research
    - Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

#### Internship
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - Specialization in all tracks must include a professional internship (minimum of 6 credit hours). In the Communication Sciences and Disorders Track, however, students must complete a three-part internship: - University teaching 2 Credit Hours - Clinical supervision 2 Credit Hours - Professional development 2 Credit Hours

**Grand Total Credits:** 78
Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

Candidacy

To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken.

The following are required to be admitted to candidacy and enroll in dissertation hours:

- Completion of all course work, except for dissertation hours.
- Successful completion of the candidacy examination.
- Successful defense of the written dissertation proposal.
- The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars.
- Submittal of an approved program of study.

Candidacy Examinations

All PhD candidates will be required to complete two examinations.

Please note that there may be variations in length of exam time and content based on the respective requirements of each track.

- Research in the Specialization—8-hour written examination.
- Specialization—3-hour oral examination.

Independent Learning

The dissertation satisfies the independent learning requirement.

Education PhD - Education PhD, Counselor Education Track

Track Website

https://ccie.ucf.edu/cesp/counselored

Track Handbook

Education PhD

Track Contact Information

Ann Shillingford PhD
Associate Professor
Dr-S@ucf.edu
EDC 322 Q
Online Availability
No

Track Description
The CACREP Accredited Counselor Education track in the Education PhD program is designed specifically for those who wish to pursue careers as counselor educators at the university level or as supervisors in schools or agencies. The Counselor Education PhD program offers courses and supervision that emphasize competence in teaching adult learners, counseling practice, clinical supervision, research/scholarship, and leadership/advocacy.

As part of the program's pragmatic approach to preparing counselor educators, in addition to classroom studies, all doctoral students complete clinical and supervisory experiences in the UCF Community Counseling and Research. The UCF Community Counseling and Research Center serves as a hub for training and research in the program, with doctoral students providing (a) counseling services to children, adolescents, and adults through the provision of individual, couples, and family therapy and (b) supervisory services to master's students during their practicum. The CCRC serves more than 1400 individuals, couples, and families in the central Florida community. Our programs objectives are centered on a primary goal, which is the education of outstanding counselor educators prepared to assume leadership roles in diverse settings.

The Counselor Education track in the Education PhD program requires a minimum of 69 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 21 credit hours of specialization courses, 15 credit hours of dissertation, and 9 credit hours of internship. All students must also complete the candidacy examination.

Total Credit Hours Required: 69 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
A master's degree in Counseling (or a closely related field) and master's level competency in educational research and statistics.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

**Required Courses**

45 Total Credits

- **Core**
  - Complete all of the following
    - Earn at least 6 credits from the following:
      - IDS7500 - Seminar in Educational Research (1 - 99)
    - Complete the following:
      - IDS7501 - Issues and Research in Education (3)
      - EDF7475 - Qualitative Research in Education (3)
      - EDF7403 - Quantitative Foundations of Educational Research (3)
      - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
      - IDS7502 - Case Studies in Research Design (3)
      - EDF7406 - Multivariate Statistics in Education (3)

- **Specialization**
  - Complete the following:
    - MHS7406 - Advanced Theories in Counseling (3)
    - MHS7801 - Advanced Practicum in Counselor Education (3)
    - MHS7700 - Literature and Leadership in Counselor Education (3)
    - MHS7311 - Scholarship and External Funding in Counselor Education (3)
    - MHS7611 - Supervision in Counselor Education (3)
    - MHS7730 - Research Seminar in Counselor Education (3)
    - MHS7497 - Advanced Multiculturalism in Counseling (3)

- **Required Internship**
  - 9 Total Credits
    - Complete all of the following
      - Earn at least 6 credits from the following:
        - MHS7840 - Internship in Counselor Education (3)
      - Complete the following:
        - MHS7808 - Internship in Counseling Supervision (3)

- **Dissertation**
  - 15 Total Credits
    - Earn at least 15 credits from the following types of courses:
      - Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

**Candidacy**

0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required candidacy examinations. Candidacy examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester the candidacy examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination (both written and oral). - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

**Candidacy Examinations**

0 Total Credits

- All PhD candidates will be required to complete a candidacy examination. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. For the Counselor Education track in the Education PhD, there are five examination foci, each of which have a written component and a verbal defense component: - Counseling in Counselor Education. - Teaching in Counselor Education. - Supervision in Counselor Education. - Research & Scholarship in Counselor Education. - Leadership & Advocacy in Counselor Education. For more information on the candidacy exams, refer to the Counselor Education PhD Handbook.

Grand Total Credits: 69
Track Details

Independent Learning
The dissertation satisfies the independent learning requirement.

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Fellowship Information
Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

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finaid@ucf.edu
http://finaid.ucf.edu

Education PhD - Education PhD, Early Childhood Track

Track Website
https://ccie.ucf.edu/teachered/early-childhood-education/

Track Contact Information
Judith Levin, EdD
Associate Lecturer
judith.levin@ucf.edu
Telephone: 407-823-4615
Education 122

Online Availability
No

Track Description
This program has temporarily suspended admission effective Fall 2020.

The Early Childhood track in the Education PhD program requires a minimum of 60 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 15 credit hours of specialization courses, 6 credit hours of independent study, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
A master's degree in a related field of study.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
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2022-2023 Graduate Catalog
Degree Requirements

Required Courses
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)
  - IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Program Details
  - EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Program Details

Specialization Courses
15 Total Credits

- Complete the following:
  - EEC7058 - Theoretical Foundations of Early Childhood (3)
  - EEC7673 - Early Childhood: Professional Publishing and Grant Writing (3)
  - EEC7055 - Advocacy, Public Policy, and Program Evaluation (3)
  - EEC7409 - Current Trends in Child, Family, and Community Sciences (3)
  - EEC7676 - Critical Analysis of Early Childhood Research (3)

Required Internship
6 Total Credits

- Complete the following:
  - EEC7945 - Early Childhood: Internship in Teaching and Supervision (3)
  - EEC7948 - Early Childhood: Internship in Research (3)

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - Dissertation Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submittal of an approved program of study.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 60
Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

The dissertation satisfies the independent learning requirement.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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https://funding.graduate.ucf.edu

Fellowship Information

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UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Education PhD - Education PhD, Elementary Education Track

Track Website
https://ccie.ucf.edu/teachered/elementary-education/

Track Contact Information

Sherron Roberts EdD
Professor
sherron.roberts@ucf.edu
EDU 315U

Online Availability

No
**Track Description**

This program has temporarily suspended admission effective Fall 2020.

The Elementary Education track in the Education PhD program is designed to provide further education for those aspiring to work in the area of education at the post-secondary level (four-year colleges and/or research universities).

The program permits students to concentrate their doctoral study in either a field of emphasis, such as science, mathematics, literacy and social studies, or to create an interdisciplinary focus, such as mathematics-science or reading-social studies. The program of study is most appropriate for educators who can create, analyze and synthesize educational studies and for educators seeking employment in settings requiring a strong research base. In contrast to the EdD, the doctoral program relies on students who progress through their program of study in cohorts and who are full members of the learning community of the College of Community Innovation and Education. The program includes a strong philosophical base, research seminars requiring one-on-one work with faculty members, cluster seminars requiring work with several faculty members in interdisciplinary research projects, and long-term mentoring via supervised internships.

The Elementary Education track in the Education PhD program requires a minimum of 60 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 6 credit hours of specialization courses, 12 credit hours of electives, 3-6 credit hours of internship, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

**Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree**

**Track Prerequisites**

A master's degree in a related field of study, including one Graduate Curriculum course, and master's level competency in educational research and statistics.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Required Courses
30 Total Credits

- Core
24 Total Credits

  - Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)
  - IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Program Details EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Program Details

Specialization
6 Total Credits

  - Earn at least 6 credits from the following types of courses:
Philosophical Foundations for Studies in Education 3 Credit Hours

Writing for Professional Publication in Education 3 Credit Hours

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  Areas of emphasis: four additional courses in one or more areas including Science Education, Literacy Education, Technology Education, or Arts Education with one course from outside the college in a related field of study (12 credit hours minimum).

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  EDE 7980 - Dissertation Research
  Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Required Internship
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  EDE 6946 Elementary Education Internship
  Depending on the student’s experiential background, the program of study requires three to six variable credit hours of supervised internships. Often elementary teachers seeking the PhD have served as successful supervising teachers to undergraduate interns. If this is not the case, the adviser may seek to have the doctoral student take three credit hours to serve as a supervised internship coordinator at the university level. Additionally, students interested in long-term goals related to research may want to use the variable credit hours to accumulate a minimum of 250 hours as a supervised intern working for an educational researcher. Most likely, since our doctoral students' career goals will align with the professoriate, students will be required to teach one university course with supervision and feedback from an established professor. The adviser/program coordinator will determine the kind of internship and the number of semester hours needed. These internship experiences are highly valued and set the candidate apart from other applicants as they seek employment at the college and university level.

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: **60**

2022-2023 Graduate Catalog
**Track Details**

**Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)**

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

**Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)**

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
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finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Education PhD - Education PhD, Exceptional Education Track**

**Track Website**

https://ccie.ucf.edu/teachered/exceptional-student-education/

**Track Contact Information**

Lisa Dieker PhD
Pegasus Professor
ldieker@ucf.edu
Telephone: 407-823-3885
ED 315M

**Online Availability**

No
Track Description

The Exceptional Education track in the Education PhD program is designed to prepare highly competent doctoral-level professionals to assume leadership positions in teaching, research and service in the area of special education.

The Exceptional Education track is a challenging program of study. The program focuses on developing the qualifications to conduct research, implement best practices based on research, and evaluate new programs and projects that serve students with disabilities.

The Exceptional Education track in the Education PhD program requires a minimum of 60 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 15 credit hours of specialization courses, 6 credit hours of internship, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites

A master's degree in a closely related field.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
39 Total Credits

- Core Courses
  24 Total Credits
    - Complete all of the following
      - Earn at least 6 credits from the following:
        - IDS7500 - Seminar in Educational Research (1 - 99)
      - Complete the following:
        - IDS7501 - Issues and Research in Education (3)
        - EDF7475 - Qualitative Research in Education (3)
        - EDF7403 - Quantitative Foundations of Educational Research (3)
        - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
        - IDS7502 - Case Studies in Research Design (3)
        - EDF7406 - Multivariate Statistics in Education (3)

    - IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Program Details
    - EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Program Details

- Specialization Courses
  15 Total Credits
    - Complete the following:
      - EEX7936 - Current Issues Trends in Special Education (3)
      - EEX7527 - Professional Writing Grant Writing in Special Education (3)
      - EEX7766 - Technology Research Training in Special Education (3)
      - EEX7428 - Personnel Preparation: Special Education (3)
      - EEX7320 - Program Evaluation and Planning in Special Education (3)

- Dissertation
  15 Total Credits
    - Earn at least 15 credits from the following types of courses:
      - EEX 7980 - Dissertation Research
        Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

- Internship
  6 Total Credits
    - Complete the following:
      - EEX7865 - Internship in College Instruction in Special Education (3)
      - EEX7866 - Internship in Practicum Supervision in Special Education (3)

- Candidacy
  0 Total Credits
    - To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

- Candidacy Examinations
  0 Total Credits
    - All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 60
Track Details

**Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)**

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

**Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)**

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

**Independent Learning**

The dissertation satisfies the independent learning requirement.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Education PhD - Education PhD, Higher Education Track**

**Track Website**

https://ccie.ucf.edu/elhe/higher-education/

**Track Contact Information**

**Thomas Cox EdD**

Associate Professor
thomas.cox@ucf.edu
ED 315
**Online Availability**

No

**Track Description**

**This program has temporarily suspended admission effective Fall 2020.**

The Higher Education track in the Education PhD program is designed for applicants who have extensive experience as administrators or staff in postsecondary institutions who want to pursue careers as scholars and leaders.

A doctoral degree in this track will broaden the analytical skills necessary to contribute to the advancement of the field of higher education through research, administration and teaching. The students in this program are considered future leaders interested in intensive study of the organizational and policy issues influencing the diverse sector comprising contemporary American postsecondary education.

The Higher Education track in the Education PhD program requires 66 credit hours beyond the master's degree. The curriculum includes 24 credit hours of core courses, 27 credit hours of specialization courses, and 15 credit hours of dissertation.

**Total Credit Hours Required: 66 Credit Hours Minimum beyond the Master's Degree**

**Track Prerequisites**

A master's degree in a closely related field from a regionally accredited institution.

Evidence of a minimum of one year full-time or two years part-time professional higher education work experience.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

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PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Required Courses
51 Total Credits

- **Details**

- **Core**
  24 Total Credits
  
  - Complete all of the following
    
    - Earn at least 6 credits from the following:
      
      - IDS7500 - Seminar in Educational Research (1 - 99)
    
    - Complete the following:
      
      - IDS7501 - Issues and Research in Education (3)
      - EDF7475 - Qualitative Research in Education (3)
      - EDF7403 - Quantitative Foundations of Educational Research (3)
      - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
      - IDS7502 - Case Studies in Research Design (3)
      - EDF7406 - Multivariate Statistics in Education (3)
    
    - IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Program Details
    
    - EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Program Details

- **Specialization**
  27 Total Credits

  - Complete all of the following
Complete the following:
- EDH7401 - Higher Education and Public Policy (3)
- EDH7934 - Higher Education, Research, and Professional Writing Seminar (3)
- EDH7066 - Higher Education: Philosophical/Historical Perspectives (3)
- EDH7508 - Finance in Higher Education (3)
- EDH7665 - Higher Education Leadership (3)
- EDH7636 - Organizational Theory and Practices in Higher Education (3)

Earn at least 3 credits from the following types of courses:
- EDH 7047 - Diversity in Issues Higher Education

Complete at least 1 of the following:
- EDH7631 - Managing change, conflict, and stability in Higher Education (3)
- EDH7207 - Curriculum, Instruction, and Distance Learning in Higher Education (3)
- EDH7366 - Assessment Practices in Higher Education (3)
- EDH7208 - International Perspectives of Higher Education (3)

Candidacy Examination
0 Total Credits
- Candidacy examinations will be scheduled near the tenth week of the fall and spring semesters; summer exams will not be offered. The exams are: - Part 1. Written examination (submitted through webcourses) - Part 2. Oral examination Evidence of the following are required to be eligible to complete the doctoral comprehensive examination in the Education PhD program, Higher Education track: - Currently enrolled in the university during the semester any comprehensive examination is taken. - Submission of an approved program of study (overall GPA 3.0 or greater on all graduate work). - Completion of most course work. (Students may only take exams when only 2-3 semesters of course work remain. This statement does not refer to dissertation hours.) - In consultation with program faculty, the dissertation advisory committee is formed, paperwork filed, and approved. (Committee consists of four members: a minimum of three approved CCIE graduate faculty and one approved graduate faculty scholar or CCIE faculty.) - Submission of an approved doctoral comprehensive examination application by the stated deadline. - Fulfill any program deadlines for submitting comprehensive examination content-related materials (topics, questions, etc.) to the program coordinator by the stated deadline. (See program website for details HEPS: https://ccie.ucf.edu/elhe/higher-education).

Candidacy
0 Total Credits
- Candidacy is the stage of doctoral studies when students focus exclusively on planning, researching and writing their proposal and dissertation. To enter candidacy for the Education Ph.D. program, Higher Education track, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. In addition, evidence of the following are required to be admitted to candidacy and enroll in dissertation hours at least one week before the first day of classes for which the students wishes to enroll in dissertation hours: - Submission of an approved program of study. - Completion of all course work, except for dissertation hours. - Successful completion of all parts of the candidacy examinations. - In consultation with program faculty, the dissertation advisory committee is formed, paperwork filed, and approved. (Committee consists of four members: a minimum of three approved CCIE graduate faculty and one approved graduate faculty scholar or CCIE faculty.) Note: Once students enter Candidacy, they must enroll in a minimum of three dissertation hours (see below) every semester (including summers), until they graduate from the program.

Dissertation
15 Total Credits
- Earn at least 15 credits from the following types of courses:
  - Dissertation Research Registration for dissertation hours is not permitted until the student is admitted to Candidacy. Doctoral students must work with their doctoral adviser/major professor to prepare a proposal and present and defend the final research dissertation to their dissertation committee. Once the proposal is completed and approval is secured from the UCF Institutional Review Board (IRB), students conduct research and submit and defend the final research dissertation to their dissertation committee. Required Documentation - Required Documentation During Dissertation Stage - All items listed are necessary to fulfill the requirements to graduate. Application to Defend Dissertation Proposal - Dissertation Proposal Approval - Application for IRB Approval of Research Defense - Dissertation Announcement - Dissertation Approval - Application to Graduate - All necessary requirements of the College of Graduate Studies for graduation

Grand Total Credits: 66
Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling in Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling in Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

Independent Learning

The dissertation satisfies the independent learning experience.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education PhD - Education PhD, Instructional Design and Technology Track

Track Website
https://ccie.ucf.edu/lser/instructional-design-and-technology/

Track Contact Information

Atsushi Hirumi PhD
Associate Professor
hirumi@ucf.edu
ED 320-F
Online Availability
No

Track Description
The Instructional Design and Technology track in the Education PhD program prepares students for teaching and research in the field of instructional design and technology, instructional systems, educational technology, and e-learning in professions such as university professor, corporate directors of training and human resources, and corporate researchers.

The focus is on the design of conventional in-class, online and hybrid training and educational programs, and the application of appropriate instructional technologies to facilitate adult learner. For more information about the Instructional Design and Technology track, visit education.ucf.edu/insttech.

The Instructional Design and Technology track in the Education PhD program requires a minimum of 60 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 9 credit hours of specialization courses, 9 credit hours of electives, 3 credit hours of internship, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
A master's degree in a closely related field.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
33 Total Credits

- Details

Core
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)
- IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Program Details
- EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Program Details

Specialization
9 Total Credits

- Complete the following:
  - IDS6504 - Adult Learning (3)
  - IDS6503 - International Trends in Instructional Systems (3)
  - EME7634 - Advanced Instructional Systems Design (3)

Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  - Cognate or elective; approved by adviser

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - EME 7980 - Dissertation Research
  
  Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Required Internship
3 Total Credits

- Complete the following:
  - EME7942 - Doctoral Internship in Educational Technology (3)

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Submission and completion of approved program of study, except for dissertation hours. - Successful completion of the candidacy examination. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Satisfactory progress toward the independent learning requirements as evidenced by the annual accomplishments and activities report.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 60
Track Details

**Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)**

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

**Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)**

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

**Independent Learning**

During their program of study, PhD students are required to meet the following requirements for independent learning to enter candidacy, including:

- Submitting a manuscript that is deemed appropriate by at least one program faculty member for publication in a peer-reviewed journal.
- Presenting research in at least one international, national or state conference.
- Presenting at university and/or college research symposiums annually.
- Providing service to professional organization, community partner, and/or program.
- Documenting and presenting independent learning accomplishments and activities along with development of an individual research agenda deemed satisfactory by at least two or more program faculty on an annual basis.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Education PhD - Education PhD, Learning Sciences Track**

**Track Website**

https://ccie.ucf.edu/education-phd/
Track Contact Information

Michelle Taub PhD
Assistant Professor
michelle.taub@ucf.edu
HPAII 238-A

Online Availability

No

Track Description

The Learning Sciences track is an interdisciplinary track within the Education PhD that will expose students to key components of research on learning with additional training on using big data for research on learning analytics and data science for focus on learning for both humans and machines. The track will provide learning opportunities across disciplines (i.e., cognitive science, computer science, data science, education, psychology, statistics) for graduate students at UCF who seek careers in both academia and industry. The program will contain the core courses from the Education PhD, but requires at least 9 hours of required specialization credits in specific Learning Sciences courses and at least 6 hours of required elective credits, providing students the opportunity to earn a certificate in a related field of human-machine learning, if desired. This will increase career opportunities for interdisciplinary research jobs in academia or industry across the country.

The Learning Sciences track in the Education PhD program requires a minimum of 54 credit hours beyond a master's degree in Learning Sciences or a related field.

Students must complete 24 credit hours of core courses, 9 credit hours of specialization courses, 6 credit hours of electives, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 54 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites

A master's degree in learning sciences or a closely related field.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
33 Total Credits

Details

Core
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)
  - IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Program Details
  - EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Program Details

Specialization
9 Total Credits

- Complete the following:
  - EME6938ST2 - ST: Research on Advanced Learning Technologies (3)
  - EME6938ST1 - Theoretical Foundations of the Learning Sciences (3)
  - EME6938ST3 - ST: Metacognition (3)

Elective Courses
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - Students will select at least 2 courses from the following disciplines: - Psychology (PSY) - Statistics (STA) [can include the SAS Data Mining Graduate Certificate (15 credit hours)] - Philosophy and Cognitive Science (PHI) [can include the Cognitive Sciences Graduate Certificate (18 credit hours)] - Computer Science (CS) - Multidisciplinary Neuroscience Alliance (MDNA) interdisciplinary program

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - EME 7980 - Dissertation Research Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Submission and completion of approved program of study, except for dissertation hours. - Successful completion of the candidacy examination. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Satisfactory progress toward the independent learning requirements as evidenced by the annual accomplishments and activities report.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 54
Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

Independent Learning

During their program of study, PhD students are required to meet the following requirements for independent learning to enter candidacy, including:

- Submitting a manuscript that is deemed appropriate by at least one program faculty member for publication in a peer-reviewed journal.
- Presenting research in at least one international, national or state conference.
- Presenting at university and/or college research symposiums annually.
- Providing service to professional organization, community partner, and/or program.
- Documenting and presenting independent learning accomplishments and activities along with development of an individual research agenda deemed satisfactory by at least two or more program faculty on an annual basis.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education PhD - Education PhD, Mathematics Education Track

Track Website
https://ccie.ucf.edu/education-phd/
Track Contact Information
Sarah B. Bush PhD
Professor
sarah.bush@ucf.edu
ED 123D

Online Availability
No

Track Description
The Mathematics Education track in the Education PhD program is designed to prepare mathematics educators for various career options, including preparing educators, teaching postsecondary mathematics, and conducting research in mathematics education.

Doctoral students in the track engage in undergraduate teaching, participate in research activities with faculty, experience internships, and interact with the nationally acclaimed Lockheed Martin/UCF Teaching Academy for Mathematics and Science.

The Mathematics Education track in the Education PhD program requires a minimum of 63 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 9 credit hours of specialization courses, 12 credit hours of electives, 3 credit hours of internship, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 63 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
A master's degree in a closely related field and master's level competency in educational research and statistics.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
33 Total Credits

Details

Core
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)
- IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Program Details
- EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Program Details

Specialization
9 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - MAE7795 - Seminar on Research in Mathematics Education (3)
  - Complete the following:
    - MAE7640 - History of Mathematics Education (3)

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  - Course work in elementary mathematics education 3 Credit Hours
  - Course work in secondary mathematics education 3 Credit Hours
  - Course work in mathematics or mathematics education 6 Credit Hours

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - MAE 7980 - Dissertation Research
    Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Internship
3 Total Credits

- Complete the following:
  - MAE7945 - Internship in Mathematics Education (3)

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours:
  - Completion of all course work, except for dissertation hours.
  - Successful completion of the candidacy examination.
  - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars.
  - Submission of an approved program of study.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track.
  - Research in the Specialization—8-hour written examination.
  - Specialization—3-hour oral examination.

Grand Total Credits: 63
Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling in Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling in Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis in Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

Independent Learning

The dissertation satisfies the independent learning requirement.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education PhD - Education PhD, Methodology, Measurement and Analysis Track

Track Website

https://ccie.ucf.edu/methodology-measurement-and-analysis/

Track Contact Information

Debbie L. Hahs-Vaughn PhD
Professor
debbie@ucf.edu
ED 222M

2022-2023 Graduate Catalog
Online Availability
No

Track Description
The Methodology, Measurement, and Analysis track in the Education PhD program is designed to prepare methodologists in education, the social sciences, and other human sciences for either the professoriate or practice including diverse quantitative and qualitative areas such as statistical consulting and data analytic fields, psychometrics, and program evaluation.

Four major areas are encompassed in the Methodology, Measurement, and Analysis program: quantitative research, qualitative research, measurement, and program evaluation.

Track Prerequisites
A master's degree in a closely related field.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
42 Total Credits

Details

Core
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - EDF7475 - Qualitative Research in Education (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)

- IDS 7502 - Case Studies in Research Design may be substituted for one of the approved research electives from group A listed in the Program Details section below. EDF 7406 - Multivariate Statistics in Education may be substituted for one of the approved research electives from group A listed in the Program Details section below.

Specialization
18 Total Credits

- Complete at least 6 of the following:
  - EDF7405 - Quantitative Methods II (3)
  - EDF7406 - Multivariate Statistics in Education (3)
  - EDF7410 - Application of Nonparametric and Categorical Data Analysis in Education (3)
  - EDF7415 - Latent Variable Modeling In Education (3)
  - EDF7427 - Psychometrics (3)
  - EDF7468 - Evaluation of Complex Problems of Practice (3)
  - EDF7473 - Ethnography in Educational Settings (3)
  - EDF7474 - Multilevel Data Analysis In Education (3)
  - EDF7476 - Advanced Research Methods (3)
  - EDF7479 - Qualitative Data Analysis (3)
EDF7488 - Monte Carlo Simulation Research in Education (3)
EDF7939 - Special Topics (3)
EDF7489 - Quantitative Research Synthesis (3)

Electives
6 Total Credits

- Complete at least 2 of the following:
  - EDF6447 - Development and Validation of Educational Tests and Measures (3)
  - EDF6464 - Mixed Methods for Evaluation in Educational Settings (3)
  - EDF6486 - Research Design in Education (3)
  - EDF7410 - Application of Nonparametric and Categorical Data Analysis in Education (3)
  - EDG6285 - Evaluation of School Programs (3)
  - EDF7473 - Ethnography in Educational Settings (3)
  - EDF7488 - Monte Carlo Simulation Research in Education (3)
  - EDF7479 - Qualitative Data Analysis (3)
  - EDF7468 - Evaluation of Complex Problems of Practice (3)
  - EDF6401 - Statistics for Educational Data (3)

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - EDF 7980 - Dissertation Research

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submittal of an approved program of study.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 63

Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above; Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Independent Learning

The dissertation satisfies the independent learning experience.
Financial Information

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Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education PhD - Education PhD, Reading Education Track

Track Website
https://ccie.ucf.edu/teachered/k-12/

Track Contact Information

Vicky Zygouris-Coe PhD
Assistant Professor
Vassiliki.Zygouris-Coe@ucf.edu
Telephone: 407-823-0386
ED 315

Online Availability

No

Track Description

This program has temporarily suspended admission effective Fall 2020.

The Reading Education track in the Education PhD program is designed to provide further education for those aspiring to work in the area of education at the post-secondary level (four-year college and/or research university) or as a lead teacher/resource teacher for a school district. The program assumes prior study in reading education.

The program provides for an area of advanced study in the field of reading and a concentration in a closely related field. The program includes a strong research base through the research core and specialization course work and an internship during which a candidate gains professorial experience.

Students are required to have the equivalent of the Master of Education in Reading degree, 21 hours of graduate reading education credit, prior to entering the program. In the event that a student does not have 21 hours of graduate reading education credit, the student can be admitted to the program, but will be required to complete the 21 hours in addition to the required program hours.

The Reading Education track in the Education PhD program requires a minimum of 69 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 15 credit hours of specialization courses, 9 credit hours of electives, 3-6 credit hours of internship, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 69 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites

A master's degree in a related field of study, including one Graduate Curriculum course, and master's level competency in educational research and statistics.

A minimum of 21 credit hours of graduate reading education courses.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
Online Application
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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
39 Total Credits

- Details

Core
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)
  - IDS 7502 - Case Studies in Research Design may be substituted for one of the approved research electives from group A listed in the Program Details section below. EDF 7406 - Multivariate Statistics in Education may be substituted for one of the approved research electives from group B listed in the Program Details section below.

Specialization
15 Total Credits

- Complete the following:
  - RED7797 - Theoretical Processes of Reading Comprehension (3)
  - RED7743 - Reading and Writing Processes (3)
  - RED7648 - Analysis and Evaluation of Trends and Issues in Literacy Education (3)
  - RED7745 - Research in Reading Education Seminar (3)
  - RED7697 - Literacy for the Twenty-First Century (3)

Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  - Students choose a minimum of 9 credit hours of elective courses from a concentration in a related field, such as Communication Sciences and Disorders, Exceptional Student Education, TESOL, Language Arts Education, Children's/Adolescent Literature.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - RED 7990 - Dissertation Research Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present to the dissertation committee, and defend the final research submission with the dissertation committee.

Internship
6 Total Credits

- Earn at least 6 credits from the following:
  - RED7947 - Internship in Reading Education (3)

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 grade point average on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 69
Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

Independent Learning

The dissertations fulfills the independent learning requirement.

Financial Information

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education PhD - Education PhD, Science Education Track

Track Website
https://ccie.ucf.edu/teachered/secondaryed/

Track Contact Information
Malcolm Butler PhD
Associate Professor
malcolm.butler@ucf.edu
Telephone: 407-823-3272
ED 322-T
Online Availability

No

Track Description

This program has suspended admission effective Fall 2020.

This Science Education track in the Education PhD program is designed to prepare science educators for various career options, including training science teachers, teaching postsecondary science, and conducting research in science education.

Doctoral students in this track engage in research activities with an interdisciplinary faculty, experience internships, and interact with the nationally acclaimed Lockheed Martin/UCF Teaching Academy for Mathematics and Science.

Track Prerequisites

A master's degree in a closely related field.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
42 Total Credits

- Details

Core
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)
  - IDS 7502 - Case Studies in Research Design may be substituted for one of the approved research electives from group A listed in the Program Details section below. EDF 7406 - Multivariate Statistics in Education may be substituted for one of the approved research electives from group B listed in the Program Details section below.

Specialization
18 Total Credits

- Complete the following:
  - SCE7746 - Teaching Theory and Research in Science Education (3)
  - SCE7145 - Design of Post Secondary Science Curriculum (3)
  - SCE7242 - Assessment in Science Teaching, Learning and Research (3)
  - SCE7864 - Science Technology and Society (3)
  - SCE7935 - Seminar–Professional Writing/Grants in Science Education (3)
  - SCE7146 - Professional Issues in Science Education (3)

Electives
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - Additional specialization electives

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - SCE 7980 - Doctoral Dissertation Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Internship
6 Total Credits

- Earn at least 6 credits from the following:
  - SCE7942 - Internship/Practicum in Science Education (3)

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 66
Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

Independent Learning

The dissertation serves as the independent learning experience.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education PhD - Education PhD, Social Science Education Track

Track Website
https://ccie.ucf.edu/teachered/secondaryed/

Track Contact Information

William Russell PhD
Associate Professor
russell@ucf.edu
Telephone: 407-823-4345
Education 115J
Online Availability
No

Track Description
This program has temporarily suspended admission effective Fall 2020.

The Social Science Education track in the Education PhD program is designed to prepare social science educators for successful careers in research and teaching.

The program assists students in providing options to careers in preparing social science teachers, teaching post-secondary social science (history, political science, economics, etc.), and conducting research activities in social science education. Doctoral students in the track engage in research activities with an interdisciplinary faculty, experience internships, and interact with various social science educators and social science experts. Throughout this program, students are mentored by experienced and successful university social science education faculty. Based on the students' previous graduate course work, students may be required to complete additional graduate social science education (SSE) courses and/or graduate content courses beyond the minimum requirements.

The Social Science Education track in the Education PhD program requires a minimum of 60 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 18 credit hours of specialization courses, 3 credit hours of internship, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
A master's degree in a closely related field.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
42 Total Credits

- Details

Core
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)
  - IDS 7502 - Case Studies in Research Design may be substituted for one of the approved research electives from group A listed in the Program Details section below. EDF 7406 - Multivariate Statistics in Education may be substituted for one of the approved research electives from group B listed in the Program Details section below.

Specialization
18 Total Credits

- Complete all of the following
  - Complete the following:
    - SSE7740 - History of Social Studies Education (3)
    - SSE7796 - Research in Social Science Education Seminar (3)
    - SSE7797 - Content and Program Analysis in Social Science Education (3)
    - SSE7700 - Critical Issues in Social Studies Teacher Education (3)
  - Earn at least 6 credits from the following types of courses:
    - Social Science Education (SSE) Electives 6 Credit Hours; must be approved by adviser

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - SSE 7980 - Dissertation Research Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Internship
3 Total Credits

- Complete the following:
  - SSE7947 - Internship in Social Science Education (3)

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note there may be variations in length of exam time and content based upon the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 60
Track Details

Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7408 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7408 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

Independent Learning

The dissertation fulfills the independent learning requirement.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

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Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Education PhD - Education PhD, Teaching English to Speakers of Other Languages Track

Track Website

https://ccie.ucf.edu/teachered/secondaryed/

Track Contact Information

Joyce Nutta PhD
Professor
joyce.nutta@ucf.edu
Telephone: 407-823-5791
ED 122M
Online Availability
No

Track Description
The University of Central Florida is uniquely positioned to meet the critical need for advanced degrees in TESOL. Faculty from the College of Community Innovation and Education and the College of Arts and Humanities approach TESOL issues from multiple perspectives and collaborate in teaching and research.

Combining the interdisciplinary expertise of faculty in two Colleges, the PhD Track in TESOL offers students in-depth experiences in the research, theory, and practice of TESOL, as well as flexibility in selecting a complementary cognate that meets their professional goals.

The Teaching English to Speakers of Other Languages (TESOL) track in the Education PhD program requires at least 63 credit hours of study beyond the master's degree. The curriculum includes 24 credit hours of core courses, 15 credit hours of TESOL specialization courses, 9 credit hours of cognate courses, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 63 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
A master's degree in a closely related field.

Prerequisites
- TSL 6250 - Applied Linguistics in ESOL 3 Credit Hours
- TSL 6440 - Assessment Issues in TESOL 3 Credit Hours
- TSL 6642 - Issues in Second Language Acquisition 3 Credit Hours
- EDF 6401 - Statistics for Educational Data 3 Credit Hours
- TSL 5345 - Methods of ESOL Teaching 3 Credit Hours or TSL 5085 - Teaching Language Minority Students in K-12 Classrooms 3 Credit Hours

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
48 Total Credits

- Details

Core
24 Total Credits

- Complete all of the following
- Earn at least 6 credits from the following:
  - IDS7500 - Seminar in Educational Research (1 - 99)
- Complete the following:
  - IDS7501 - Issues and Research in Education (3)
  - EDF7475 - Qualitative Research in Education (3)
  - EDF7403 - Quantitative Foundations of Educational Research (3)
  - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
  - IDS7502 - Case Studies in Research Design (3)
  - EDF7406 - Multivariate Statistics in Education (3)
- IDS 7502 - Case Studies in Research Design may be substituted for one of the approved research electives from group A listed in the Program Details section below. EDF 7406 - Multivariate Statistics in Education may be substituted for
one of the approved research electives from group B listed in the Program Details section below.

Specialization
15 Total Credits

- Complete the following:
  - TSL6643 - Diachronic Analysis of Second Language Acquisition Processes (3)
  - TSL6379 - Second Language Literacy (3)
  - TSL6600 - Second Language Vocabulary Acquisition (3)
  - TSL6252 - Sociolinguistics for ESOL (3)
  - TSL7006 - Second Language Teacher Preparation (3)

Cognate
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  A minimum of 9 credit hours of cognate courses must be approved by the adviser and graduate program director. Possible cognates include Communication Sciences and Disorders, Community College Teaching, Exceptional Education, Global and Comparative Education, Multicultural Education, Instructional Technology, Program Administration, Reading, and other related areas.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  TSL 7980 - Dissertation Research
  Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Examinations
0 Total Credits

- A qualifying examination will be required during the first year of study as an intake, diagnostic tool to determine student proficiency in TESOL. A written candidacy examination will be required to be admitted to candidacy and will normally occur at the completion of course work.

Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

Additional Program Requirement
0 Total Credits

- Students must have completed a minimum of two college-level courses in a foreign language or basic proficiency in a foreign language as measured by the American Council on the Teaching of Foreign Languages (ACTFL) oral proficiency interview (OPI) or other assessment approved by the program faculty before completion of 36 hours of study. Non-native speakers of English may use their native language to meet this requirement. This requirement may be satisfied prior to admission but must be satisfied prior to candidacy.

Grand Total Credits: **63**
Track Details

**Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling CORE requirement above)**

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)
- IDS 7938 - Research Cluster Seminar 3 Credit Hours

**Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling CORE requirement above)**

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours
- SPA 7495 - Doctoral Seminar II: Spoken and Written Language Disorders 3 Credit Hours (Communication Sciences Track students only)

**Independent Learning**

The dissertation satisfies the independent learning experience.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Education PhD - Education PhD, Teaching, Learning, and Development Track**

**Track Website**

https://ccie.ucf.edu/education-phd/

**Track Handbook**

Track Contact Information

Elizabeth A. Dooley, EdD
Professor, School of Teacher Education
Elizabeth.Dooley@ucf.edu

Online Availability

No

Track Description

The Teaching, Learning, and Development (TLD) track in the Education PhD program is designed to prepare highly competent doctoral-level professionals who wish to pursue careers in teacher education or related areas. The TLD track is a cutting-edge, research-oriented program of study.

This interdisciplinary program focuses on developing the qualifications of professionals who wish to pursue careers in the professoriate, and serve in leadership positions in national, state, local educational agencies, or other settings that require a robust research preparation. Doctoral students engage with interdisciplinary societal and educational contexts, hone their disciplinary skills in various situations, become experts in their discipline of choice, competent in research, and acquire knowledge and skills to conduct research and add to their profession. Programs of study can be designed to align with the student’s long-term career goal.

The Teaching, Learning, and Development track in the Education PhD program requires a minimum of 63 credit hours beyond the master's degree. Students must complete 24 credit hours of PhD in Education core courses, 12 credit hours of TLD track core courses, 12 credit hours of specialization courses (Early Childhood Education, Elementary Education, Reading Education, Science Education/STEM and Social Sciences Education or related area) and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 63 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites

A master's degree in a related field of study, including one Graduate Curriculum course, and master's level competency in educational research and statistics.

A minimum of 21 credit hours of graduate content-specific education courses.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
36 Total Credits

• Complete all of the following
  
  PhD Core
  • Complete all of the following
  • Earn at least 6 credits from the following:
    • IDS7500 - Seminar in Educational Research (1 - 99)
  • Complete the following:
    • IDS7501 - Issues and Research in Education (3)
    • EDF7475 - Qualitative Research in Education (3)
    • EDF7403 - Quantitative Foundations of Educational Research (3)
    • EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    • IDS7502 - Case Studies in Research Design (3)
    • EDF7406 - Multivariate Statistics in Education (3)
  • IDS 7502 - Case Studies in Research Design may be substituted with one of the approved research electives in Group A listed under Track Details
  • EDF 7406 - Multivariate Statistics in Education may be substituted with one of the approved research electives in Group B listed under Track Details

  Teaching, Learning, and Development Core
  • Complete the following:
    • EDG7921 - Critical Issues in Teaching, Learning, and Development (3)
    • EDG7948 - Internship in Teaching, Learning, and Development (3)
    • EDG7951 - Professional Scholarship and Grant Writing in Teaching, Learning, and Development (3)
    • EDG7981 - Research in Teaching, Learning, and Development (3)

Area of Specialization
12 Total Credits

• Complete 1 of the following
  
  Early Childhood Education
  • Complete all of the following
  Specialization Courses
  • Complete all of the following
    • Earn at least 9 credits from the following:
      • EEC7058 - Theoretical Foundations of Early Childhood (3)
      • EEC7409 - Current Trends in Child, Family, and Community Sciences (3)
      • EEC7676 - Critical Analysis of Early Childhood Research (3)
    • • Faculty Approved Elective (3)

  Research Elective Courses
  • Earn at least 3 credits from the following types of courses:
    • Earn at least 3 credit hours from the following types of research, faculty approved courses: • Research Seminar • Group A or B

Elementary Education

• Complete all of the following
  
  Specialization Courses
  • Earn at least 9 credits from the following types of courses:
    • Theoretical or Philosophical Foundations (3) • Interdisciplinary doctoral coursework faculty approved • (3-9)

  Research Elective Courses
  • Earn at least 3 credits from the following types of courses:
    • Earn at least 3 credit hours from the following types of research, faculty approved courses: • Research Seminar • Group A or B
Reading Education
- Complete all of the following
  Specialization Courses
  - Complete all of the following
  - Earn at least 9 credits from the following:
    - RED7797 - Theoretical Processes of Reading Comprehension (3)
    - RED7743 - Reading and Writing Processes (3)
    - RED7648 - Analysis and Evaluation of Trends and Issues in Literacy Education (3)
    - RED7745 - Research in Reading Education Seminar (3)
    - RED7697 - Literacy for the Twenty-First Century (3)
  - • Faculty Approved Elective (3)
  Research Elective Courses
  - Earn at least 3 credits from the following types of courses:
  - Earn at least 3 credit hours from the following types of research, faculty approved courses: • Research Seminar • Group A or B

Science/STEM Education
- Complete all of the following
  Specialization Courses
  - Complete all of the following
  - Earn at least 9 credits from the following:
    - SCE7746 - Teaching Theory and Research in Science Education (3)
    - SCE7145 - Design of Post Secondary Science Curriculum (3)
    - SCE7242 - Assessment in Science Teaching, Learning and Research (3)
    - SCE7864 - Science Technology and Society (3)
    - SCE7146 - Professional Issues in Science Education (3)
  - • Faculty Approved Elective (3)
  Research Elective Courses
  - Earn at least 3 credits from the following types of courses:
  - Earn at least 3 credit hours from the following types of research, faculty approved courses: • Research Seminar • Group A or B

Social Science Education
- Complete all of the following
  Specialization Courses
  - Complete all of the following
  - Earn at least 9 credits from the following:
    - SSE7740 - History of Social Studies Education (3)
    - SSE7796 - Research in Social Science Education Seminar (3)
    - SSE7797 - Content and Program Analysis in Social Science Education (3)
  - • Faculty Approved Elective (3)
  Research Elective Courses
  - Earn at least 3 credits from the following types of courses:
  - Earn at least 3 credit hours from the following types of research, faculty approved courses: • Research Seminar • Group A or B

Dissertation
15 Total Credits
- Complete all of the following
  - Earn at least 15 credits from the following types of courses:
    - EEC 7980 Dissertation Research (3)
    - EDE 7980 Dissertation Research (3)
    - RED 7980 Dissertation Research (3)
    - SCE 7980 Dissertation Research (3)
  - Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Candidacy
0 Total Credits
- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. The student and major adviser will schedule examinations. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

Candidacy Examinations
0 Total Credits
- Candidacy (comprehensive) exams are determined by the faculty advisor. Please note that there may be variations in the length of exam time and content based upon the respective requirements of each area of specialization.

Independent Learning
0 Total Credits
The dissertation fulfills the independent learning requirement.

Grand Total Credits: 63

**Track Details**

**Group A (Course below may be taken in place of IDS 7502 - Case Studies in Research Design in fulfilling the CORE requirement above)**

- EDF 7406 - Multivariate Statistics in Education 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours

**Group B (Course below may be taken in place of EDF 7406 - Multivariate Statistics in Education in fulfilling the CORE requirement above)**

- IDS 7938 - Research Cluster Seminar 3 Credit Hours
- EDF 7405 - Quantitative Methods II 3 Credit Hours
- EDF 7410 - Application of Nonparametric and Categorical Data Analysis in Education 3 Credit Hours
- EDF 7415 - Latent Variable Modeling In Education 3 Credit Hours
- EDF 7473 - Ethnography in Educational Settings 3 Credit Hours
- EDF 7474 - Multilevel Data Analysis In Education 3 Credit Hours
- EDF 7488 - Monte Carlo Simulation Research in Education 3 Credit Hours

**Financial Information**

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**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**College of Community Innovation and Education**

Graduate Affairs
407-823-5369
https://ccie.ucf.edu/academics/graduate-assistantships/

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/
Education Undecided or Certification

College
College of Community Innovation and Education

Department
College of Community Innovation and Education Dean's Office

Program Website
https://ccie.ucf.edu/

Program Contact Information
Graduate Affairs Office
cciegrad@ucf.edu
Telephone: 407-823-5369
ED 115

Is this program available 100% online?
No

Program Description
The Education Undecided/Certification program is for students who have completed at least a baccalaureate degree from an accredited institution recognized by UCF in the United States and are not seeking a graduate degree. Students in this status may be interested in taking graduate courses for personal or professional enhancement or to prepare for possible admission to a graduate degree-seeking or certificate program in the College of Community Innovation and Education at UCF.

Not all graduate degree programs in the UCF College of Community Innovation and Education allow students in this status to enroll in their courses. It is best to contact the program director for the graduate program that offers the course prior to applying. If eligible, students in this status may take only 5000- or 6000-level courses (unless seeking certification).

Admission into Education Undecided/Certification status does not guarantee admission to a graduate degree-seeking or certificate program at UCF. International students are not eligible for this status unless they hold an eligible visa. International students taking online courses from their home country are eligible to be nondegree seeking since they do not require a visa.

Please Note: In general, Education Undecided/Certification students are not eligible for financial aid, assistantships, or fellowships, although it is best to check with the Office of Student Financial Assistance for specific details. Nondegree-seeking students must be enrolled in 12 credit hours or more to be considered in full-time status.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Educational Leadership EdD

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education
Program Website
https://ccie.ucf.edu/elhe/educational-leadership/

Program Contact Information
Graduate Affairs Office, CCIE
cciegrad@ucf.edu
Telephone: 407-823-5369
ED 115

Is this program available 100% online?
No

Program Description
The Educational Leadership EdD program is designed to prepare educators for leadership positions at all levels of educational administration from PK-12 to higher education, as well as leadership positions in various educational agencies or organizations. As well, the program prepares students for positions in teaching and research. As a professional program, studies are flexible and diverse, allowing for individual needs to be met. While a thorough knowledge of the field of educational leadership is expected of all doctoral students, individuals will also gain expertise in at least one area of specialization. Specialization knowledge is obtained through course work, independent and directed studies, research, and field experiences. Educational Leadership doctoral programs are designed to broaden administrative knowledge and skills of practicing professionals.

The Higher Education track is appropriate for students who are committed to advancing their leadership capabilities in college and university settings. The Program of Study has been designed to broaden the administrative knowledge and skills of higher education professionals who bring to the program a prior discipline specialization. Students admitted to the program are typically employed in teaching, research and administrative positions in universities, colleges, community colleges and education related institutions and organizations. The Higher Education track requires completion of a dissertation.

The Executive track in Educational Leadership EdD. The Executive EdD is appropriate for students who are committed to advancing their leadership opportunities and capabilities in PK-12 and other organizational settings. Students admitted to the program are typically employed in teaching and administrative positions in elementary and secondary schools, as well as other educational agencies and organizations. Focus areas include: political and organizational theory, leadership, systems theory, planning and evaluation, school law and finance, data-based decision making, communications, instructional leadership, human resource management, program analysis and evaluation. Educational Leadership certification is not included in this program.

The program is taught in a lock-step cohort-based format to be convenient to those who are working in teaching and administrative positions. The Executive track requires completion of a client-based field study. Please scroll to the bottom of this page for further details on these tracks.

College of Graduate Studies Contact Information
Brandon Ruff
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
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GMAT: RZT-HT-58
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Financial Information
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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Educational Leadership EdD - Educational Leadership EdD, Executive Track

Track Website
https://ccie.ucf.edu/elhe/educational-leadership/

Track Handbook
Educational Leadership EdD, Executive Track

Track Contact Information
Larry J. Walker, EdD
Assistant Professor
Larry.Walker2@ucf.edu
ED 222

Online Availability
No

Track Description
The Executive track in the Educational Leadership EdD program is designed to prepare educators for leadership positions in PK-12 organizations and other educational organizations. The program prepares students for professional practice as scholarly practitioners.

The Executive EdD is appropriate for students who are committed to advancing their leadership opportunities and capabilities in PK-12 and other organizational settings. Students admitted to the program are typically employed in teaching and administrative positions in elementary and secondary schools, as well as other educational agencies and organizations. Focus areas include: political and organizational theory, leadership, systems theory, planning and evaluation, school law and finance, data-based decision making, communications, instructional leadership, human resource management, program analysis and evaluation. Educational Leadership certification is not included in this program.

The Executive track requires a minimum of 54 credit hours beyond the master's degree, including 6 credit hours of a client-based Doctoral Field Study and at least 15 credit hours of Dissertation in Practice. The plan of study for the Executive track in the Educational Leadership EdD is arranged as a lock-step cohort-based program to facilitate scheduling for those who are employed in teaching and administrative positions. Details about this program are found in the Executive Handbook.

Total Credit Hours Required: 54 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
Master's degree in a closely related field.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
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TOEFL: 5233
ETS PPI: 5233
### Degree Requirements

**Required Courses**

- **Total Credits**: 33

*Details*

#### Core

- **Total Credits**: 24

- Complete the following:
  - EDA7101 - Organizational Theory in Education (3)
  - EDA7192 - Educational Leadership (3)
  - EDA7195 - Politics, Governance, and Financing of Educational Organizations (3)
  - EDA7205 - Planning, Research, and Evaluation Systems in Educational Administration (3)
  - EDA7225 - Advanced Legal Studies in Education (3)
  - EDA7215 - Community Outreach for Educational Leaders (3)
  - EDA7193 - Instructional Leadership (3)
  - EDA7224 - Human Resource Development in Educational Organizations (3)

#### Research Methods

- **Total Credits**: 9

- Complete the following:
  - EDF7471 - Research in Educational Leadership I (3)
  - EDF7407 - Research in Educational Leadership 2 (3)
  - EDF7408 - Research in Educational Leadership 3 (3)

#### Doctoral Field Study

- **Total Credits**: 6

- Complete all of the following
  - Earn at least 6 credits from the following:
    - EDA7943 - Field Project in Educational Leadership (3 - 6)
  - Doctoral students will conduct a dissertation in practice on an issue or problem of practice during the last four semesters of the program. The proposal is developed during the first 3 semester hours of EDA 7943 and implemented during the second semester.

#### Dissertation in Practice

- **Total Credits**: 15

- Earn at least 15 credits from the following types of courses:
  - EDA 7987 - Dissertation in Practice in EDA 7987 - Dissertation in Practice students conduct scholarly research on a complex problem of practice in an education organization. The dissertation in practice will have an introduction, literature review, methodology, findings, and discussion and conclusions.

#### Candidacy

- **Total Credits**: 0

- To enter candidacy for the Executive track in the Educational Leadership EdD program, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required milestones. The following are required to be admitted to candidacy:
  - Completion of an on-demand writing white paper (Milestone #1) to be completed prior to summer semester Year 1.
  - Completion of a dissertation in practice proposal (Milestone #2) accepted during the summer semester of Year 2.
  - Completion of all course work, except for the Doctoral Field Study.

**Grand Total Credits**: 54

### Track Details

**Independent Learning**

The doctoral field study provides an independent learning experience by having students **conduct** a study on an issue or problem of practice in education.

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2022-2023 Graduate Catalog
Financial Information
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Fellowship Information
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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Educational Leadership EdD - Educational Leadership EdD, Higher Education Track

Track Website
https://ccie.ucf.edu/elhe/higher-education/

Track Handbook
Educational Leadership EdD, Higher Education Track

Track Contact Information
Nancy Marshall EdD
Program Coordinator and Lecturer
Nancy.marshall@ucf.edu

Online Availability
No

Track Description
The Higher Education track in the Educational Leadership EdD program is appropriate for students who are committed to advancing their leadership capabilities in college and university settings.

The Higher Education track in the Educational Leadership EdD program has been designed to broaden the administrative knowledge and skills of higher education professionals who bring to the program a prior discipline specialization. Students admitted to the program are typically employed in teaching, research and administrative positions in community colleges and universities or education related agencies.

Students pursuing the Higher Education track in the Educational Leadership EdD program are typically employed in two- or four-year colleges or universities. Their programs of study require them to complete a minimum of 36 credit hours of specified core and specialization courses plus two elective courses. Students must also complete 12 credit hours in research methods and 15 credit hours of dissertation. The 63 minimum credit hours is required beyond the master's degree, with an emphasis related to the study of higher education as a field of inquiry. Details about the administration of this program can be found in the Higher Education Handbook.

Total Credit Hours Required: 63 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
Master's degree from a regionally accredited institution.

Evidence of a minimum of one year full-time or two years part-time professional higher education work experience.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
30 Total Credits

Details

Core
18 Total Credits

- Complete the following:
  - EDH7040 - Research on the College Student (3)
  - EDH7401 - Higher Education and Public Policy (3)
  - EDH7631 - Managing change, conflict, and stability in Higher Education (3)
  - EDH7934 - Higher Ed Literature, Research, and Professional Writing Seminar (3)
  - EDH7665 - Higher Education Leadership (3)
  - EDH7046 - Diversity Issues in Higher Education (3)

Specialization
12 Total Credits

- Complete the following:
  - EDH7405 - Legal Issues in Higher Education (3)
  - EDH7066 - Higher Education: Philosophical/Historical Perspectives (3)
  - EDH7508 - Finance in Higher Education (3)
  - EDH7636 - Organizational Theory and Practices in Higher Education (3)

Research Methods
12 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF6401 - Statistics for Educational Data (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7475 - Qualitative Research in Education (3)
  - Complete at least 1 of the following:
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - EDF7405 - Quantitative Methods II (3)
    - EDF7406 - Multivariate Statistics in Education (3)
    - EDF7410 - Application of Nonparametric and Categorical Data Analysis in Education (3)
    - EDF7415 - Latent Variable Modeling In Education (3)
    - EDF7473 - Ethnography in Educational Settings (3)
    - EDF7474 - Multilevel Data Analysis In Education (3)
    - EDF7479 - Qualitative Data Analysis (3)
    - EDF7488 - Monte Carlo Simulation Research in Education (3)
    - EDF7483 - Mixed Methods Research in Education (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - EDH6047 - Theories of College Student Development (3)
  - EDH6105 - Retention Strategies in Colleges and Universities (3)
  - EDH7366 - Assessment Practices in Higher Education (3)
Candidacy Examination
0 Total Credits

- Candidacy examinations will be scheduled near the tenth week of the fall and spring semesters; summer exams will not be offered. The exams are: - Part 1. Written examination (submited via webcourses) - Part 2. Oral examination Evidence of the following are required to be eligible to complete the doctoral comprehensive examination in the Educational Leadership EdD program, Higher Education track: - Currently enrolled in the university during the semester any comprehensive examination is taken. - Submission of an approved program of study (overall GPA 3.0 or greater on all graduate work). - Completion of most course work. (Students may only take exams when only 2-3 semesters of course work remain. This statement does not refer to dissertation hours.) - In consultation with program faculty, the dissertation advisory committee is formed, paperwork filed, and approved. (Committee consists of four members: a minimum of three approved CCIE graduate faculty and one approved graduate faculty scholar or CCIE faculty.) - Submission of an approved doctoral comprehensive examination application by the stated deadline. - Fulfill any program deadlines for submitting comprehensive examination content-related materials (topics, questions, etc.) to the program coordinator by the stated deadline. (See program website for details: https://ccie.ucf.edu/elhe/higher-education/)

Candidacy
0 Total Credits

- Candidacy is the stage of doctoral studies when students focus exclusively on planning, researching and writing their proposal and dissertation. To enter candidacy for the Educational Leadership EdD program, Higher Education track, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. In addition, evidence of the following are required to be admitted to candidacy and enroll in dissertation hours at least one week before the first day of classes for which the student wishes to enroll in dissertation hours: - Submission of an approved program of study. - Successful completion of all course work, except for dissertation hours. - Successful completion of all parts of the candidacy examination. - In consultation with program faculty, the dissertation advisory committee is formed, paperwork filed, and approved. (Committee consists of four members: a minimum of three approved CCIE graduate faculty and one approved graduate faculty scholar or CCIE faculty.) Once students enter Candidacy, they must enroll in a minimum of three dissertation hours (EDH 7980) every semester (including summers), until they graduate from the program.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  EDH 7980 - Dissertation Registration for dissertation hours is not permitted until the student is admitted to Candidacy. Doctoral students must work with their doctoral adviser/major professor to prepare a proposal and present and defend the proposal to the dissertation committee. Once the proposal is completed and approval is secured from the UCF Institutional Review Board (IRB), students conduct research and submit and defend the final research dissertation to their dissertation committee. Required Documentation During Dissertation Stage: All items listed are necessary to fulfill the requirements to graduate. - Application to Defend Dissertation Proposal - Dissertation Proposal Approval - Application for IRB Approval of Research - Defense Dissertation Announcement - Dissertation Approval - Application to Graduate - All necessary requirements of the College of Graduate Studies for graduation

Grand Total Credits: 63

Financial Information

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Educational Leadership EdS

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Program Website**
https://ccie.ucf.edu/elhe/educational-leadership/

**Program Handbook Link**
Educational Leadership EdS

**Program Contact Information**
Sheila Moore, EdD
Sheila.Moore@ucf.edu

**Is this program available 100% online?**
No

**Licensure Disclosure**
The Educational Leadership EdS program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit [https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Educational-Leadership-EdS.pdf](https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Educational-Leadership-EdS.pdf).

**Program Description**
The Education Specialist in Educational Leadership program is designed for those currently employed in or interested in decision-making positions in educational organizations.

The program is an advanced professional degree designed specifically for individuals who have completed a master's degree in a field other than Educational Leadership and who wish to meet the requirements for Florida Level 1 Educational Leadership Certification while working toward a degree.

Students who complete an EdS in Educational Leadership may apply for admission to the doctoral program. The EdS program requires a research report at the completion of studies.

The Educational Leadership EdS program requires a minimum of 36 credit hours beyond the master's degree. Students must complete EDA 6909 Research Report at the completion of their study, as well as successfully complete EDA 6946 - Internship by earning at least a grade of "B."

**Total Credit Hours Required: 36 Credit Hours Minimum beyond the Master's Degree**

**Program Prerequisites**
A master's degree in a related field of study.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Core
9 Total Credits

- Complete all of the following
  - Complete the following:
    - EDA7101 - Organizational Theory in Education (3)
  - Earn at least 3 credits from the following:
    - EDA6946 - Internship (1 - 99)
  - Earn at least 3 credits from the following:
    - EDA6909 - Research Report (1 - 99)

Specialization
21 Total Credits

- Complete the following:
  - EDA6061 - Organization and Administration of Schools (3)
  - EDA6232 - Legal Aspects of School Operation (3)
  - EDA6240 - Educational Financial Affairs (3)
  - EDA6250 - Educational Systems Planning and Management (3)
  - EDA6931 - Contemporary Issues in Educational Leadership (3)
  - EDS6123 - Educational Supervisory Practices I (3)
  - EDS6130 - Educational Supervisory Practices II (3)

Co-requisite/Elective Courses
6 Total Credits

- Complete 1 of the following
  - Complete the following:
    - EDF6401 - Statistics for Educational Data (3)
    - EDF6481 - Fundamentals of Graduate Research in Education (3)
  - Earn at least 6 credits from the following types of courses:
    Additional Electives as approved by adviser IF student have already completed EDF 6401 and EDF 6481 as part of the Master's Degree.

Grand Total Credits: 36

Program Details

EDA 7101 will be taken the last fall semester of enrollment prior to graduation; enrollment requires instructor permission.

Additional Program Requirements

Educational leadership majors must successfully complete:

- 3 credit hour EDA 6946 Administrative Internship (should be taken within the last two semesters of enrollment)
- Pass all sections of the Florida Educational Leadership Examination and receive scores in time for graduation.

Independent Learning

Students must complete a research report at the conclusion of their studies.
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Educational Leadership MEd
College College of Community Innovation and Education
Department Department of Educational Leadership & Higher Education
Program Website https://ccie.ucf.edu/elhe/educational-leadership/
Program Handbook Link Educational Leadership MEd
Program Contact Information Sheila Moore, EdD Sheila.Moore@ucf.edu ED 220
Is this program available 100% online? No
Licensure Disclosure This Educational Leadership MEd program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Educational-Leadership-MEd.pdf.
Program Description The Master of Education in Educational Leadership program is intended for those who wish to work in leadership positions and administrative careers in education. The MEd program provides a theoretical and conceptual knowledge base and practical application required for principalship and for Florida Level I Educational Leadership certification.
Courses required in the program address the Florida Educational Leadership Standards and the Florida Educational Leadership Examination (FELE) competencies and indicators.
The Educational Leadership MEd program requires a minimum of 36 credit hours beyond the bachelor's degree, including 30 credit hours of core courses and 6 credit hours of required administrative internship. Courses may be taken in any sequence with the exception of EDA 6946, which must be taken during the last two semesters.
Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

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Degree Requirements

Core (Recommended that students take these courses in the following sequence:)
30 Total Credits

- Complete the following:
  - EDA6061 - Organization and Administration of Schools (3)
  - EDA6232 - Legal Aspects of School Operation (3)
  - EDA6240 - Educational Financial Affairs (3)
  - EDA6260 - Educational Systems Planning and Management (3)
  - EDA6931 - Contemporary Issues in Educational Leadership (3)
  - EDA6423 - Data-Based Decision Making for School Educational Leaders (3)
  - EDS6123 - Educational Supervisory Practices I (3)
  - EDS6130 - Educational Supervisory Practices II (3)
  - EDA6300 - Community School Administration (3)
  - EDA6502 - Organization and Administration of Instructional Programs (3)

Internship
6 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - EDA6946 - Internship (1 - 99)
  - The internship should be completed during or after the last two semesters of coursework listed above.

Grand Total Credits: **36**
Program Details

The MEd program provides the theoretical and conceptual knowledge base with practical application required for the principalship and for Florida Level I Educational Leadership certification. Courses required in the program address the Florida Educational Leadership Standards and Florida Educational Leadership Examination (FELE) competencies and indicators required by the Florida Department of Education. Students are required to pass the FELE for graduation. An MEd in Educational Leadership or its equivalent, and successful completion of the FELE are required by the state of Florida for Level 1 Educational Leadership certification (Certification is subject to Florida Department of Education approval).

The MEd program requires an administrative internship. The internship is an independent learning activity that takes place in a regular K-12 public school setting in which students must apply, reflect on, and refine knowledge and skills acquired in the program. For more information concerning the Educational Leadership internship, please refer to the Educational Leadership website at: education.ucf.edu/edleadership (click on Guide to the Administrative Internship).

MEd students in Educational Leadership will document the experience with each of the Florida Principal Leadership Standards (FPLS) and Florida Educational Leadership Exam (FELE) competencies during the EDA 6946 Administrative Internship. This documentation and successful completion of the administrative internship (grade of A or B) will serve as the culminating experience required for graduation.

Modified Leadership Core Program for Those with Graduate Degrees in Other Disciplines

If an individual holds a graduate degree with a major other than Educational Administration, Administration, Supervision or Educational Leadership, certification may be obtained through completion of an approved modified program in Educational Leadership. The UCF modified program consists of the seven core courses and Administrative Internship course of the Educational Leadership MEd degree. Request an evaluation of prior graduate course work (required for admission into the program) on the following website: education.ucf.edu/edleadership/.

Additional Program Requirements

- Complete the Administrative Graduate Internship with a minimum grade of B.
- Pass all applicable sections of the Florida Educational Leadership Examination.

Equipment Fee

Students in the Educational Leadership MEd program pay a $32 equipment fee each semester that they are enrolled. Part-time students pay $16 per semester.

Independent Learning

The MEd program requires an administrative internship. The administrative internship is an independent learning activity that takes place in a regular K-12 public school setting in which students must apply, reflect on, and refine knowledge and skills acquired in the program. For more information concerning the Educational Leadership internship, please refer to the Educational Leadership website at: http://education.ucf.edu/edleadership (click on Internship Guide).

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Educational Leadership MA
College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Program Handbook Link
Educational Leadership MA

Program Contact Information
Sheila Moore, EdD
Sheila.Moore@ucf.edu
ED 220

Is this program available 100% online?
Yes

UCF Online

Please note: Educational Leadership, MA may be completed fully online although not all associated tracks, elective options, or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description
The online Master of Arts in Educational Leadership program is not a state-approved program for certification in Florida. The program is designed to prepare students for administrative and leadership positions in school settings and other education-related fields that specifically do NOT require Florida certification. Some examples include administrative positions outside of Florida, around the nation and world, a private school headmaster, charter school administrator, community college or university staff administrator, or museum administrator.

The Educational Leadership MA also offers two tracks focused on higher education: Higher Education/Student Personnel and College Teaching and Leadership, both of which have different admission, enrollment, and graduation requirements.

The Higher Education/College Teaching and Leadership track is designed for individuals whose goal is to teach at the community college level.

The Higher Education/Student Personnel track is designed to prepare students for leadership positions in a variety of student personnel/affairs departments on college and university campuses and education-related fields. Note, these programs have different admission, enrollment, and graduation requirements.

Please scroll to the bottom of this page for further details on these Tracks.

The Educational Leadership MA program requires a minimum of 30 credit hours beyond the bachelor’s degree, including 9 credit hours of research and measurement courses and 21 credit hours of administration courses. The courses may be taken in any order the student wishes but the culminating Research Report (EDA 6909) must be taken last. For student convenience and planning, at least two administration courses are projected to be offered each semester and the EDF courses offered each semester.

Students enrolled in the Florida state-approved MEd, EdS, or Modified Core programs in educational leadership may not take these online courses for credit unless approved by their educational leadership faculty adviser.

The MA program does not fulfill Florida certification requirements.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Research and Measurement
9 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF6481 - Fundamentals of Graduate Research in Education (3)
  - Complete at least 1 of the following:
    - EDF6401 - Statistics for Educational Data (3)
    - EDF6432 - Measurement and Evaluation in Education (3)
  - Earn at least 3 credits from the following:
    - EDA6909 - Research Report (1 - 99)

Administration
21 Total Credits

- Complete the following:
  - EDA6062 - Leadership in Educational Organizations (3)
  - EDA6228 - Human Resource Processes in Education (3)
  - EDA6234 - Personnel and Education Related Law (3)
  - EDA6246 - Basic Education Funding and Management (3)
  - EDA6275 - Digital Leadership and Systems Management (3)
  - EDA6303 - Organizations and the Community (3)
  - EDA6932 - Issues in Education (3)

Grand Total Credits: 30

Program Details

Independent Learning

Students are required to successfully complete the EDA 6909 Research Report. For more information, contact the graduate program coordinator.

Financial Information

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UCF Student Financial Assistance

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finaid@ucf.edu
http://finaid.ucf.edu

2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Educational Leadership MA - Educational Leadership MA, Higher Education/College Teaching and Leadership Track

Track Website
https://ccie.ucf.edu/elhe/higher-education/

Track Contact Information

Thomas Cox EdD
thomas.cox@ucf.edu
ED 315Q

Online Availability
No

Track Description

The Higher Education/College Teaching and Leadership track in the Educational Leadership MA program is designed for individuals planning to teach at the college level and neither requires state teacher certification for admission nor prepares candidates for state teacher certification.

The program considers new applicants during fall and spring semesters only; passing a comprehensive exam at the end of the program is a graduation requirement.

The Higher Education/College Teaching and Leadership track in the Educational Leadership MA program is designed for individuals whose goal is to teach at the community college level. Every attempt is made to build the minimum required 18 hours of graduate-level content area courses into the program of study. Only six hours of independent study courses may be used to satisfy degree requirements. It is important to see an adviser if courses are difficult to schedule in the content area. Students electing this track will not meet state requirements for teacher certification in grades K-12. Successfully passing a comprehensive exam at the end of the program is a final graduation requirement.

Total Credit Hours Required: 42 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
24 Total Credits

- Complete all of the following
  - Students in this track should consult with the Higher Education/College Teaching and Leadership adviser regarding core requirements prior to registering for core courses.
  - Complete the following:
    - EDH6053 - The Community College in America (3)
    - EDH6081 - Contemporary Issues in Colleges (3)
    - EDH6204 - Leadership in College Organizations (3)
    - EDH6215 - The College Curriculum (3)
    - EDH6305 - Teaching and Learning in Colleges and Universities (3)
    - EDF481 - Fundamentals of Graduate Research in Education (3)
    - IDS6504 - Adult Learning (3)
  - Complete at least 1 of the following:
    - EDF6432 - Measurement and Evaluation in Education (3)
    - EDF6401 - Statistics for Educational Data (3)

Elective Courses
18 Total Credits

- Earn at least 18 credits from the following types of courses:
  - Courses must be approved by the student's adviser in one of the following disciplines: - Art - English - English for Speakers of Other Languages (ESOL) - Math - Science - Social Science (Select one: History, Sociology, Psychology, etc.)

Grand Total Credits: 42

Financial Information

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Educational Leadership MA - Educational Leadership MA, Higher Education/Student Personnel Track

Track Website
https://ccie.ucf.edu/elhe/higher-education/

Track Contact Information

Nancy Marshall, EdD
Lecturer and Academic Program Coordinator
Nancy.Marshall@ucf.edu
Telephone: 407-823-5369
ED 206H

Online Availability
No
**Track Description**

The Higher Education/Student Personnel Track in the Educational Leadership MA program is designed to prepare students for leadership positions in student personnel administration in higher education and education-related fields.

Higher Education Professionals work in a variety of settings on college and university campuses, from financial aid, orientation, and residence life to athletics, international services, and student activities. They provide services and develop programs that affect all aspects of students' lives inside and outside of the classroom.

Given the focus of the program, this master's degree does not lead to fulfillment of K-12 teacher certification requirements.

**Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

**Core**

6 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF6481 - Fundamentals of Graduate Research in Education (3)
  - Complete at least 1 of the following:
    - EDF6432 - Measurement and Evaluation in Education (3)
    - EDF6401 - Statistics for Educational Data (3)

**Specialization**

24 Total Credits

- Complete the following:
  - EDH6635 - Organization and Administration of Higher Education (3)
  - EDH6005 - History and Philosophy of Higher Education (3)
  - EDH6505 - Finance in Higher Education (3)
  - EDH6935 - Capstone Seminar in College Student Personnel (3)
  - EDH6407 - Ethical and Legal Issues in Student Personnel (3)
  - EDH6634 - Student Personnel Services in Higher Education (3)
  - EDH6047 - Theories of College Student Development (3)
  - EDH6105 - Retention Strategies in Colleges and Universities (3)

**Elective Courses**

3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - Electives approved by adviser

**Professional Field Experience**

6 Total Credits

- Complete all of the following
  - Complete the following:
    - EDH6947 - Practicum in Student Personnel (3)
  - Earn at least 3 credits from the following:
    - EDH6946 - Internship (1 - 99)

**Grand Total Credits:** **39**
Track Details

Independent Learning

Both an internship and practicum are required for completing the degree, in addition to a capstone seminar.

Financial Information

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Educational Leadership MA - Educational Leadership MA, Student Athlete Support Services Track

Track Website
https://ccie.ucf.edu/elhe/educational-leadership/

Track Contact Information

Brenda Thompson EdD
heps@ucf.edu
Telephone: 407-823-4164
Education 206E

Online Availability

No

Track Description

Admission to this program has been suspended effective Summer 2015.

The Student Athlete Support Services (SASS) Track in the Educational Leadership MA program prepares student support personnel for professional career positions working in athletic departments.

The Student Athlete Support Services track in the Educational Leadership MA program requires a minimum of 39 credit hours beyond the bachelor's degree, including six credit hours of core courses, 27 credit hours of specialization, six credit hours of professional field experience, and passing a comprehensive exam at the end of studies.

The MA program does not fulfill state certification requirements.

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Core
6 Total Credits

- Complete the following:
  - EDF6481 - Fundamentals of Graduate Research in Education (3)
  - EDF6432 - Measurement and Evaluation in Education (3)

Specialization
27 Total Credits

- Complete the following:
  - EDH6635 - Organization and Administration of Higher Education (3)
  - EDH6065 - History and Philosophy of Higher Education (3)
  - EDH6935 - Capstone Seminar in College Student Personnel (3)
  - EDH6407 - Ethical and Legal Issues in Student Personnel (3)
  - EDH6634 - Student Personnel Services in Higher Education (3)
  - EDH6047 - Theories of College Student Development (3)
  - EDH6655 - Athletics in the American University (3)
  - EDH6656 - Academic Success and the Student Athlete (3)
  - ADE6678 - The Socio-Historical Context of Adult Education (3)

Professional Field Experience
6 Total Credits

- Complete all of the following
  - Complete the following:
    - EDH6947 - Practicum in Student Personnel (3)
  - Earn at least 3 credits from the following:
    - EDH6946 - Internship (1 - 99)

Grand Total Credits: 39

Track Details

Independent Learning
Both an internship and practicum are required for completing the degree, in addition to a capstone seminar.

Financial Information
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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Educational Program Evaluation Graduate Certificate

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/iser/methodology-measurement-and-analysis/

Program Contact Information
Steven Sivo PhD
Professor
Steven.Sivo@ucf.edu
Telephone: 407-823-4147
ED 222Q

Is this program available 100% online?
No

Program Description
This certificate program is suspended effective Fall 2021
The Educational Program Evaluation graduate certificate focuses on program evaluation related to the field of education but will be broad-based enough to be useful for students from all disciplines. This program will help learners enhance their positions in the evaluation community, help them pursue careers in evaluation, and improve the general state of knowledge in program evaluation.

The graduate certificate in Educational Program Evaluation requires 15 credit hours of courses selected from a list of approved courses.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites
Admission is open to those with a master's degree from an accredited institution recognized by UCF

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - EDG6285 - Evaluation of School Programs (3)
  - EDF6464 - Mixed Methods for Evaluation in Educational Settings (3)
  - Course Not Found

Elective Courses
6 Total Credits

- Complete 1 of the following Data Analysis Methods
  - Complete the following:
    - EDF6401 - Statistics for Educational Data (3)
    - EDF7479 - Qualitative Data Analysis (3)

- Evaluation/Research Methods/Grants
  - Complete the following:
    - EDF6481 - Fundamentals of Graduate Research in Education (3)
    - SCE7935 - Seminar–Professional Writing/Grants in Science Education (3)

- Measurement and Surveys
  - Complete the following:
    - EDF6432 - Measurement and Evaluation in Education (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)

Grand Total Credits: 12

Program Details

All 7000 level courses must be approved by program coordinator prior to selection.

Elementary Education MEd

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/elementary-education/

Program Handbook Link
Elementary Education MEd

Program Contact Information

Norine Blanch
Associate Lecturer
Norine.Blanch@ucf.edu
ED 223A

Is this program available 100% online?
Yes
**UCF Online**

**Please note:** Elementary Education MEd may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to [State Restrictions](#) for current information.

**Program Description**

The Elementary Education M.Ed. program is designed to meet the needs of educators focused on Grades K-6. It provides experiences in the foundations of education, an update of the student's skills and understanding related to current research and instructional trends in basic subject matter areas, and elective choices in specific areas.

Teachers with a temporary teaching certificate, who have obtained a statement of eligibility, may be accepted into the program and may have the opportunity to include coursework required by the state of Florida to move to professional certification. However, the Elementary Education MA program is specifically designed for elementary education teaching certification. Therefore, contact the program advisor to determine which is appropriate for your circumstances.

The MEd in Elementary Education requires a minimum of 30 credit hours beyond the bachelor's degree and offers a thesis and nonthesis option. The nonthesis option requires a research study in one or more courses. The research study and final report will focus on reviewing and analyzing contemporary research in a student's particular specialization within the education profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area. Both options require 6 credit hours of core courses and a minimum of 15 credit hours of elective specialization courses, in addition to the 9 credit hours required in the thesis or nonthesis options. At minimum, 50 percent of the program coursework completed for the MEd must be at the 6000 level.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Program Prerequisites**

A current Florida Professional Teaching Certificate in the program's subject area. Applicants who have graduated from an accredited university or college teacher certification program in another state or country, in the appropriate subject and/or grade range, may also be admitted to the MEd program at the discretion of the program director.

**OR**

A Temporary Teaching Certificate, a passing score on the SAE section of the Florida Teacher Certification Examination (FTCE), and at least 1 year of successful teaching experience.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
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Graduate Admissions

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Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
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ETS PPI: 5233

**Degree Requirements**

Required Courses

- Complete all of the following
  - Students should plan to take EDE 6933 Introductory Seminar in Elementary Education during the first semester of enrollment. Students should take EDE 6935, which includes a program culminating experience, during the final semester in the program. Note: All three courses require an independent learning experience in the form of research studies.
  - Complete the following:
    - EDE6933 - Introductory Seminar in Elementary Education (1)

6 Total Credits
Specialization and Electives:
15 - 18 Total Credits

- Complete 1 of the following
  - Consult with your advisor to determine the coursework that will best meet your professional goals. Choose from the following specializations: - ESOL Endorsement - Reading Endorsement - Gifted Endorsement - Exceptional Education Certificate - General Elementary Education - Dual Language - Early Childhood Education - K-8 Mathematics and Science. The adviser may approve courses taken as part of a UCF graduate certificate program for this area of the MED (up to 18 credit hours). - EDS 5356 Mentoring and Clinical Supervision of Pre-Professional Educators-highly recommended. (This course prepares you to supervise interns. For each senior intern and two junior interns you supervise, you will earn a Certificate of Participation which covers the cost of 6 credit hours of tuition.)

- Reading Endorsement
  - Complete all of the following
    - Must take all 18 hours after applying for the reading endorsement certification program. These classes must be completed within 3 years.
    - Complete the following:
      - RED5147 - Developmental Reading (3)
      - RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)
      - RED6845 - Advanced Evaluation and Instruction in Reading (3)
      - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
      - RED6846 - Reading Practicum (6)

- ESOL Endorsement K-12 Graduate Certificate
  - Complete all of the following
    - Must take all 15 hours after applying for the ESOL endorsement certification program. Upon successful completion, students will need to complete separate paperwork with the state of Florida for official recognition of this endorsement.
    - Complete the following:
      - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
      - TSL5525 - ESOL Cultural Diversity (3)
      - TSL6142 - Critical Approaches to ESOL (3)
      - TSL6250 - Applied Linguistics in ESOL (3)
      - TSL6440 - Assessment Issues in TESOL (3)

- Gifted Education Specialization
  - Complete all of the following
    - Take all 15 credits after applying for the Gifted Certification Program. These courses are offered online.
    - Complete the following:
      - EGI6051 - Understanding the Gifted/Talented Student (3)
      - EGI6245 - Curriculum and Instruction for Teaching Advanced, Gifted, and Talented Learners (3)
      - EGI6246 - Education of Special Populations of Gifted Students (3)
      - EGI6305 - Theory and Development of Creativity (3)
      - EGI6417 - Guidance and Counseling Strategies for Teachers of Gifted and Talented Individuals (3)

- Exceptional Education Specialization
  - Complete all of the following
    - Must take all 18 hours after applying for the Special Education Graduate Certificate Program. These courses are offered online.
    - Complete the following:
      - EEX5051 - Exceptional Children in the Schools (3)
      - EEX6061 - Instructional Strategies Pre-K-6 (3)
      - EEX6065 - Programming for Students with Disabilities at the Secondary Level (3)
      - EEX6107 - Teaching Spoken and Written Language (3)
      - EEX6295 - Assessment and Curriculum Prescriptions for the Exceptional Population (3)
      - EEX6612 - Methods of Behavioral Management (3)

- Dual Languages Graduate Certificate
  - Complete all of the following
    - Select six of the following seven courses after applying for the dual languages certificate program. Please consult with your adviser to help you choose the courses that best fit the needs for your future career.
    - Complete at least 6 of the following:
      - SPN6940 - Teaching Methods for the Spanish Classroom (3)
      - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
      - TSL6143 - Curriculum and Instruction in Dual Language Programs (3)
      - TSL6250 - Applied Linguistics in ESOL (3)
      - TSL6377 - Bilingualism, Multiculturalism, and Biliteracy in the Dual Language Classroom (3)
      - TSL6443 - Assessment in Dual Language Programs (3)
      - TSL6526 - Interdependencies of Language, Culture, and Education for Dual Language Learners (3)

- Early Childhood Education
  - Complete the following:
    - EEC5205 - Programs and Trends in Early Childhood Education (3)

2022-2023 Graduate Catalog
Mathematics and/or Science Specialization

Complete the following:
- IDS6937 - Teaching Mathematics and Science Using Reform-Based Practices (3)
- MAE6318 - Current Methods in Elementary School Mathematics (3)
- MAE6517 - Diagnosis/Remediation of Difficulties in Mathematics for the Classroom Teacher (3)
- MAE6641 - Problem Solving and Critical Thinking Skills (3)
- MAE6899 - Seminar in Teaching Mathematics (3)
- SCE5836 - Space and Physical Science for Educators (3)

General Elementary Education Specialization

Earn at least 15 credits from the following:
- ISG6146 - Environmental Education for Educators (3)
- LAE5295 - Writing Workshop (1 - 3)
- LAE5319 - Methods of Elementary School Language Arts (3)
- LAE5415 - Children's Literature in Elementary Education (3)
- LAE5495 - Assessing Writing (3)
- LAE6296 - Advanced Writing Workshop (1 - 3)
- LAE6417 - Investigation in Children's Literature (3)
- LAE6616 - Trends in Language Arts Education (3)
- LAE6936 - Seminar in Language Arts Education (3)
- MAE6318 - Current Methods in Elementary School Mathematics (3)
- MAE6517 - Diagnosis/Remediation of Difficulties in Mathematics for the Classroom Teacher (3)
- MAE6641 - Problem Solving and Critical Thinking Skills (3)
- RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)
- RED6116 - Advanced Study in Foundations of Reading (3)
- SCE5836 - Space and Physical Science for Educators (3)
- TSL5345 - Methods of ESOL Teaching (3)
- TSL6142 - Critical Approaches to ESOL (3)
- TSL6440 - Assessment Issues in TESOL (3)
- TSL6250 - Applied Linguistics in ESOL (3)
- EME6507 - Multimedia for Education and Training (3)

Professional Teaching Certificate

Complete all of the following
- Refer to your statement of eligibility. Upon successful completion, students will need to pass all sections of FTCE and complete separate paperwork with the state of Florida for official recognition.

Complete the following:
- EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
- EDF6415 - Principles of Instruction and Classroom Management (3)
- EEXS051 - Exceptional Children in the Schools (3)
- REDS147 - Developmental Reading (3)
- TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
- TSL6250 - Applied Linguistics in ESOL (3)

Thesis/Nonthesis Option
9 Total Credits

- Complete 1 of the following

Thesis Option
- Complete all of the following
  - Complete at least 1 of the following:
    - EDF6481 - Fundamentals of Graduate Research in Education (3)
    - Course Not Found
  - Earn at least 6 credits from the following types of courses:
    - EDE 6971 - Thesis

Nonthesis Option
- Earn at least 9 credits from the following types of courses:
  - Additional Electives selected with the permission of the adviser A culminating experience is required in this option.

Grand Total Credits: 30 - 33
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Elementary Education MA

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/elementary-education/

Program Handbook Link
Elementary Education MA

Program Contact Information
Norine Blanch
Associate Lecturer
Norine.Blanch@ucf.edu
ED 223A

Is this program available 100% online?
No

Licensure Disclosure
For more information on how this program meets certification requirements, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Elementary-Ed-MA.pdf.
Program Description

The Master of Arts in Elementary Education program is state-approved and provides the necessary qualifications for initial teacher certification (Grades K-6) for individuals who have an undergraduate degree in a field other than Elementary Education and who wish to become certified to teach in this field. This program is committed to preparing highly qualified Elementary Education teachers with knowledge and skills aligned with research-based best practices. Additionally, graduates from this program will have the necessary requirements to apply for state-approved ESOL Endorsement (Grades K-12) and Reading Endorsement (Grades K-12) upon graduation.

The Master of Arts in Elementary Education (Grades K-6) ESOL Endorsement/Reading Endorsement (Grades K-12) is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The Elementary Education MA requires a minimum of 48 credit hours beyond the bachelor's degree. If the MA program will be providing a student's initial certification, 80 clock hours of field experience must be completed before enrolling in the supervised internship.

Total Credit Hours Required: 48 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Co-requisite

Undergraduate courses are not counted in the 48 credit hours of graduate courses that are required for the degree.

- EEX 4070 Teaching Exceptional Students 3 Credit Hours

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core
18 Total Credits

- Complete all of the following
  - Complete the following:
    - EDE6933 - Introductory Seminar in Elementary Education (1)
    - EDG6415 - Principles of Instruction and Classroom Management (3)
    - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
    - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
    - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
    - TSL6250 - Applied Linguistics in ESOL (3)
    - EDE6935 - Capstone Seminar in Elementary Education (2)
  - EDE 6933 should be taken in the first semester of the program, when possible. EDE 6935 should be taken in the final semester during Graduate Internship

Specialization
24 Total Credits

- Complete all of the following
  - Complete the following:
    - LAE5319 - Methods of Elementary School Language Arts (3)
    - LAE5415 - Children's Literature in Elementary Education (3)
    - MAE6318 - Current Methods in Elementary School Mathematics (3)
    - SCE6315 - Methods in Elementary School Science (3)
    - RED5147 - Developmental Reading (3)
    - RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)
    - RED5948 - Practicum in Reading Assessment and Instruction (3)
    - SSE6115 - Methods in Elementary School Social Science (3)
  - Note: EDE 6933 is a prerequisite or co-requisite for the specialization courses above.

Internship
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - EDE 6946 Graduate Internship Satisfactory completion of graduate internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the pre-professional level in accordance with State Board of Education Rule 6A-5.065.

Grand Total Credits: 48
Program Details

The program requires a portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the pre-professional level of performance for all of the Florida Educator Accomplished Practices. Multiple artifacts and reflective analyses are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of assessing the professional development of students as reflective practitioners. The program also requires an internship.

All teacher education candidates are required to complete Via™ by Watermark requirements before being certified for graduation. Via™ by Watermark access is required for the portfolio. See https://ccie.ucf.edu/explore-via/.

Students should plan to enroll in EDE 6933 during the first semester. Students should also plan to enroll in TSL 5085 early in the program to learn about infused English Speakers of Other Languages (ESOL) requirements including preparation of the TESOL notebook.

Contact the program coordinator before choosing classes for your first semester.

Students should ensure that they meet all requirements for Graduate Internship:

- Overall graduate GPA must be 3.0 or higher.
- Passing scores on the appropriate FTCE exams (Subject Area and Professional Area Exams) are required prior to admission to the graduate internship.
- Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at: http://www.education.ucf.edu/clinicalexpl/.
- Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

Additional Program Requirements

- Complete a portfolio according to program guidelines. This portfolio requires demonstration of professional growth, reflection, and proficiency in all Florida Educator Accomplished Practices.
- Complete and submit all TESOL portfolio assignments to address Florida ESOL competencies.
- Pass all applicable sections of the Florida Teacher Certification Examination.

NOTE: Effective January 1, 2015, only examination results earned by educators within 10 years prior to the date of application for a new Florida Educator's Certificate with the Florida Department of Education may be acceptable for certification eligibility requirements (SBR 6A-4.002).

Independent Learning

A portfolio is required that demonstrates professional growth, reflection, and proficiency in all Florida Educator Accomplished Practices. An internship is also required that demonstrates proficiency in all Florida Educator Accomplished Practices.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Emergency and Crisis Management MECM

College
College of Community Innovation and Education
Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/emergency-management/

Program Handbook Link
Emergency and Crisis Management MECM

Program Contact Information
Qian Hu, PhD
Associate Professor and MECM Program Director
Qian.Hu@ucf.edu
Telephone: 407-823-3340

Edlira Dursun, MPA, MNM
Academic Advisor
Edlira.Dursun@ucf.edu
Telephone: 407-823-1139

Is this program available 100% online?
Yes

UCF Online

Please Note: The Emergency and Crisis Management MECM may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. This program is not available to international students requiring majority of the class in-person. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Master of Emergency Management and Crisis (MECM) is designed to prepare individuals to practice as highly trained practitioners in the emergency management field through the development of core competencies including: resiliency, hazard mitigation and analysis, disaster response and recovery, emergency preparedness and planning, fiscal management, communication, intergovernmental administration, geographic information systems, legal and ethical decision making, cultural competency and diversity, and general emergency management.

The frequency of man-made and natural disasters has dramatically increased since the 1990s; emergency and disaster declarations in the U.S. reflect it. Florida is the fifth highest state with 69 major disaster declarations between 1953 and 2016 (Congressional Research Service, 2017). For communities to be prepared for, respond to, recover from, and mitigate these disasters, an educated workforce of emergency management specialists is required. Students in UCF's Master in Emergency and Crisis Management program will learn and demonstrate the competencies required to lead and manage in this dynamic and complex profession.

The Master of Emergency and Crisis Management program requires a minimum of 36 credit hours beyond the bachelor's degree. The program is offered completely online, and students have an option of taking part-time or full-time coursework.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

ggradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Emergency and Crisis Management Core Courses
30 Total Credits

- Complete the following:
  - PAD6399 - Foundations of Emergency Management and Homeland Security (3)
  - PAD6825 - Cross-Sectoral Governance (3)
  - PAD6700 - Research Methods in Public Administration (3)
  - PAD6397 - Managing Emergencies and Crises (3)
  - PAD6705 - Public Sector Communications (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6398 - Hazard Analysis and Disaster Planning (3)
  - PAD6439 - Leadership in Public Service (3)
  - PAD6946 - Internship (3)
  - PAD6086 - Advanced Concepts and Applications in Emergency and Crisis Management (3)

Additional Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - PAD5356 - Managing Community and Economic Development (3)
  - PAD5850 - Grant and Contract Management (3)
  - PAD5887 - Energy Policy (3)
  - PAD6200 - International Emergency and Crisis Management (3)
  - PAD6307 - Public Policy Analysis and Management (3)
  - PAD6327 - Public Program Evaluation Techniques (3)
  - PAD6335 - Strategic Planning and Management (3)
  - PAD6353 - Environmental Planning and Policy (3)
  - PAD6716 - Information Systems for Public Managers and Planners (3)
  - CCJ6027 - Criminal Justice Responses to Terrorism (3)
  - CPO6729 - Global Security in the Age of Migration (3)
  - IDC5602 - Cybersecurity: A Multidisciplinary Approach (3)
  - INR6136 - Seminar in American Security Policy (3)
  - PLA5587 - Current Issues in Cyberlaw (3)
  - POS6686 - National Security Law (3)
  - PUR6403 - Crisis Public Relations (3)

Grand Total Credits: 36

Program Details

Additional Program Requirements

- Students must achieve a grade of "B-" (80%) or higher in all Emergency and Crisis core courses.
- Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry, dialogue, and service learning. Tangible projects such as strategic plans, grant proposals, commercialization plans and case studies along with projects, scholarly papers, internships, and presentations at professional conferences contribute to the self-development of our students.
Financial Information

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Emergency Management and Homeland Security Graduate Certificate

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/emergency-management/certificate/

Program Contact Information

Qian Hu, PhD
Associate Professor and MECM Program Director
Qian.Hu@ucf.edu
Telephone: 407-823-3340

Edlira Dursun, MPA, MNM
Academic Advisor
Edlira.dursun@ucf.edu
Telephone: 407-823-1139

Is this program available 100% online?
No
Program Description

This graduate certificate in Emergency Management and Homeland Security provides intensive interdisciplinary graduate education for working professionals engaged in or seeking professional careers in emergency management and homeland security.

The curriculum focuses on managing security threats and crises, natural and man-made threats, disasters, or emergencies through the coordination of public, private and nonprofit sectors. In addition to covering the National Planning Frameworks and recent trends in policy and practice in this field, the program will focus on the Florida emergency management and public safety systems. Courses are held in the evenings and taught by experienced faculty members and professional.

The certificate in Emergency Management and Homeland Security consists of 18 credit hours at the graduate level, including four required core courses and two electives (one from a planning emphasis and one from management/policy). The EMHS graduate certificate program is a face-to-face program; some courses are offered on-line, however, students admitted to the EMHS program are expected to attend each course in person face-to-face. Each face-to-face course is offered one night a week for three hours, on the main campus.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - PAD6399 - Foundations of Emergency Management and Homeland Security (3)
  - PAD6397 - Managing Emergencies and Crises (3)
  - PAD6716 - Information Systems for Public Managers and Planners (3)
  - PAD6825 - Cross-Sectoral Governance (3)

Elective Courses
6 Total Credits

- Complete all of the following
- Complete at least 1 of the following:
  - PAD5336 - Introduction to Urban Planning (3)
  - PAD5338 - Land Use and Planning Law (3)
  - PAD5356 - Managing Community and Economic Development (3)
  - PAD6353 - Environmental Planning and Policy (3)
  - CGN6655 - Regional Planning, Design, and Development (3)
  - PUR6403 - Crisis Public Relations (3)
  - PAD6946 - Internship (3)

- Complete at least 1 of the following:
  - PAD5850 - Grant and Contract Management (3)
  - PAD6142 - Nonprofit Organizations (3)
  - PAD6037 - Public Organization Management (3)
  - PAD6387 - Transportation Policy (3)
  - INR6136 - Seminar in American Security Policy (3)
  - PAD6946 - Internship (3)

Grand Total Credits: 18
Program Details

PAD 6946 - Internship 3 Credit Hours

Internship must show a management and policy emphasis. If an internship is completed as a group 2 elective, a second internship cannot be completed as a group 1 elective. Current or previous employment cannot be applied toward the internship.

Students must achieve a grade of "B-" (80%) or better in every course. Grades 'C' or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Financial Information

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Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

ESOL Endorsement K-12 Graduate Certificate

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/k-12/world-languages-education/

Program Contact Information

Donita Grissom, Ph.D.
ESOL Education
School of Teacher Education
(ED-122N)
Donita.Grissom@ucf.edu

Is this program available 100% online?

No

Licensure Disclosure

The ESOL Endorsement K-12 Graduate Certificate has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-ESOL-Endorsement-GC.pdf.
**Program Description**

The Graduate Certificate in English for Speakers of Other Languages Endorsement K-12 is designed to prepare certified teachers with specialized knowledge and training in the five areas required by the state of Florida to teach in a K-12 setting: applied linguistics, curriculum, testing, methodology and cross-cultural awareness.

Teaching K-12 requires a primary teaching certification. The ESOL K-12 is an endorsement that is added to an existing teaching certification. This endorsement, therefore, is for certified teachers or students currently seeking certification with the State of Florida only.

The number of non-native students in the K-12 setting in the state of Florida as well as in most states is rapidly increasing. These students represent an array of different languages and cultural backgrounds. With these changes in K-12 schools comes more demand for qualified teachers who have the necessary knowledge and skills to work with English for Speakers of Other Languages (ESOL) students.

The ESOL Endorsement K-12 Graduate Certificate provides students with specialized knowledge and training in the five endorsement areas required for teachers in the state of Florida. The certificate focuses on the five areas required by the state of Florida to teach in a K-12 setting: applied linguistics, curriculum, testing, methodology, and cross-cultural awareness. Successful completion of the certificate meets the requirements for the state of Florida add-on endorsement for ESOL K-12.

No course substitutions are allowed. Upon successful completion, students will need to complete separate paperwork with the state of Florida for official recognition of this endorsement.

**Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree**

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**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Required Courses
15 Total Credits

- Complete all of the following
  - Complete at least 1 of the following:
    - TSL5345 - Methods of ESOL Teaching (3)
    - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
  - Complete at least 1 of the following:
    - TSL5525 - ESOL Cultural Diversity (3)
    - EDF6886 - Multicultural Education (3)
  - Complete at least 1 of the following:
    - TSL6440 - Assessment Issues in TESOL (3)
    - SPA6474 - Assessment and Management of Culturally and Linguistically Diverse Populations (3)
  - Complete the following:
    - TSL6142 - Critical Approaches to ESOL (3)
    - TSL6250 - Applied Linguistics in ESOL (3)

Grand Total Credits: 15

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Program Details

TSL 5085 - Teaching Language Minority Students in K-12 Classrooms 3 Credit Hours for students admitted to the Speech and Language Pathology program

SPA 6474 - Assessment and Management of Culturally and Linguistically Diverse Populations 3 Credit Hours for students admitted to the Speech and Language Pathology program

Independent Learning

TSL 5525, TSL 5345, and TSL 6250 require students to work with one or more nonnative speakers. TSL 6250 requires students to transcribe data elicited from a nonnative speaker.

Exceptional Student Education K-12 MA

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/exceptional-student-education/

Program Handbook Link
Exceptional Student Education K-12 MA

Program Contact Information
Mary Little PhD
Professor
mary.little@ucf.edu
Telephone: 407-823-3275
ED 315J

Is this program available 100% online?
No

Licensure Disclosure
The Exceptional Student Education K-12 MA program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Exceptional-Student-Ed-MA.pdf.
Program Description

The Master of Arts in Exceptional Student Education K-12 program is for non-education majors or previously certified teachers in another content area.

Graduates must be eligible for certification by the successful completion of the degree program in the area of exceptional student education (ESE) and must pass the Florida certification exams. Graduates will also receive Reading and ESOL endorsements upon successful completion of the program, if not currently endorsed. For additional information, contact esegrad@ucf.edu.

This is a state-approved, initial teacher preparation program designed in compliance with Florida Statutes and State Board of Education Rule 6A-5.066. Degree requirements are subject to change based on state mandates. Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

Passing scores on ALL applicable sections of the Florida Teacher Certification Examination (FTCE) are required prior to graduation. See www.fldoe.org for available test dates, test sites, and possible score conversions. The exams include:

- FTCE Professional Education Test (P.Ed.)
- FTCE Subject Area Exam for Exceptional Student Education K-12

The Master of Arts (MA) in Exceptional Student Education K-12 program requires a minimum of 39 credit hours beyond the bachelor's degree including 9 credit hours of required core courses, 21 credit hours of specialization courses, and 9 credit hours of Internship and Reading Practicum. Individual learning projects, including research skills and action research, are embedded in the specialization courses and completed in authentic settings. In addition, a culminating Comprehensive Exam will be completed to demonstrate mastery of research, knowledge, skills, and dispositions of standards from accrediting educational agencies. Students entering the MA program without prior related courses and/or appropriate teacher certifications may need to complete courses in the MA Foundation Core/Co-requisite area as prescribed by Florida State Statutes for initial teacher preparation (ITP).

All teacher education candidates are required to complete Via™ by Watermark requirements before being certified for graduation. Via™ by Watermark access is required for the portfolio. See https://ccie.ucf.edu/explore-via/.

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

These foundation core/co-requisite courses are prescribed by Florida State Statutes for initial teacher preparation (ITP). Students entering the Exceptional Student Education MA program without prior related courses and/or appropriate teacher certifications may need to complete courses in the Foundation Core/Co-requisite area.

If a student has successfully completed equivalent courses in the Foundation Core/Co-requisite area, as prescribed by Florida State Statutes for initial teacher preparation, then course waivers can be requested (see adviser).

- EEX 5051 - Exceptional Children in the Schools 3 Credit Hours Students are strongly advised to enroll in EEX 5051 early in their graduate program.
- EDF 6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education 3 Credit Hours
- EDG 6415 - Principles of Instruction and Classroom Management 3 Credit Hours
- EDF 6237 - Principles of Learning and Introduction to Classroom Assessment 3 Credit Hours
- RED 5147 - Developmental Reading 3 Credit Hours
- RED 5517 - Classroom Diagnosis and Development of Reading Proficiencies 3 Credit Hours Please note that this is currently not available online.

College of Graduate Studies Contact Information

gradmissions@ucf.edu
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Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core
9 Total Credits

- Complete all of the following
  - EDF6481 - Fundamentals of Graduate Research in Education (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
  - TSL6250 - Applied Linguistics in ESOL (3)
  - TSL 5085 and TSL 6250 are required courses leading to ESOL endorsement. Students should see an adviser if they hold a current ESOL endorsement.

Specialization
21 Total Credits

- Complete the following:
  - EEX6061 - Instructional Strategies Pre-K-6 (3)
  - EEX6065 - Programming for Students with Disabilities at the Secondary Level (3)
  - EEX6107 - Teaching Spoken and Written Language (3)
  - EEX6295 - Assessment and Curriculum Prescriptions for the Exceptional Population (3)
  - EEX6524 - Organization and Collaboration in Special Ed (3)
  - EEX6612 - Methods of Behavioral Management (3)
  - EEX6342 - Seminar-Critical Issues in Special Education (3)

Internship and Practicum
9 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following types of courses:
    - EEX 6946 Graduate Internship: ESE
  - Complete the following:
    - RED5948 - Practicum in Reading Assessment and Instruction (3)

Grand Total Credits: 39

Program Details

Foundation Core/Co-requisites

These foundation core/co-requisite courses are prescribed by Florida State Statutes for initial teacher preparation (ITP). Students entering the Exceptional Student Education MA program without prior related courses and/or appropriate teacher certifications may need to complete courses in the Foundation Core/Co-requisite area.

If a student has successfully completed equivalent courses in the Foundation Core/Co-requisite area, as prescribed by Florida State Statutes for initial teacher preparation, then course waivers can be requested (see adviser).

- EEX 5051 - Exceptional Children in the Schools 3 Credit Hours
- EDF 6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education 3 Credit Hours
- EDG 6415 - Principles of Instruction and Classroom Management 3 Credit Hours
- EDF 6237 - Principles of Learning and Introduction to Classroom Assessment 3 Credit Hours
- RED 5147 - Developmental Reading 3 Credit Hours
- RED 5517 - Classroom Diagnosis and Development of Reading Proficiencies 3 Credit Hours

Please note that this is currently not available online.

Additional Graduation Requirements

- Pass all applicable sections of the Florida Teacher Certification Examination. See http://www.fl.nesinc.com/ or www.fldoe.org for additional information about test dates and resources.
- Pass Comprehensive Exam.
- Complete a LiveText Professional Portfolio.
- Complete a TESOL Portfolio.
- Compliance with all university and graduate student policies.

NOTE: Effective January 1, 2015, only examination results earned by educators within 10 years prior to the date of application for a new Florida Educator's Certificate with the Florida Department of Education may be acceptable for certification eligibility requirements (SBR 6A-4.002).

Independent Learning

The Exceptional Student Education K-12 MA program requires the completion of an Action Research Project, Internship, and Reading Practicum. These independent learning activities take place in authentic settings where students must apply, reflect upon and refine their knowledge, skills and dispositions acquired in the program.
Exceptional Student Education MEd

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Program Website
https://ccie.ucf.edu/teachered/exceptional-student-education/

Program Handbook Link
Exceptional Student Education MEd

Program Contact Information
Mary Little PhD
Professor
mary.little@ucf.edu
Telephone: 407-823-3275
ED 315

Is this program available 100% online?
Yes

UCF Online

Please note: Exceptional Student Education (MEd) may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description
The MEd in Exceptional Student Education program prepares exceptional education teachers to work in programs serving Pre-K-12 students with disabilities. The program is designed for teachers already certified in exceptional student education (or other certification in special education) to enhance their knowledge, skills, and dispositions.

The Master of Education (M.Ed.) in Exceptional Student Education program is designed for teachers already certified in exceptional student education to enhance their knowledge, skills and dispositions. It requires 33 credit hours beyond the bachelor's degree including a 3-credit-hour research course, 24 credit hours of specialization courses and 6 credit hours of either a thesis or electives approved by an adviser. A Comprehensive Examination is also required and serves as the culminating experience in the program. Individual Learning Projects, including research skills and action research in authentic settings, are embedded in the specialization courses.

Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites
Current Florida Professional Teaching Certificate in Exceptional Student Education or have completed all the requirements for that Professional Teaching Certificate.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Course
3 Total Credits

Students are strongly encouraged to enroll in this course early in their graduate program.

- Complete the following:
  - EDF6481 - Fundamentals of Graduate Research in Education (3)

Specialization Courses
24 Total Credits

- Complete all of the following
  - Complete the following:
    - EEX6061 - Instructional Strategies Pre-K-6 (3)
    - EEX6065 - Programming for Students with Disabilities at the Secondary Level (3)
    - EEX6107 - Teaching Spoken and Written Language (3)
    - EEX6295 - Assessment and Curriculum Prescriptions for the Exceptional Population (3)
    - EEX6342 - Seminar-Critical Issues in Special Education (3)
    - EEX6524 - Organization and Collaboration in Special Ed (3)
    - EEX6612 - Methods of Behavioral Management (3)
  - Earn at least 3 credits from the following types of courses:
    - Elective course approved by an adviser (3 credit hours) OR EEX 6863 - Supervised Teaching Practicum with Exceptional Children 2-7 Credit Hours (for completion of the Severe and Profound Endorsement ONLY)
    - Please see your adviser for guidance regarding the selection of the above courses. EEX 6061 recommended to be completed successfully prior to enrollment in EEX 6107. EEX 6107 may be taken only AFTER 18 hours of graduate coursework in Exceptional Student Education have been completed successfully.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EEX 6971 - Thesis
  - Nonthesis Option
    - Complete 1 of the following
      - Earn at least 6 credits from the following:
        - EEX6909 - Research Report (1 - 99)
      - Earn at least 6 credits from the following types of courses:
        - Two additional electives approved by an adviser Suggested areas of concentration may be taken as approved electives within the M.Ed. program. Please see complete listings of additional courses in Certificate/Endorsement Programs in Exceptional Student Education for possible electives (Autism Spectrum Disorder, Intervention Specialist, Pre-K Disabilities, Severe and Profound, and Special Education). Electives must be approved by an adviser.

Comprehensive Examination
0 Total Credits

- The culminating Comprehensive Examination must be successfully completed to demonstrate mastery of research, skills, knowledge and dispositions of standards from accrediting educational agencies prior to graduation.

Grand Total Credits: 33
Program Details

Independent Learning

The MEd program may require a Supervised Teaching Practicum as an elective that is part of the Severe and Profound certificate. Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on and refine knowledge and skills acquired in the program. Please see your adviser for further information.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student’s graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Exercise Physiology, Education PhD

College

College of Community Innovation and Education

Department

Learning Sciences & Educational Research

Program Website

https://healthprofessions.ucf.edu/kpt/

Program Contact Information

David Fukuda PhD
Associate Professor
david.fukuda@ucf.edu
Telephone: 407-823-0442
ED 320R

Is this program available 100% online?

No

Program Description

Admission to this program has been suspended effective Fall 2022. Refer to the Kinesiology PhD program.

The Exercise Physiology track in the Education PhD program provides advanced studies in the area of exercise physiology and wellness, sport and exercise science.

Students interested in the doctoral program might come from the biological and health-related professions, exercise science, physical education, or athletic training.

The Exercise Physiology track in the Education PhD program requires a minimum of 66 credit hours beyond the master's degree. Students must complete 24 credit hours of core courses, 27 credit hours of specialization courses, and 15 credit hours of dissertation. All students must also complete the candidacy examination.

Total Credit Hours Required: 66 Credit Hours Minimum beyond the Master's Degree
Program Prerequisites
A master's degree in a closely related field and master's level competency in educational research and statistics.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
51 Total Credits

Details

Core
24 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
  - Complete the following:
    - IDS7501 - Issues and Research in Education (3)
    - EDF7475 - Qualitative Research in Education (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
    - IDS7502 - Case Studies in Research Design (3)
    - EDF7406 - Multivariate Statistics in Education (3)

- IDS 7502 - Case Studies in Research Design may be substituted for one of the approved research electives from group A listed in the Program Details section below. EDF 7406 - Multivariate Statistics in Education may be substituted for one of the approved research electives from group B listed in the Program Details section below.

Specialization Courses
27 Total Credits

- Complete at least 9 of the following:
  - APK6124 - Environmental Exercise Physiology (3)
  - PET6363 - Dietary and Nutritional Supplementation for Athletic Performance (3)
  - APK6168 - Exercise, Nutrition and Weight Control (3)
  - APK6167 - Sport Nutrition and Ergogenic Aids (3)
  - APK6118C - Neuromuscular Physiology of Human Movement (3)
  - APK6107 - Cardiovascular Exercise Physiology (3)
  - APK6170 - Exercise Physiology II (3)
  - APK6176 - Program Design in Strength and Conditioning (3)
  - APK6127 - Assessment and Evaluation in Kinesiology (3)
  - APK6235 - Kinesiology Instrumentation (3)
  - APK6171 - Exercise Prescription for Special Populations (3)

- Course Not Found
- Course Not Found
- PET7387 - Exercise Endocrinology (3)
- Course Not Found

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - APK 7980 - Dissertation Research Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Candidacy
0 Total Credits

- To enter candidacy for the PhD, students must have an overall 3.0 GPA on all graduate work included in the planned program and pass all required examinations. Examinations will be scheduled by the student and major adviser. The associate dean for graduate studies and research must be notified of the date and location of the exam 30 days in advance. Students must be enrolled in the university during the semester an examination is taken. The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

Candidacy Examinations
0 Total Credits

- All PhD candidates will be required to complete two examinations. Please note that there may be variations in length of exam time and content based on the respective requirements of each track. - Research in the Specialization—8-hour written examination. - Specialization—3-hour oral examination.

Grand Total Credits: 66
Program Details

Independent Learning

The dissertation satisfies the independent learning requirement.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

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Grad Fellowships

Phone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Fundraising Graduate Certificate

College

College of Community Innovation and Education

Department

School of Public Administration

Program Website

https://ccie.ucf.edu/public-administration/nonprofit-management/

Program Contact Information

Young-Joo Lee, PhD
Nonprofit Management Director & Associate Professor
Young-Joo.Lee@ucf.edu

Nasrin Lakhani, MNM
Director, Advising and Student support Services
Nasrin@ucf.edu
407-823-0912

Is this program available 100% online?

Yes

UCF Online

Please note: Fundraising Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

The Graduate Certificate in Fundraising is an 18-credit completely online certificate that provides an overview of the core concepts in fundraising and development for those interested in a career as a professional fundraiser. The Certificate is intended to meet the needs of individuals seeking a focused experience in order to prepare for or advance their careers in fundraising and development. It is appropriate for students who seek to expand their knowledge, but who do not wish to commit to a master's degree program.

Credits earned in the certificate program may be applied toward the Master of Nonprofit Management (MNM) degree. However, admission to the MNM degree program has separate requirements from those of the certificate program and students considering continuing into the master's degree should familiarize themselves with credit transfer policy and should consult with a faculty adviser early in their certificate program. The Graduate Certificate in Fundraising requires that students complete 18 credit hours. Students must maintain at least a 3.0-grade point average in order to be awarded the Graduate Certificate. The Certificate must be completed within 7 years.

The Graduate Certificate in Fundraising program is a completely online; some courses may be offered face-to-face, however, students in this program are expected to have the ability to complete the coursework online. The program requires a minimum of 18 credit hours beyond the bachelor's degree; consisting of 15 credit hours of core courses and 3 credit hours of a restricted elective.

The Certificate program incorporates service learning in some of its courses. Service learning involves students partnering with a local nonprofit organization of their choice to offer technical assistance in a specific area of operation that is covered in their coursework. Service Learning enhances the students' academic experience and presents opportunities for networking. The process is supervised by the instructor and provides benefits to both the organization and the student.

Some of the courses may also involve group work intended to develop leadership abilities while providing an opportunity for the student to show his or her ability to be a team player. Group projects promote important intellectual and social skills and help to prepare students for professional work where teamwork and collaboration are necessary.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: 5233
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - PAD5146 - Nonprofit Resource Development (3)
  - PAD6142 - Nonprofit Organizations (3)
  - PAD6237 - Ethics and Governance in Nonprofit Management (3)
  - PAD6235 - Fundraising as a Profession (3)

Elective Courses (See Program Details For Course Delivery Options)
6 Total Credits

- Complete at least 2 of the following:
  - PAD5850 - Grant and Contract Management (3)
  - PAD6208 - Nonprofit Financial Management (3)
  - PAD6335 - Strategic Planning and Management (3)
  - PAD6236 - Philanthropy and Society (3)
  - PAD6946 - Internship (3)

Grand Total Credits: 18

Program Details

Students must achieve a grade of "B-" (80%) or better in every course. Grades 'C' or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.
Gifted Education Graduate Certificate

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/lser/gifted-education/

Program Contact Information
Gillian Eriksson PhD
Gillian.Eriksson@ucf.edu
Telephone: 407-823-6493
Education 223M

Is this program available 100% online?
Yes

UCF Online

Please note: Gifted Education Graduate Certificate may be completed fully online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

Completion of the Gifted Education Certificate program meets the Florida Department of Education requirements to add Gifted Education Endorsement certification to a Florida Teaching Certificate. The coursework presents research-based best practices that examine a broadened conception of giftedness, a comprehensive system of identification and a continuum of services for meeting the differential learning and developmental needs of diverse populations of gifted students. The Gifted Education Graduate Certificate program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Gifted-Ed-GC.pdf.

Program Description

The Graduate Certificate in Gifted Education prepares educators and classroom teachers to meet the learning needs of diverse advanced, gifted and talented learners in a range of services while providing an accelerated and enriched curriculum.

The coursework for the graduate certificate is based on the Teacher Preparation Standards in Gifted Education set by NAGC/CEC (National Association for Gifted Children and the Council for Exceptional Children). There are two levels possible within the coursework: the regular certificate level applicable to all teachers and professionals seeking specialist knowledge in gifted education; and the Advanced level that includes the Advanced Standards in Gifted Education Teacher Training applicable to those seeking higher levels of research who may already have wide experience in working with advanced, gifted and talented learners. Strategies that model best practices of pre-assessment, curriculum compacting, differentiated and independent learning, extended curriculum, and creative productivity are infused in this program.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree
Global, International and Comparative Education Graduate Certificate

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/ser/curriculum-and-instruction/

Program Contact Information
Karen Biraimah PhD
karen.biraimah@ucf.edu
Telephone: 407-823-2428
ED 320H

Is this program available 100% online?
No

Program Description
The Graduate Certificate in Global, International and Comparative Education prepares teachers for PK-12 classrooms and other professionals who wish to work in international and cross-cultural settings, NGOs, bilateral and multilateral organizations, and/or state and federal government departments.

The certificate is comprised of five graduate courses addressing the theoretical, methodological, critical and practical issues associated with global education, through both macro and micro cultural perspectives.

Students in the Graduate Certificate in Global, International and Comparative Education program must complete five courses (15 credit hours total), four required courses and one elective. Courses may be taken out of sequence.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits
- Complete the following:
  - EDF6809 - Introduction to Comparative and International Education (3)
  - SSE5391 - Global Education: Theory and Practice (3)
  - EDS6365 - Education and National Development (3)

Elective Courses
3 Total Credits
- Complete 1 of the following
  - Earn at least 3 credits from the following:
    - EDG6775 - Exploring Global Educational Issues in International Contexts (1 - 3)
  - Complete at least 1 of the following:
    - EEC6606 - Global Issues in Early Childhood (3)
  - Other graduate courses with Program Coordinator's approval may be chosen.

Grand Total Credits: 15
Health Administration MHA

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Program Website
https://ccie.ucf.edu/hmi/programs/health-administration-ma/

Program Description
The Master of Health Administration offers two tracks: Health Services Administration and the Executive Health Services Administration. Please scroll to the bottom of this page for further details on these Tracks.

The track in Health Services Administration is a traditional program with courses offered in mixed-mode format and the Executive Health Services Administration is geared towards professionals with at least three years of Health Management experience and is offered fully online.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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Institution Codes
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Health Administration MHA - Health Administration MHA, Executive Health Services Administration Track

Track Website
https://ccie.ucf.edu/hmi/programs/health-administration-ma/

Track Handbook
Health Administration MHA, Executive Health Administration Track

Track Contact Information
Dawn Oetjen, PhD
Professor and Program Director
Dawn.Oetjen@ucf.edu
Telephone: 407-823-0171
DPAC 401

Kristin Della Sala, MEd
Academic Support Coordinator II
Kristin.Dellasala@ucf.edu
Telephone: 407-823-3267
DPAC 401
**Online Availability**
Yes

**Track Description**
The School of Global Health Management and Informatics offers a CAHME accredited Executive Master of Health Administration (Executive MHA). This program is 44 credit hours beyond the bachelor's degree and is designed for self-motivated, experienced health services professionals with a minimum of three years of relevant professional experience, including managers, mid-career professionals, and clinicians.

Health care is America's fastest growing service industry. The Master of Health Administration focuses on the structure of health care organizations and examines important issues that impact the health care industry. The Executive MHA (eMHA) track is attractive to working health care professionals due to the online delivery format, which allows students to earn an Executive MHA degree from any location and at times convenient to each student. Throughout the program, students enhance their leadership skills. Learn from leading experts and academics in the field of health administration.

Students admitted into this program must possess a minimum of three years of relevant health care and/or management experience. Students enroll in the program as a cohort with a maximum of 30 students. The cohort model provides faculty the opportunity to discuss issues in greater detail and allows students the ability to network among their peers. The program will be delivered in an online format.

The Executive Master of Health Administration track requires a minimum of 44 credit hours beyond the bachelor's degree. Students must pass the capstone course at the end of their studies as part of Capstone in the Executive MHA (HSA 6188) program requirement. This program is completely online with a course sequence that is lock-step and students must follow the required sequence of coursework.

**Total Credit Hours Required: 44 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**
Evidence of a minimum of three (3) years or more of relevant professional experience in healthcare.

**College of Graduate Studies Contact Information**
gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Core 40 Total Credits

- Complete the following:
  - HSA6766 - Health Care Statistics and Research (4)
  - HSA6345 - Leadership for Health Care Executives (4)
  - HSA6179 - Financial Accounting for Health Care Managers (4)
  - HSA6505 - Health Care Quality and Risk Management (4)
  - HSA6178 - Financial Management for Health Care Managers (4)
  - HSA6197C - Health Care Informatics for Health Care Leaders (4)
  - HSA6156 - Health Care Economics and Policy (4)
  - HSA6520 - Epidemiology and Health Planning (4)
  - HSA6555 - Health Care Ethics and Law (4)
  - HSA6346 - Health Care Organizational Behavior and Human Resource Management (4)

Capstone 4 Total Credits

- Complete all of the following
  - Complete the following:
    - HSA6188 - Health Care Capstone and Strategic Management (4)

HSA 6188 is offered during the second Summer and Fall of the program. A final written examination experience is required of all students in the program. This requirement will be met through successful completion of the capstone course (HSA 6188). To successfully pass this course, students must earn a grade of "A" or "B." There is one exception: students who earn no other "C" grades while in the Executive MHA program will be permitted to pass this course with a grade of "C."

Grand Total Credits: 44

Track Details

Cost Per Credit Hour

For the Executive Master of Health Administration program, the cost per credit hour is $772.69.*

*Fee is subject to change

Additional Program Requirements

Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Additionally, a student may apply a maximum total of six semester credit hours of "C" grades, or the "C" grade credits associated with at most two classes, whichever is greater, to satisfy degree program requirements. Students who earn more than six credit hours or two "C" grades may be dismissed from further study in the program. A student who earns a grade of "D" or below will be dismissed from further study in the Executive MHA program. In any course repeated, a student must earn a grade of "B" or better. The Executive Master of Health Administration program generally does not use plus/minus grading.

Audio and Visual Equipment Requirement: The program is 100 percent online, however in our commitment to engage students in an online learning environment, there may be times when the professors hold webinars and virtual conferences which require students to be online. As such, students need reliable audio and visual equipment (i.e. microphone, headsets, web camera, etc.) to participate in webinars and video conferences.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Tangible research projects, scholarly papers, or our capstone experience also contribute to the self-development of our students.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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Fellowship Information

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https://funding.graduate.ucf.edu

Health Administration MHA - Health Administration MHA, Health Services Administration Track

Track Website
https://ccie.ucf.edu/hmi/programs/health-administration-ma/

Track Handbook
Health Administration MHA, Health Services Administration Track

Track Contact Information

Reid Oetjen, PhD
Reid.Oetjen@ucf.edu
Telephone: 407-823-5668
UCF Downtown 401

Pamela VonGraff
pamela.vongraff@ucf.edu
Telephone: 407-823-0564
UCF Downtown DPAC 401

Online Availability
No

Track Description
The School of Global Health Management and Informatics offers a Master of Health Administration with a track in Health Services Administration. The HSA track is 51 credit hours beyond the bachelor's degree and is accredited by the Commission on Accreditation of Healthcare Management Education (CAHME).

Healthcare is America's fastest-growing service industry, and healthcare executives are in demand to administer the acute and long-term care needs of an aging population and to serve as consultants to businesses and industrial organizations. The Master of Health Administration degree program focuses on the structure of healthcare organizations and examines important issues that impact the healthcare industry as well as examining the management and administrative aspects of health services organizations. It encompasses the business management side of health care, including human resources, marketing, sales, accounting, information systems, planning, and facility management.

The HSA track is attractive to working professionals as all course options are offered at night. Selected courses are also available during the day for students with more flexible schedules. Students can enroll in the program on a full-time or part-time basis. Courses are offered in a mixed-mode format with classroom limits capped at 30 students per section.

Working professionals with 3 or more years of healthcare management experience may wish to consider the Executive Master of Health Administration (e-MHA): www.ucf.edu/online/degree/executive-master-health-administration/.

The Health Services Administration track in the Health Administration MHA program requires a minimum of 51 credit hours beyond the bachelor's degree. This includes 42 credit hours of required courses, 3 credit hours of the capstone course, 3 credit hours of electives, and 3 credit hours of an internship. The degree program also requires 6 credit hours of prerequisite courses, which are taken after admission into the program. Knowledge of personal computers is also required.

Total Credit Hours Required: 51 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Prerequisites**

0 Total Credits

- Students must complete prerequisite coursework, including knowledge of finance and economics. Upon admission to the MHA program, students will be required to complete 2 prerequisite assessment tests. Students that receive a passing score of a 80% or higher will be exempt from taking the prerequisite in the respective area. - HSA 5177 - Foundations of Health Care Finance 3 Credit Hours - HSA 5436 - Foundations of Health Care Economics 3 Credit Hours

**Required Courses**

45 Total Credits

- Details

**Core**

42 Total Credits

- Complete the following:
  - HSA5198 - Health Care Decision Sciences and Knowledge Management (3)
  - HSA6119 - Health Care Organization and Management (3)
  - HSA6128 - Health Care Services Management (3)
  - HSA6155 - Health Economics and Policy (3)
  - HSA6195 - Management and Health Information Systems (3)
  - HSA6342 - Health Care Human Resources (3)
  - HSA6385 - Health Care Quality Management (3)
  - HSC6636 - Issues and Trends in the Health Professions (3)
  - HSC6911 - Scientific Inquiry in the Health Profession (3)
  - PHC6000 - Epidemiology (3)
  - PHC6146 - Health Planning and Policy (3)
  - PHC6160 - Health Care Finance (3)
  - PHC6164 - Health Care Finance II (3)
  - PHC6420 - Case Studies in Health Law (3)

**Capstone (See Program Details For Note)**

3 Total Credits

- Complete the following:
  - HSA6925 - Capstone in HSA (3)

**Elective Courses**

3 Total Credits

- Complete at least 1 of the following:
  - HSC6656 - Healthcare Ethics (3)
  - HSA6112 - International Health Systems (3)
  - HSA6512 - Health Care Leadership (3)
  - HSA6536 - Health and Medical Terminology for Health Administrators (3)
  - HSA5509 - Health Care Risk Management I (3)
  - PHC6183 - Health Care Emergency Management (3)
  - PUP6607 - Politics of Health (3)
  - NGR5660 - Health Disparities: Issues and Strategies (3)
  - GEY5648 - Gerontology: An Interdisciplinary Approach (3)

**Internship**

3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - HSA 6946 Internship - offered every semester (Prerequisites: 24 credit hours completed in the program and completion of the internship orientation webcourse) As a requirement for the Master of Health Administration, students must complete an internship within the administrative realm of an actual healthcare organization. Students will work directly with the Director of Internships to select an organization of interest. Students are required to fulfill 240 contact hours within their selected organization over the course of the semester, or approximately 18-20 hours per week. Many healthcare organizations will require that students complete a background check, which may include, but is not limited to, law enforcement fingerprinting, state driving records, credit reports, and criminal records check. The cost of the background check is the student's responsibility. Background checks may take time to complete and, subsequently, could delay the student's internship placement. It is advised that, in the semester prior to the internship, the student contact the organization directly to obtain further information on the organization's background check requirements. Students who have potential background issues must contact the Director of Internships to schedule an interview in order to discuss the impact on field placement. The Health Services Administration Program cannot guarantee internship placement or subsequent degree completion for students who do not pass background checks. Students with 3 or more years of relevant healthcare management experience may qualify for a research-based internship option and are advised to contact the Director of Internships.

Grand Total Credits: 51

2022-2023 Graduate Catalog
Track Details

Prerequisite

Students must complete prerequisite course work, including knowledge of finance and economics. Upon admission to the MHA program, students will be required to complete 2 prerequisite assessment tests. Students that receive a passing score of a 80% or higher will be exempt from taking the prerequisite in the respective area.

- HSA 5177 - Foundations of Health Care Finance 3 Credit Hours
- HSA 5436 - Foundations of Health Care Economics 3 Credit Hours

Additional Program Requirements

Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher. Additionally, students may not earn more than six credit hours of "C" grades while in the program. Students who receive more than six credit hours of "C" will be dismissed from further study in the major. A student who earns a grade of "D" or below will be dismissed from further study in the HSA program. In any course repeated, a student must earn a grade of "B" or better. The Health Services Administration program generally does not use plus/minus grading.

Capstone

Capstone is offered every semester.

A final written examination experience is required of all students in the program. This requirement will be met through successful completion of the capstone course (HSA 6925). To successfully pass this course, students must earn a grade of "A" or "B." There is one exception: students who earn no other "C" grades while in the MHA program will be permitted to pass this course with a grade of "C."

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Tangible research projects, scholarly papers, internships, and the capstone experience also contribute to the self-development of our students.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships

Telephone: 407-823-0127
ggradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Health Care Informatics MS, Professional Science Master's

College

College of Community Innovation and Education

Department

School of Global Health Management and Informatics

Program Website

https://ccie.ucf.edu/hmi/programs/hci/

Program Handbook Link

Health Care Informatics MS
Program Contact Information

Kendall Cortelyou-Ward PhD
Kendall.Cortelyou-Ward@ucf.edu
DPAC 401

Hannah Nguyen, MHA
Program Coordinator
Hannah.Ngyuen@ucf.edu
Telephone:(407) 823-2359
DPAC 401

Is this program available 100% online?
Yes

UCF Online

Please note: Professional Master of Science in Health Care Informatics may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The School of Global Health Management and Informatics offers a Professional Master of Science in Health Care Informatics, a program designed to meet the growing demand for highly trained health care informatics professionals.

The Health Care Informatics program is unique in that it focuses on providing students with a thorough grounding in the clinical, management and business aspects of the health informatics field. Credits must be taken in health care database management, systems analysis and design, privacy and security and other courses in the curriculum. Students are required to complete an internship during the last semester in the program.

The program is offered online in a distance-learning cohort format to offer access and convenience to working professionals. Applications and admissions are accepted twice per year for fall and spring terms only. Students with professional experience in health care, new graduates from bachelor's programs in health services and students seeking career changes to the health care industry are all encouraged to apply.

The Health Care Informatics program is entirely online. This program charges an enhanced tuition rate.

For state employees (including UCF employees), the tuition waiver will not cover courses in the HCI program.

The successful completion of the MSHCI degree does NOT qualify graduates to sit for the Registered Health Information Administrator (RHIA) or the Registered Health Information Technician (RHIT) certifications.

However, graduates WITH EXPERIENCE are eligible to sit for the Certified Health Data Analyst (CHDA) certification after the successful completion of your MSHCI degree.

The Professional Master of Science in Health Care Informatics will be awarded upon completion of 38 credits of prescribed graduate study. Courses are offered all online as a cohort program. All students must take the courses in the prescribed sequence, and during the last semester in the program students complete an internship and Capstone course.

Total Credit Hours Required: 38 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

There are no prerequisites required for the program. However, students without the necessary professional or educational experience are required to take three foundational courses in health services administration, health information management, and medical terminology. These can be completed while enrolled in the MSHCI program.

Foundational courses

- HIM 6007 - Survey of Health Information Management 1 Credit Hours
- HIM 6267 - Foundation of Health Services Administration 1 Credit Hours
- HIM 6477 - Medical Terminology for Informatics Professionals 1 Credit Hours
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
38 Total Credits

- Complete the following:
  - HIM5118C - Health Care Informatics and Information Technology (4)
  - HIM6123C - Project Management in Health Care Informatics (4)
  - HIM6122C - System Analysis and Design (4)
  - HIM6217C - Health Care Database Management (4)
  - HIM6119C - Biostatistics and Decision Analysis (4)
  - HIM6121C - Privacy and Security in Health Care Informatics (4)
  - HIM6464C - Epidemiology, Analytics and Quality Management (4)
  - HIM6124C - Health Care Data Architecture and Modeling (4)
  - HIM6947 - MS Healthcare Informatics Internship (2)
  - HIM6927 - MS Healthcare Informatics Orientation (1)
  - HIM6125 - Health Care Informatics Capstone (3)

Grand Total Credits: 38

Program Details

Cost Per Credit Hour

For the Health Care Informatics MS program, the cost per credit hour is $772.69.*

*Fee is subject to change

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Health Information Administration Graduate Certificate

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Program Website
https://ccie.ucf.edu/health-information-administration/

Program Contact Information
Alice Noblin
Lecturer
Alice.Noblin@ucf.edu
Telephone: 407-823-2353
HPA2 210D

Is this program available 100% online?
Yes

UCF Online

Please note: This program may be completed online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees. See http://ucf.edu/online for more information.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

Applications to this certificate program are currently suspended for the Spring 2018 semester.

The Department of Health Management and Informatics offers a Health Information Administration Graduate Certificate program that requires 20 credit hours of graduate coursework. This program is designed to meet the growing demand for highly trained health care information management professionals. Admission is only open to those in the UCF MS in Health Care Informatics program. Admission is only open to graduates of the UCF MS in Health Care Informatics or students currently admitted to the UCF MS in Health Care Informatics program. Prerequisites in Anatomy and Physiology I and II are required for current students and graduates of the MS-HCI degree program before enrolling in the graduate certificate program.

The Health Information Administration graduate certificate program is offered online in a distance-learning cohort format for easy access and convenience by working professionals. Applications and admissions are accepted twice per year for fall and spring terms, beginning no earlier than the second year of the student's Healthcare Informatics MS program (that is, fall of the student's second year of MS study).

The successful completion of the Health Care Informatics MS and Health Information Administration Graduate Certificate programs enables students to sit for the RHIA (Registered Healthcare Information Administrator) certification examination.

The Graduate Certificate in Health Information Administration requires 20 credit hours of graduate study in addition to enrollment in the MS in Health Care Informatics program. Courses are offered online as a cohort program with all students completing two courses per semester. All students must take the courses in the prescribed sequence. Visit the program website (see above) for the program cohort schedule.

Total Credit Hours Required: 20 Credit Hours Minimum beyond the Master's Degree

Program Prerequisites

Prerequisites
The following prerequisites are required for consideration of admission to the graduate certificate program:

- Anatomy and Physiology I and II
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
20 Total Credits

- Complete the following:
  - HIM6293 - Health Care Coding and Diagnosis (4)
  - HSA6189 - Health Care Procedural Coding and Reimbursement (4)
  - HSA6752 - Health Care Analytics (4)
  - HSA6759 - Health Care Outcomes Management (4)
  - HSA6179 - Financial Accounting for Health Care Managers (4)

Grand Total Credits: 20

Program Details

Cost Per Credit Hour

For the Graduate Certificate in Health Information Administration program, the cost per credit hour is $772.69.*

*Fee is subject to change

Housing and Residence Life Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Program Website
https://ccie.ucf.edu/elhe/

Program Contact Information

Thomas Cox EdD
thomas.cox@ucf.edu
ED 315Q

Is this program available 100% online?

No

Program Description

The housing and residence life leadership graduate certificate is designed to prepare individuals to become leaders and professionals in the residence life profession. It will expand their knowledge of topics relevant to residence life including student development theory, student personnel services, the first-year college experience, diversity issues, and legal and ethical issues in student services. Additionally, individuals will develop their own leadership skills as well as curriculum development for programs involving students in residence at colleges and universities. A practical internship is required to allow hands on field experience in housing and residence life.

Total Credit Hours Required: 16 Credit Hours Minimum beyond the Bachelor’s Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - EDH6047 - Theories of College Student Development (3)
  - EDH6634 - Student Personnel Services in Higher Education (3)

Elective Courses
9 Total Credits

- Complete at least 3 of the following:
  - EDH6045 - First Year College Experience (3)
  - EDH7046 - Diversity Issues in Higher Education (3)
  - EDH6204 - Leadership in College Organizations (3)
  - EDH6215 - The College Curriculum (3)
  - EDH6407 - Ethical and Legal Issues in Student Personnel (3)

Internship
1 Total Credits

- Earn at least 1 credits from the following types of courses:
  - Internship - Students will complete a 1 credit hour internship (15-20 hours) in a residence life position or a closely related position approved by the faculty advisor.

Grand Total Credits: 16

Initial Teacher Professional Preparation Graduate Certificate

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/secondaryed/initial-teacher-professional-preparation/

Program Contact Information

Regina "Gina" Gresham
Associate Professor
Gina.Gresham@ucf.edu
Telephone: 407-823-3550
Education 123J

Is this program available 100% online?
Yes
Please note: Initial Teacher Preparation Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

The Initial Teacher Professional Preparation Graduate Certificate program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Initial-Teacher-Prep-GC.pdf.

Program Description

The Graduate Certificate in Initial Teacher Professional Preparation (ITPP) is designed for students who have secured a teaching position, plan to obtain a teaching position, or have a temporary teaching certificate. The Initial Teacher Preparation Program graduate certificate is not a Florida Department of Education state-approved teacher education program. The certificate offers foundation courses that can supplement partial requirements toward teacher certification. The ITPP does not include content area courses, internship, or certification exams. Therefore, students seeking professional educator certification may wish to complete one of UCF’s Teacher Education M.A.T. programs (link: https://ccie.ucf.edu/academics/masters/).

The professional core courses in the certificate include uploading key assignments using the Via™ by Watermark platform and are assessed by faculty to provide evidence of candidate proficiency in all Florida Educator Accomplished Practices (FEAPs). The goal of the certificate is to enable educators to have successful teaching experiences in grades 6-12 classrooms. Students may enroll in the Initial Teacher Professional Preparation certificate and apply to be accepted to the Teacher Education MAT program either concurrently or after earning the certificate.

For the Initial Teacher Professional Preparation graduate certificate, students complete six courses (18 credit hours total), including five required courses (15 credit hours) and at least one special methods course (3 credit hours).

All teacher education candidates are required to complete Via™ by Watermark requirements before being certified for graduation. Via™ by Watermark access is required for the portfolio. See https://ccie.ucf.edu/explore-via/.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

Graduate Admissions Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
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ETS PPI: 5233
## Degree Requirements

### Required Courses

15 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
    - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
    - EDG6415 - Principles of Instruction and Classroom Management (3)
    - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
  - Complete at least 1 of the following:
    - REDS147 - Developmental Reading (3)
    - LAE5496 - Disciplinary Literacy in the Content Areas (3)

- Co-requisite
  3 - 4 Total Credits

  - Complete 1 of the following
    - Option 1 (This is not a certification course.)
      - Complete the following:
        - EEX5051 - Exceptional Children in the Schools (3)
    - Option 2
      - Complete all of the following
        - Special Methods Course selection depends on the student's intended certification area. Equivalent courses from other accredited Florida State Institutions may be used to satisfy this requirement the discretion of the Program Director. Students are advised to obtain permission in advance of registering for these courses.
        - Complete at least 1 of the following:
          - ARE5359 - Teaching Art K-12 (4)
          - FLE5345 - Teaching World Languages in K-12 Schools (3)
          - LAE5346 - Methods of Teaching English Language Arts (3)
          - MAE5327 - Teaching Middle School Mathematics (3)
          - MAE5336 - Current Methods in Secondary School Mathematics (3)
          - MUE5348C - K-12 Music Methods (4)
          - SCE5325 - Teaching Middle School Science (3)
          - SCE5337 - Issues and Methods in Secondary School Science (3)
          - SSE5790 - Inquiry and Instructional Analysis in Social Science Education (3)
          - BTE6935 - Seminar in Business Education (3)

Grand Total Credits: **18 - 19**

### Instructional Design and Technology MA

**College**

College of Community Innovation and Education

**Department**

Learning Sciences & Educational Research

**Program Website**

https://ccie.ucf.edu/lser/instructional-design-and-technology/

**Program Handbook Link**

Instructional Design and Technology MA

**Program Contact Information**

Richard Hartshorne PhD  
Professor  
richard.hartshorne@ucf.edu  
Telephone: 407-823-1861  
ED 209-D

**Is this program available 100% online?**

Yes
UCF Online

Please Note: Instructional Design and Technology, MA may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Master of Arts in Instructional Design and Technology program is designed to meet the needs of working professionals in various settings. It enables candidates to complete courses in traditional, Web, and mixed-mode (with one face-to-face meeting every other week). The program offers tracks in educational technology, instructional systems, and e-learning, enabling candidates to pursue careers in business and industry, K-12, and higher education. Please scroll to the bottom of this page for further details on these Tracks.

All three tracks of the Instructional Design and Technology MA require a minimum of 36 credit hours beyond the bachelor's degree, including 12 credit hours of instructional technology core courses, 12 credit hours of professional specialization, nine credit hours of electives, and three credit hours of practicum.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 16012
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
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ETS PPI: 5233

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Millican Hall 120
Telephone: 407-823-2827
 Appointment Line: 407-823-5285
 Fax: 407-823-5241
 finaid@ucf.edu
 http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Track Website
https://ccie.ucf.edu/lser/instructional-design-and-technology/

Track Handbook
Instructional Design and Technology MA, e-Learning Track

Track Contact Information
Glenda Gunter PhD
Professor
glenda.gunter@ucf.edu
ED 322-P

Online Availability
Yes

Track Description
The e-Learning track in the Instructional Design and Technology MA program is designed for educators in K-12 and higher education, trainers, and instructional designers.

The program focuses on teaching the design, delivery, and evaluation of high-quality e-learning materials for in-service, preservice teachers and online trainers for both totally online and blended (hybrid) learning environments. Candidates gain employment in business and industry, K-12, and higher education as organizations across sectors work to optimize the use of telecommunication technologies to enhance individual and collaborative learning. The e-Learning program may be completed totally online or in mixed mode. For more information, visit education.ucf.edu/insttech/.

International students who are in the U.S. and maintaining a U.S. Student Visa are not eligible for this track.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
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ETS PPI: 5233
Degree Requirements

Required Courses
24 Total Credits

- Details

Core
12 Total Credits

- Complete all of the following
  - Complete the following:
    - EME6055 - Current Trends in Instructional Technology (3)
    - EME6062 - Research in Instructional Technology (3)
    - EME6613 - Instructional System Design (3)
  - Complete at least 1 of the following:
    - EDF6432 - Measurement and Evaluation in Education (3)
    - EDF6401 - Statistics for Educational Data (3)
    - EDF6481 - Fundamentals of Graduate Research in Education (3)
    - EDF6472 - Data-Driven Decision-Making for Instruction (3)

Specialization
12 Total Credits

- Complete all of the following
  - "EME 6417 (fall) must be taken before EME 6458 (spring); these courses are sequential, where the work product begins in EME 6417 and is completed during EME 6458.
  - Complete the following:
    - EME6507 - Multimedia for Education and Training (3)
    - EME6457 - Distance Education: Technology Process Product (3)
    - EME6417 - Interactive Online and Virtual Teaching Environments (3)
    - EME6458 - Virtual Teaching and the Digital Educator (3)

Elective Courses (See Program Details Below For Note) 9
9 Total Credits

- Complete at least 3 of the following:
  - EDF6432 - Measurement and Evaluation in Education (3)
  - EDF6401 - Statistics for Educational Data (3)
  - EDF6401 - Statistics for Educational Data (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EME6607 - Planned Change in Instructional Technology (3)
  - EME6601 - Instructional Simulation Design for Training and Education (3)
  - EME6614 - Instructional Game Design for Training and Education (3)
  - IDS6503 - International Trends in Instructional Systems (3)
  - IDS6504 - Adult Learning (3)
  - EINS5251 - Usability Engineering (3)
  - EINS5255C - Interactive Simulation (3)
  - ENC6216 - Editing Professional Writing (3)
  - Course Not Found
  - ENC6261 - Technical Writing, Theory and Practice (3)
  - ENC6296 - Interactive Design in Technical Communication (3)
  - DIG6432 - Transmedia Story Creation (3)
  - EDF6635 - Capstone: Action Research in Teacher Leadership (3)
  - EDF6684 - Education as A Cultural Process (3)
  - EDF6886 - Multicultural Education (3)
  - EGI6051 - Understanding the Gifted/Talented Student (3)
  - ESE6217 - Curriculum Design (3)
  - TSL5345 - Methods of ESOL Teaching (3)

Practicum
3 Total Credits

- Complete the following:
  - EME6940 - Theory into Practice in Educational Technology (3)

Grand Total Credits: 36
**Track Details**

**Elective Courses**

Courses not listed above require adviser approval. All ENC courses require approval from the English Department.

**Independent Learning**

Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

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**Instructional Design and Technology MA - Instructional Design and Technology MA, Educational Technology Track**

**Track Website**

https://ccie.ucf.edu/iser/instructional-design-and-technology/

**Track Handbook**

Instructional Design and Technology MA, Educational Technology Track

**Track Contact Information**

Richard Hartshorne PhD
Professor
richard.hartshorne@ucf.edu
Telephone: 407-823-1861
ED 209-D

**Online Availability**

Yes
**Track Description**

The Educational Technology track is designed for classroom teachers who want to increase their technical skills and become highly skilled at successfully integrating technology into the curriculum as well as develop leadership skills necessary to become site-based technology coordinators in K-12 schools, colleges, and universities.

The knowledge gained through the Educational Technology program allows candidates to seek new career paths in education. Graduates from this program have the skills to become computer teachers, instructors at the community and college and university level and instructional designers. The program does not lead to any current certification in Florida.

The Educational Technology track in the Instructional Design and Technology MA program requires a minimum of 36 credit hours beyond the bachelor's degree. The curriculum includes 12 credit hours of instructional technology core courses, 12 credit hours of professional specialization, nine credit hours of electives, and three credit hours of practicum.

International students who are in the U.S. and maintaining a U.S. Student Visa are not eligible for this track.

**Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

2022-2023 Graduate Catalog
## Degree Requirements

### Required Courses

**24 Total Credits**

- **Core**
  - **12 Total Credits**
    - Complete all of the following:
      - Complete the following:
        - EME6055 - Current Trends in Instructional Technology (3)
        - EME6062 - Research in Instructional Technology (3)
        - EME6613 - Instructional System Design (3)
    - Complete at least 1 of the following:
      - EDF6432 - Measurement and Evaluation in Education (3)
      - EDF6432 - Measurement and Evaluation in Education (3)
      - EDF6481 - Fundamentals of Graduate Research in Education (3)
      - EDF6472 - Data-Driven Decision-Making for Instruction (3)

- **Professional Specialization**
  - **12 Total Credits**
    - Complete the following:
      - EME6053 - Teaching and Learning with Emerging Technologies (3)
      - EME6405 - Adapting and Integrating Innovative Technologies in Education (3)
      - EME6507 - Multimedia for Education and Training (3)
      - EME6602 - Integration of Technology into the Learning Environments (3)

- **Elective Courses (See Program Details Below For Note)**
  - **9 Total Credits**
    - Complete at least 3 of the following:
      - EDF6432 - Measurement and Evaluation in Education (3)
      - EDF6401 - Statistics for Educational Data (3)
      - EDF6481 - Fundamentals of Graduate Research in Education (3)
      - EDF6472 - Data-Driven Decision-Making for Instruction (3)
      - EME6209 - Multimedia Instructional Systems II (3)
      - EME6457 - Distance Education: Technology Process Product (3)
      - EME6601 - Planned Change in Instructional Technology (3)
      - EME6601 - Instructional Simulation Design for Training and Education (3)
      - IDS6504 - Adult Learning (3)
      - ENC6216 - Editing Professional Writing (3)
      - Course Not Found
      - ENC6261 - Technical Writing, Theory and Practice (3)
      - ENC6296 - Interactive Design in Technical Communication (3)
      - DIG6432 - Transmedia Story Creation (3)
      - EDF6635 - Capstone: Action Research in Teacher Leadership (3)
      - EDF6888 - Education as A Cultural Process (3)
      - EDF6886 - Multicultural Education (3)
      - EG6051 - Understanding the Gifted/Talented Student (3)
      - ESE6217 - Curriculum Design (3)
      - TSL5345 - Methods of ESOL Teaching (3)

### Practicum

**3 Total Credits**

- Complete all of the following:
  - Complete the following:
    - EME6940 - Theory into Practice in Educational Technology (3)
  - Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

**Grand Total Credits: 36**
Track Details

Elective Courses
Students must choose at least 9 credit hours of electives. Electives in current certification area, technology, or other as approved by adviser. Courses not listed below require adviser approval. All ENC courses require approval from English Department.

Independent Learning
Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information
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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Instructional Design and Technology MA - Instructional Design and Technology MA, Instructional Systems Track

Track Website
https://ccie.ucf.edu/lser/instructional-design-and-technology/

Track Handbook
Instructional Design and Technology MA, Instructional Systems Track

Track Contact Information
Atsusi Hirumi PhD
Professor
atsusi.hirumi@ucf.edu
ED 322-P

Online Availability
Yes
**Track Description**

The Instructional Systems track in the Instructional Design and Technology MA program is designed for prospective and practicing instructional designers, training specialists and training directors/managers in business, industry, government, or other settings where training, professional development and lifelong learning takes place.

Candidates develop expertise in how and why people learn, how to stimulate and facilitate learning, and in the use of alternative instructional delivery systems. Candidates analyze training requirements and design, develop, evaluate, and manage training and educational programs using current and emerging technologies. The Instructional Systems program may be completed totally online or in mixed mode.

The Instructional Systems track in the Instructional Design and Technology MA program requires a minimum of 36 credit hours beyond the bachelor's degree. The curriculum includes 12 credit hours of instructional technology core courses, 12 credit hours of professional specialization, 9 credit hours of electives, three credit hours of practicum, and a comprehensive exam taken during the last semester of coursework.

International students who are in the U.S. and maintaining a U.S. Student Visa are not eligible for this track.

**Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233
Degree Requirements

Required Courses
24 Total Credits

Details

Core
12 Total Credits

- Complete all of the following
  - Complete the following:
    - EME6055 - Current Trends in Instructional Technology (3)
    - EME6062 - Research in Instructional Technology (3)
    - EME6613 - Instructional System Design (3)
  - Complete at least 1 of the following:
    - EDF6432 - Measurement and Evaluation in Education (3)
    - EDF6401 - Statistics for Educational Data (3)
    - EDF6481 - Fundamentals of Graduate Research in Education (3)
    - EDF6472 - Data-Driven Decision-Making for Instruction (3)

Professional Specialization
12 Total Credits

- Complete the following:
  - EME6226 - Instructional Development and Evaluation (3)
  - EME6507 - Multimedia for Education and Training (3)
  - EME6607 - Planned Change in Instructional Technology (3)
  - EME6705 - Administration of Instructional Systems (3)

Elective Courses (See Program Details Below For Note)
9 Total Credits

- Complete at least 3 of the following:
  - EDF6432 - Measurement and Evaluation in Education (3)
  - EDF6401 - Statistics for Educational Data (3)
  - EDF6481 - Fundamentals of Graduate Research in Education (3)
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EME6209 - Multimedia Instructional Systems II (3)
  - EME6457 - Distance Education: Technology Process Product (3)
  - EME6601 - Instructional Simulation Design for Training and Education (3)
  - EME6614 - Instructional Game Design for Training and Education (3)
  - EME6646 - Instructional Game Design for Training and Education (3)
  - IDS6503 - International Trends in Instructional Systems (3)
  - IDS6504 - Adult Learning (3)
  - EINS251 - Usability Engineering (3)
  - EINS255C - Interactive Simulation (3)
  - EINS258 - Human Computer Interaction (3)
  - ENC6216 - Editing Professional Writing (3)
  - Course Not Found
  - ENC6261 - Technical Writing, Theory and Practice (3)
  - ENC6296 - Interactive Design in Technical Communication (3)
  - DIG6432 - Transmedia Story Creation (3)
  - DIG6136 - Design for Interactive Media (3)
  - DIG6551 - Theory and Practice of Interactive Storytelling (3)

Practicum
3 Total Credits

- Complete all of the following
  - Complete the following:
    - EME6940 - Theory into Practice in Educational Technology (3)
  - Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

Grand Total Credits: 36
Track Details

Elective Courses

Courses not listed above require adviser approval. All ENC courses require approval from the English department.

Independent Learning

Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Instructional Design for Simulations Graduate Certificate

College

College of Community Innovation and Education

Department

Learning Sciences & Educational Research

Program Website

https://ccie.ucf.edu/ler/instructional-design-and-technology/

Program Contact Information

Atsusi Hirumi PhD
Associate Professor
hirumi@ucf.edu
ED 320-F

Is this program available 100% online?

Yes

UCF Online

Please note: Instructional Design for Simulations Graduate Certificate may be completed fully online although not all program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

The Graduate Certificate in Instructional Design for Simulations prepares educators, instructional designers, and human resource and training specialists in corporate, industry and educational settings to work with engineers, graphic artists, computer programmers, and game developers to design training and instructional systems.

Training and educational programs are now incorporating stand-alone and PC-based simulations and instructional (video) games to enhance human motivation and performance. The result has been a growing demand for simulation and game-based training and instructional systems in corporate, government and education sectors. The Graduate Certificate in Instructional Design for Simulations provides an interdisciplinary approach to prepare educators, instructional designers, and human resource and training specialists in corporate, industry and educational settings to work with engineers, graphic artists, computer programmers, and game developers to design training and instructional systems, focusing on the pedagogical aspects of stand-alone and PC-based desktop training and educational simulations and games.

For the Instructional Design for Simulations certificate, students complete five required courses (15 credit hours total). The recommended plan of study, noting when each course is offered, is provided on the Instructional Technology program website under Plans of Study for professional certificates.

International students who are in the U.S. and maintaining a U.S. Student Visa are not eligible for this certificate.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete all of the following
  - Complete the following:
    - EME6613 - Instructional System Design (3)
    - EME6938ST4 - ST: Story Design for Instruction (3)
    - EME6601 - Instructional Simulation Design for Training and Education (3)
    - EME6614 - Instructional Game Design for Training and Education (3)
  - Complete at least 1 of the following:
    - IDS5142 - Modeling and Simulation for Instructional Design (3)
    - IDS6147 - Perspectives on Modeling and Simulation (3)

Grand Total Credits: 15

Instructional Design Graduate Certificate

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/lser/instructional-design-and-technology/
Program Contact Information

Atsusi Hirumi PhD
Professor
atsusi.hirumi@ucf.edu
ED 320-F

Is this program available 100% online?

Yes

UCF Online

Please note: Instructional Design Graduate Certificate may be completed fully online although not all program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Instructional Design prepares educators, instructional designers, and human resource and training specialists in corporate, industry, and educational settings to design training, professional development, or other instructional materials.

The certificate provides an opportunity for study and professional training and development of the design and development skills necessary to become an instructional designer in varied fields. The certificate requires substantial independent thinking and emphasis is placed on the cultivation of scholarly attitudes and methods.

All courses are taught online and many will also be offered on a flexible schedule at the Orlando campus. The Instructional Design graduate certificate requires five courses (15 credit hours total).

International students who are in the U.S. and maintaining a U.S. Student Visa are not eligible for this certificate.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete the following:
  - EME6613 - Instructional System Design (3)
  - EME6226 - Instructional Development and Evaluation (3)
  - EME6607 - Planned Change in Instructional Technology (3)
  - EME6507 - Multimedia for Education and Training (3)
  - EME6705 - Administration of Instructional Systems (3)

Grand Total Credits: 15
Instructional/Educational Technology Graduate Certificate

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/lser/instructional-design-and-technology

Program Contact Information
Richard Hartshorne PhD
Professor
richard.hartshorne@ucf.edu
Telephone: 407-823-1861
ED 209-D

Is this program available 100% online?
Yes

UCF Online

Please note: Instructional/Educational Technology Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Instructional/Educational Technology provides teachers with the knowledge and training to apply technological tools to the learning process.

The Graduate Certificate in Instructional/Educational Technology provides an opportunity for study and professional training and development of the leadership skills necessary to become educational technology specialists in K-12 schools. The certificate requires substantial independent thinking and emphasis is placed on the cultivation of scholarly attitudes and methods while assisting students in meeting the requirements for the State of Florida Teacher Certification. In addition, students will learn the subject matter needed to meet the National Educational Technology Standards for Teachers developed by the International Society for Technology in Education (ISTE).

Several courses are taught online and other courses will be offered on a flexible schedule at the Orlando campus. The Instructional/Educational Technology certificate requires five courses (15 credit hours total).

International students who are in the U.S. and maintaining a U.S. Student Visa are not eligible for this certificate.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor’s Degree
Interdisciplinary Language and Literacy Intervention Graduate Certificate

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/exceptional-student-education/

Program Contact Information

Mary Little PhD
Dena Sianda PhD
Exceptional Student Education

Linda I. Rosa-Lugo EdD
College of Health Professions and Sciences
School of Communication Sciences and Disorders

ProjectSPEECH@ucf.edu
Telephone: 407-823-4351
HPA 2-110

Is this program available 100% online?
No
Program Description

The Interdisciplinary Language and Literacy Intervention graduate certificate provides advanced coursework focused on evidence-based knowledge, skills, and resources for individuals who work with students who have high-intensity needs. This collaborative and inter-professional graduate certificate address competencies for an intervention specialist from the Council for Exceptional Students (CEC) and from the American Speech-Language-Hearing Association (ASHA). This certificate is designed to meet the needs of educators and speech-language pathologists who use school-based and classroom instructional data to meet the instructional and intervention needs of all students, including students with high-intensity needs, beyond the typical, initial classroom instruction within a multi-tiered system of supports.

This certificate will provide an advanced, multi-disciplinary theoretical approach and applied knowledge base to experienced educators and speech-language pathologists.

Coursework focuses on knowledge, skills and competencies for professionals working with students within an intervention framework. The Interdisciplinary Language and Literacy Intervention certificate is a multi-disciplinary approach and includes competencies from exceptional student education, communication disorders, reading education, and English as a Second Language (ESOL) education. The graduate courses provide an opportunity for students to complete the Interdisciplinary Language and Literacy Intervention graduate certificate beyond the undergraduate degree. Should a student wish to earn a master’s degree, education specialist degree, or doctoral degree, the courses in the certificate could be applied to one of several degree programs in the College of Community Innovation and Education or in the School of Communication Sciences and Disorders (housed in the College of Health Professions and Sciences) with the permission of their advisor.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
12 Total Credits

- Complete the following:
  - EEX6218 - Diagnostic Assessment and Intervention Planning in Exceptional Education (3)
  - IDS6657 - Professional Collaboration in Language and Literacy (3)
  - RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)
  - SPA6843 - Severe Language-Based Reading and Writing Disabilities (3)

Grand Total Credits: 12

Juvenile Justice Leadership Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Program Website
https://ccie.ucf.edu/criminaljustice/
Program Contact Information

Eugene Paoline, III PhD
Professor
Eugene.Paoline@ucf.edu
Telephone: 407-823-2603
HS1, RM 321

Elexis Ritz
elexis.ritz@ucf.edu
Telephone: 407-823-6093
HS1 311

Is this program available 100% online?
Yes

UCF Online

Please note: Juvenile Justice Leadership Graduate Certificate may be completed fully online although not all elective options may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters and be part of another degree seeking program. Only 3 of the 9 credit hours may be taken in a completely online format. International applicants should be aware the program may not offer sufficient on-campus courses for F or J visa holders. Please contact the program for more information before applying. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Juvenile Justice Leadership is designed to provide students with theoretical and practical knowledge in the areas of criminal justice, public administration, and social work.

The juvenile justice system, long understaffed, is facing the continuing problem of increased juvenile crime, high levels of juvenile drug and substance abuse, and debatable programs to rehabilitate delinquent children. Juvenile Justice Leadership is one of the fastest growing career fields in Criminal Justice.

The curriculum for the Juvenile Justice Leadership certificate program consists of two required courses and two elective courses for a total of 12 credit hours.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
### Degree Requirements

#### Required Courses
6 Total Credits

- Complete the following:
  - CJJ6020 - The Juvenile Justice System (3)
  - CCJ6118 - Criminal Justice Organizations (3)

#### Elective Course
6 Total Credits

- Complete at least 2 of the following:
  - CCJ5015 - The Nature of Crime (3)
  - CCJ6073 - Data Management Systems for Crime Analysis (3)
  - CCJ5456 - The Administration of Justice (3)
  - CJL6568 - Law and Social Control (3)
  - CCJ6106 - Policy Analysis in Criminal Justice (3)
  - PAD6327 - Public Program Evaluation Techniques (3)
  - SOW6712 - Clinical Social Work Practice with Substance Addictions (3)
  - SOW6655 - Child Abuse: Treatment and Prevention (3)
  - SYP6561 - Child Abuse in Society (3)

Grand Total Credits: **12**

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### K-8 Mathematics and Science Education MEd

**College**

College of Community Innovation and Education

**Department**

School of Teacher Education

**Program Website**

https://ccie.ucf.edu/teachered/k-12/

**Program Handbook Link**

K-8 Mathematics and Science Education MEd

**Program Contact Information**

**Enrique Ortiz PhD**

Associate Professor
enrique.ortiz@ucf.edu
Telephone: 407-823-5222
ED 123 G

**Is this program available 100% online?**

No

**Program Description**

The Master of Education in K-8 Mathematics and Science Education program prepares teachers to improve the quality of teaching and learning in mathematics and science in grades K-8.

The K-8 Mathematics and Science Education MEd program requires a minimum of 36 credit hours beyond the bachelor's degree, including 15 credit hours of core courses, 15 credit hours of specialization content pedagogical courses, and six credit hours of thesis work or the nonthesis option, which focuses on either completing and submitting findings of a research project to a refereed journal or developing a portfolio in preparation for National Board Certification for Teachers.

**Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree**

**Program Prerequisites**

A professional Florida teaching certificate in one of the following areas: elementary education, mathematics education (middle school or secondary), or science education (middle school or secondary).

Three years of teaching experience.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
30 Total Credits

- Details

Core
15 Total Credits

- Complete the following:
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - EEX6342 - Seminar-Critical Issues in Special Education (3)
  - IDS6937 - Teaching Mathematics and Science Using Reform-Based Practices (3)
  - IDS6939 - Reforming Curriculum in Mathematics and Science Education (3)
  - IDS6516 - Leadership Development for Mathematics and Science Teachers (3)

Specialization
15 Total Credits

- Complete the following:
  - SCE5836 - Space and Physical Science for Educators (3)
  - ISC6146 - Environmental Education for Educators (3)
  - MAE6899 - Seminar in Teaching Mathematics (3)
  - MAE6318 - Current Methods in Elementary School Mathematics (3)
  - MAE6641 - Problem Solving and Critical Thinking Skills (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following

  Thesis Option

- Earn at least 6 credits from the following types of courses:
  - IDS 6971 - Thesis

  The College of Graduate Studies Thesis and Dissertation page (https://graduate.ucf.edu/thesis-and-dissertation/) contains information on the university’s requirements for dissertation formatting, format review, defenses, final submission, and more. A step-by-step completion guide is also available on the Thesis and Dissertation Services (https://apps.graduate.ucf.edu/ETD_Student_Services/) site. The following requirements must be met by dissertation students in their final term:
  - Submit a properly formatted file for initial format review by the format review deadline
  - Submit the Thesis and Dissertation Release Option form well before the defense
  - Defend by the defense deadline
  - Receive format approval (if not granted upon initial review)
  - Submit signed approval form by final submission deadline
  - Submit final thesis or dissertation document by final submission deadline

Nonthesis Option

- Complete all of the following

  - Complete the following:
    - IDS6910 - Research in Mathematics and Science Education (3)
    - EDG6329 - Quality Teaching Practices (3)
  - Non-thesis scholars will engage in an action research analyzing an issue or challenge in their own classroom teaching practice or school procedures in the areas of mathematics and/or science. An action research project includes the application of research methodologies, literature review, data collection, and data analysis. As part of Capstone Course, the culminating activities are final paper report and poster presentation of the action research project. A research advisor will be selected to collaborate with the scholar in the development of the action research. In this context, action research refers to a wide variety of evaluative, investigative, and analytical research methods designed to diagnose problems or weaknesses (organizational, academic, or instructional) and help teachers develop practical solutions to address them quickly and efficiently. The general goal is to investigate a practical approach that leads to increasingly better results for schools, teachers, or programs. It typically follows a predefined process; for example: 1. identify a problem to be studied, 2. collect data on the problem, 3. organize, analyze, and interpret the data, 4. develop a plan to address the problem, 5. implement the plan, 6. evaluate the results of the actions taken, 7. identify a new problem, and 8. if necessary, repeat the process. Unlike more formal research studies, such as those conducted by universities and published in peer-reviewed scholarly journals, action research is typically conducted by the teachers working school being studied. It involves less formal, prescriptive, or theory-driven research methods, since the goal is to address practical problems in a specific school or classroom, rather than produce independently validated and reproducible findings. It is typically focused on solving or answering a specific question; for example, Why are so many of our ninth graders failing mathematics?

Grand Total Credits: 36

Program Details

Independent Learning

A thesis or action research project is required.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Leadership in Workforce Development Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Program Website
https://ccie.ucf.edu/elhe/career-and-technical-education/

Program Handbook Link
N/A

Program Contact Information
Lisa Martino, PhD
Lecturer, CTE Academic Program Coordinator
lisa.martino@ucf.edu
Telephone: 407-823-6184
ED 220C

Is this program available 100% online?
Yes

UCF Online

Please note: The Leadership in Workforce Development graduate certificate may be completed fully online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is authorized to provide online courses or instruction to students in all states. Refer to State Authorizations for current information.
Program Description

The Leadership in Workforce Development Graduate Certificate is a fully online, short term program of study that may be completed in one year. This program prepares professionals to become workforce development and training leaders. Leaders in workforce development and training plan, coordinate, and direct workplace skills and technical knowledge instruction which meet current and future needs of business and industry while advancing workers in their careers.

Workforce development leaders may be employed in secondary and postsecondary education institutions, continuing education programs, government social services, workforce development agencies, career/employment organizations, as well as private sector business and industry training and talent management departments. Job titles in those sectors include program coordinator, manager, supervisor, administrator, director, consultant, specialist, or other workforce development/training administrator-type positions.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

To be admitted to the Leadership in Workforce Development graduate certificate program, students will need to have an earned Bachelor's degree from an accredited institution recognized by UCF.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

15 Total Credits

- Complete the following:
  - ECW5265 - Experiential Learning in Career and Workforce Education Programs (3)
  - ECW6105 - Career Education Curriculum Planning and Implementation (3)
  - ECW6667 - Workforce Development Theory to Practice (3)
  - ECW5208 - Workforce Development and Training Management (3)
  - ECT6792 - Research Applications for Workforce Development (3)

Grand Total Credits: 15

Program Details

To be admitted to the certificate program students will need to have a Bachelor's degree from an accredited institution recognized by UCF. Courses must be completed as indicated in the degree requirements. There are no substitutions to the program of study.
Financial Information

There are very few Certificate Programs that are eligible for financial aid. Only coursework required for the program will be considered in calculating aid eligibility. Disbursements will take place after the Drop/Swap & Add period. Students must meet all eligibility requirements prior to disbursement.

For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

Local Director of Career and Technical Education Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Program Website
https://ccie.ucf.edu/elhe/career-and-workforce-education/

Program Contact Information
Lisa Martino, PhD
Lecturer, Academic Program Coordinator
lisa.martino@ucf.edu
Telephone: 407-823-6184
ED 220C

Is this program available 100% online?

Yes

UCF Online

Please note: Local Director of Career and Technical Education may be completed fully online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit UCF Global. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is authorized to provide online courses or instruction to students in all states. Refer to State Authorizations for current information.
Program Description

The Local Director of Career and Technical Education Graduate Certificate is an online, short-term program of study that focuses on career and technical education administration, supervision, and management competencies. This graduate certificate will enhance your leadership skills to improve the quality of CTE instruction through effective program management.

The program of study can be completed within one year. *This graduate certificate is not an initial professional education certificate program.

The Certificate is designed for career and technical education (CTE) teachers or corporate trainers with a bachelor's degree who wish to advance their career as a Career and Technical Education (CTE) program coordinator, director, manager, supervisor, or administrator in secondary and postsecondary educational settings. It is also for students interested in advancing their knowledge in CTE professional education coursework.

This certificate may also, in part, prepare candidates to meet a portion of the State of Florida Department of Education Certification in Local Director of Career and Technical Education coursework requirements. Other requirements for the Florida DOE certification are noted on the FL DOE website.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

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Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
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GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete the following:
  - ECW5207 - Management of Career Education Programs (3)
  - ECW6105 - Career Education Curriculum Planning and Implementation (3)
  - ECW6205 - Administration of Local Career Education Programs (3)
  - ECW6206 - Supervision in Local Career and Technical Education Programs (3)
  - ECW6695 - School/Community Relations for Career and Technical Education Programs (3)

Grand Total Credits: 15

Marriage, Couple, and Family Therapy Graduate Certificate

College

College of Community Innovation and Education

Department

Learning Sciences & Educational Research

Program Website

https://ccie.ucf.edu/counselored/
This program has temporarily suspended admissions effective Spring 2020

The Graduate Certificate in Marriage, Couple and Family Therapy is housed within the Counselor Education Program in the College of Community Innovation and Education. The certificate program is designed to provide advanced training to students in the Counselor Education and Social Work programs and for practicing counselors and therapists working with families, couples, and children.

As part of the program’s pragmatic approach to preparing counselors, in addition to classroom studies, all students complete clinical experiences in the UCF Community Counseling and Research Center and field-based experiences in the community. The UCF Community Counseling and Research Center serves as a hub for training and research in the program, with graduate students providing annual services to over 1,400 individuals, couples, and families in the central Florida community.

Master’s students in the School of Social Work can also obtain the Graduate Certificate in Marriage, Couple and Family Therapy by taking the required courses for Social Work students, which include content about family theory and assessment and counseling with families as well as a field component. Information about Social Work courses and field courses can be obtained through the School of Social Work.

The Graduate Certificate in Marriage, Couple and Family Therapy requires 15 credit hours. The Practicum in Counselor Education (MHS 6803) and the Counseling Internship (MHS 6830) must be taken in separate semesters. Among the total hours accumulated in these clinical experiences, at least 180 hours of direct client contact must be dedicated to working with couples, families, and unmarried dyads. For Social Work students, the certificate requires 17 credit hours, enrollment in either the part-time or full-time Clinical Field Seminar is acceptable, and all coursework is specific to Social Work.

Total Credit Hours Required: 15-17 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

Admission is open to students currently enrolled in graduate Counseling, Psychology or Social Work programs at UCF.
Degree Requirements

Required Courses
15 - 17 Total Credits

- Complete 1 of the following
  - Complete all of the following
    - Complete the following:
      - MHS6430 - Family Counseling I (3)
      - MHS6431 - Family Counseling II (3)
      - MHS6440 - Couples Counseling (3)
      - MHS6803 - Practicum in Counselor Education (3)
    - Earn at least 3 credits from the following:
      - MHS6830 - Counseling Internship (1 - 6)

Required Courses for Social Work Students
- Complete all of the following
  - Complete the following:
    - SOW5107 - Human Behavior in the Social Environment (3)
    - SOW6612 - Clinical Practice with Families (3)
    - SOW6531 - Full Time MSW Clinical Field Integrative Seminar I (2)
    - SOW6536 - Full Time MSW Clinical Field Integrative Seminar II (2)
    - MHS6440 - Couples Counseling (3)
  - Earn at least 4 credits from the following:
    - SOW6940 - Clinical Field Education (0 - 99)

Grand Total Credits: 15 - 17

Program Details

Part-time clinical courses

**For this certificate program, the following part-time clinical courses meet the 8 hour field seminar sequence:

- SOW 6561 - Part-Time MSW Clinical Field Integrative Seminar I ** 2 Credit Hours
- SOW 6562 - Part Time MSW Clinical Field Integrative Seminar II ** 1 Credit Hours
- SOW 6563 - Part-Time MSW Clinical Field Integrative Seminar III ** 1 Credit Hours
- SOW 6940 - Clinical Field Education ** VAR Credit Hours
- 1st Semester ** 2 Credit Hours
- 2nd Semester ** 1 Credit Hour
- 3rd Semester ** 1 Credit Hour

Marriage, Couple, and Family Therapy MA

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Program Website
https://ccie.ucf.edu/counselored/

Program Handbook Link
Marriage, Couple, and Family Therapy, MA

Program Contact Information
Sejal Barden PhD
Associate Professor
counsel@ucf.edu
Telephone: 407-823-2401
ED 322H

Is this program available 100% online?
No
Licensure Disclosure

The CACREP accredited Marriage, Couple, and Family Therapy MA program prepares students for licensure in Florida as a Marriage and Family Therapist in order to practice in agencies, private practices, and other settings. Applicants considering this program should contact their State Licensure Board to verify the courses required. The Marriage, Couple, and Family Therapy MA program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit


Program Description

The CACREP accredited Marriage, Couple and Family Therapy MA program prepares students for licensure in marriage and family therapy and to practice in agencies, private practices, and other settings.

As part of the program's pragmatic approach to preparing counselors, in addition to classroom studies, all students complete clinical experiences in the UCF Community Counseling and Research Center and field-based experiences in the community. The UCF Community Counseling and Research Center serves as a hub for training and research in the program, with graduate students providing counseling services to children, adolescents, and adults through the provision of individual, couples, and family therapy. The CCRC serves more than 1400 individuals, couples, and families in the central Florida community.

The Marriage, Couple and Family Therapy MA program requires a minimum of 63 credit hours beyond the bachelor's degree, including 6 credit hours of core courses, 45 credit hours of specialization courses (including 3 credit hours of an elective), and 12 credit hours of professional clinical experience.

Total Credit Hours Required: 63 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
51 Total Credits

Details

Core
6 Total Credits

- Complete the following:
  - EDF6155 - Lifespan Human Development and Learning (3)
  - EDF6481 - Fundamentals of Graduate Research in Education (3)

Specialization
45 Total Credits

- Complete all of the following
  - MHS5005 - Introduction to the Counseling Profession (3)
  - MHS6430 - Family Counseling I (3)
  - MHS6431 - Family Counseling II (3)
  - MHS6440 - Couples Counseling (3)
  - MHS6070 - Diagnosis and Treatment in Counseling (3)
  - MHS6220 - Individual Psychoeducational Testing I (3)
  - MHS6400 - Theories of Counseling and Personality (3)
  - MHS6401 - Techniques of Counseling (3)
  - MHS6420 - Foundations of Multicultural Counseling (3)
  - MHS6450 - Addictions Counseling (3)
  - MHS6470 - Human Sexuality and Relationships (3)
  - MHS6500 - Group Procedures and Theories in Counseling (3)
  - MHS6702 - Ethical and Legal Issues (3)
  - SDS6347 - Career Development (3)

- Earn at least 3 credits from the following types of courses:
  Elective approved by adviser.

Professional Clinical Experience:
12 Total Credits

- Complete all of the following
  - The clinical experiences are comprised of two sections, Practicum and Internship. Both are experiential in nature and are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program to their work with actual clients. The practicum is conducted on campus in the UCF Community Counseling and Research Center and the internship is conducted at various clinical sites around central Florida. The clinical experiences are comprised of two sections, Practicum and Internship. Both are experiential in nature and are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program to their work with actual clients. The practicum is conducted on campus in the UCF Community Counseling and Research Center and the internship is conducted at various clinical sites around central Florida.
  - Earn at least 6 credits from the following:
    - MHS6803 - Practicum in Counselor Education (3)
  - Prerequisites for MHS 6803 Practicum in Counselor Education are the following: MHS 5005, MHS 6070, MHS 6400, MHS 6401, MHS 6500, and MHS 6702. A minimum of 27 credit hours are required prior to beginning the practicum.

  Earn at least 6 credits from the following:
    - MHS6830 - Counseling Internship (1 - 6)
    - The prerequisite for MHS 6830 Counseling Internship is a "B" or better in all sections of MHS 6803 as well as MHS 6420.

Grand Total Credits: 63
Program Details

Additional Program Requirements
- Achieve at least a GPA of 3.0 in counseling specialization courses.
- Achieve a "B" or better in MHS 5005, MHS 6401, MHS 6803, and MHS 6803.
- Complete a total of 800 hours of clinical experiences, 200 of which will be in the UCF Community Counseling and Research Center and 600 of which are field-based experiences in the community.
- Students in the Marriage, Couple and Family Therapy program must complete 180 hours of marriage and family therapy services (within the 800 total hours of clinical experiences over the course of their practica and internships) in a marriage and family therapy setting.
- Complete a portfolio and receive approval by Counselor Education faculty.
- Complete a professional exit examination.
- Given the experiential, competency, and performance-based nature of the courses taken by Marriage, Couple and Family Therapy students, students are limited to taking a maximum of three (3) courses per semester. However, if students believe they can verify a need to take more than three courses, they should consult with their academic advisor for approval guidelines. Students who have not received prior approval and who register for more than three courses per semester will be administratively dropped from any courses over the maximum load.

Independent Learning
Practica and internships are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program. The internship experience provides students with the practical experience of providing hands-on services for a variety of clients and presenting concerns. Such services may include, but are not limited to, individual, couple, family, and group counseling with children, adolescents, and adults. Client concerns range from developmental and relational concerns to more severe pathology.

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information
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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Nonprofit Management Graduate Certificate

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/nonprofit-management/
Is this program available 100% online?
Yes

UCF Online

Please note: Nonprofit Management Graduate Certificate may be completed fully online, and newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Nonprofit Management is delivered completely online and offers specialized, graduate-level knowledge in nonprofit management, resources development, strategic planning, volunteerism, and program evaluation. The certificate supports those currently working in the nonprofit sector or those looking for advancement in the nonprofit sector or in organizations that partner with the nonprofit sector.

Credits earned in the certificate program may be applied toward the Master of Nonprofit Management (MNM) degree. However, admission to the MNM degree program has separate requirements from those of the certificate program and students considering continuing into the master's degree should familiarize themselves with admissions requirements, the credit transfer policy and should consult with a faculty adviser early in their certificate program. The Graduate Certificate in Nonprofit Management requires that students complete 18 credit hours. Students must maintain at least a 3.0-grade point average in order to be awarded the Graduate Certificate. The Certificate must be completed within 7 years.

An Out-of-State Graduate Certificate in Nonprofit Management Cohort Track is also offered specifically for students who are not Florida residents and who reside outside of the state of Florida. The Out-of-State Cohort is also delivered completely online, and the curriculum is identical to the Florida resident program. Students in the cohort program pay less than half of the regular out-of-state tuition. Students interested in the Out-of-State cohort should refer to the Out-of-State Graduate Certificate in Nonprofit Management program track.

This program also has 1 track: Nonprofit Management Graduate Certificate, Out of State Cohort Track. Please scroll to the bottom of this page for further details.

The Graduate Certificate in Nonprofit Management program is a completely online; students in this program are expected to have the ability to complete the coursework online. The program requires a minimum of 18 credit hours beyond the bachelor's degree; consisting of 15 credit hours of core courses and 3 credit hours of a restricted elective.

The Certificate program incorporates service learning in some of its courses. Service learning involves students partnering with a local nonprofit organization of their choice to offer technical assistance in a specific area of operation that is covered in their coursework. Service Learning enhances the students' academic experience and presents opportunities for networking. The process is supervised by the instructor and provides benefits to both the organization and the student.

Some of the courses may also involve group work intended to develop leadership abilities while providing an opportunity for the student to show his or her ability to be a team player. Group projects promote important intellectual and social skills and help to prepare students for professional work where teamwork and collaboration are necessary.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

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Institution Codes
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ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete the following:
  - PAD5145 - Volunteerism in Nonprofit Management (3)
  - PAD5146 - Nonprofit Resource Development (3)
  - PAD6142 - Nonprofit Organizations (3)
  - PAD6327 - Public Program Evaluation Techniques (3)
  - PAD6335 - Strategic Planning and Management (3)

Elective Course
3 Total Credits

- Complete at least 1 of the following:
  - PAD5850 - Grant and Contract Management (3)
  - PAD6237 - Ethics and Governance in Nonprofit Management (3)
  - PAD6208 - Nonprofit Financial Management (3)
  - SOW6383 - Social Work Administration (3)

Grand Total Credits: 18

Program Details

Students must achieve a grade of "B-" (80%) or better in every course. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

National Nonprofit Leadership Certificate: The Nonprofit Leadership Alliance represents the achievements of national academic and experiential standards in nonprofit management. Students pursuing the Nonprofit Leadership Certification must meet the Nonprofit Leadership Alliance mandated requirements. An internship is required for students pursuing the National Nonprofit Leadership Certification. Students who provide documentation of at least 300 hours of nonprofit sector experience may have the internship waived.

Nonprofit Management Graduate Certificate - Nonprofit Management Graduate Certificate, Out of State Cohort Track

Track Website
https://ccie.ucf.edu/public-administration/nonprofit-management/

Track Contact Information

Young-Joo Lee, PhD
Nonprofit Management Director & Associate Professor
Young-Joo.Lee@ucf.edu
Telephone: 407-823-3693

Nasrin Lakhani, MNM
Manager Graduate Advising and Student Support
Nasrin@ucf.edu
Telephone: 407-823-0912

2022-2023 Graduate Catalog
Online Availability
Yes

Track Description
The Out-of-State Cohort in the Graduate Certificate in Nonprofit Management is designed specifically for students who are not Florida residents and who reside outside of the state of Florida. The certificate is delivered completely online and offers specialized, graduate-level knowledge in nonprofit management, resource development, strategic planning, volunteerism, and program evaluation.

The Out-of-State Cohort in the Graduate Certificate in Nonprofit Management is designed specifically for students who are not Florida residents and who reside outside of the state of Florida. The certificate is delivered completely online and offers specialized, graduate-level knowledge in nonprofit management, resource development, strategic planning, volunteerism, and program evaluation. The certificate supports those currently working in the nonprofit sector or those looking for advancement in the nonprofit sector or in organizations that partner with the nonprofit sector. Students in the Out-of-State Cohort pay less than half of the regular out-of-state tuition. Students who are Florida residents who reside in the state of Florida should refer to the Nonprofit Management Certificate program.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

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Institution Codes
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TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
15 Total Credits
- Complete the following:
  - PAD5145 - Volunteerism in Nonprofit Management (3)
  - PAD5146 - Nonprofit Resource Development (3)
  - PAD6142 - Nonprofit Organizations (3)
  - PAD6327 - Public Program Evaluation Techniques (3)
  - PAD6335 - Strategic Planning and Management (3)

Elective Course
3 Total Credits
- Complete at least 1 of the following:
  - PAD5850 - Grant and Contract Management (3)
  - PAD6149 - Nonprofit Administration (3)
  - PAD6167 - Graduate Nonprofit Leadership Seminar (3)
  - PAD6208 - Nonprofit Financial Management (3)
  - SOW6383 - Social Work Administration (3)

Grand Total Credits: 18

Track Details
Students must achieve a grade of "B-" (80%) or better in every course. Grades 'C' or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

National Nonprofit Leadership Certificate The Nonprofit Leadership Alliance represents the achievements of national academic and experiential standards in nonprofit management. An internship is also required for students with less than 300 hours of nonprofit sector experience. Students who provide documentation of at least 300 hours of experience in the nonprofit sector may have their internship waived. Students pursuing the Nonprofit Leadership Certification must complete PAD 6167 - Graduate Nonprofit Leadership Seminar as their elective and meet the Nonprofit Leadership Alliance mandated requirements.
Nonprofit Management MNM

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/nonprofit-management/mnm/

Program Handbook Link
Nonprofit Management MNM

Program Contact Information
Young-joo Lee, PhD
Associate Professor
Director, Nonprofit Programs
Young-joo.Lee@ucf.edu
DPAC 448C

Nasrin Lakhani, MNM
Director, Advising and Student Support Services
nasrin.lakhani@ucf.edu
Telephone: 407-823-0912

Is this program available 100% online?
Yes

UCF Online

Please note: Master of Nonprofit Management (MNM) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

This program is not available to International students requiring most classes in person. Please visit http://global.ucf.edu/ for more information or call UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description
The nonprofit sector is the fastest growing area of the economy, and the completely online Master of Nonprofit Management MNM program prepares students for careers in this dynamic field. The degree program provides opportunities for students to prepare for employment or to advance their careers as administrators in nonprofit organizations. The program is intended to produce graduates equipped with the management skills and analytical skills needed for successful careers in the nonprofit sector.

A Public Administration MPA Dual Degree Track is also available. Please scroll to the bottom of this page for further details on these Tracks.

The Master of Nonprofit Management (MNM) program is offered completely online. Students in this program are expected to have the ability to complete the coursework online. The program requires 30 credit hours of core courses, 3 credit hours of restricted electives and 3 of general electives.

The MNM program incorporates service learning in some of its courses. Service learning is hands-on learning that provides real-life experience in executing tangible projects such as strategic plans, grant proposals, and volunteer management case studies. It enhances the student's understanding of the course core concepts, helps develop leadership skills and provides networking opportunities with a community partner.

Some of the courses also involve group work intended to develop leadership abilities while providing an opportunity for the student to show his or her ability to be a team player. Group projects promote important intellectual and social skills and help to prepare students for professional work where teamwork and collaboration are necessary.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
27 Total Credits

- Complete the following:
  - PAD5145 - Volunteerism in Nonprofit Management (3)
  - PAD5146 - Nonprofit Resource Development (3)
  - PAD5850 - Grant and Contract Management (3)
  - PAD6142 - Nonprofit Organizations (3)
  - PAD6208 - Nonprofit Financial Management (3)
  - PAD6237 - Ethics and Governance in Nonprofit Management (3)
  - PAD6335 - Strategic Planning and Management (3)
  - PAD6417 - Human Resource Management (3)
  - PAD6327 - Public Program Evaluation Techniques (3)

Capstone Course
3 Total Credits

- Complete all of the following
- Complete the following:
  - PAD6149 - Nonprofit Administration (3)
- This course is the capstone learning experience for the program requiring the development of a portfolio and analysis that demonstrate the student's mastery of the NASPAA Universal Competencies. The capstone course is offered only in fall and spring semesters. Must be taken in the final semester, core courses are prerequisites.

Restricted Elective
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - This elective must be a UCF Public Administration 6000-level course that is chosen after consultation with the student's academic adviser.

Electives Option
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - Students take one elective course in addition to the restricted elective (three credit hours each) with the prior approval of the program director. The elective courses are to be in the student's area of interest, such as public administration, criminal justice, health care, social work or the arts. The MNM program does not accept 4000-level courses.

Grand Total Credits: 36
Program Details

Additional Program Requirements

Students must achieve a grade of "B-" (80%) or higher in every course listed under core requirements and in the Capstone course PAD 6149. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry, dialog and service learning. Students are encouraged to engage in research projects, scholarly papers, internships, and presentations at professional conferences that contribute to their self development. The final culminating experience for those enrolled in the Master of Nonprofit Management results in students taking and satisfactorily completing the Nonprofit Administration (PAD 6149).

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Nonprofit Management MNM - Nonprofit Management MNM, Public Administration MPA Dual Degree Track

Track Website
https://ccie.ucf.edu/public-administration/nonprofit-management/

Track Contact Information

Young-oo Lee, PhD (MNM Program)
Associate Professor
Director, Nonprofit Programs
Young-Joo.Lee@ucf.edu
DPAC 448C

Nasrin Lakhani, MNM
Director, Graduate Advising and Student Support
nasrin.lakhani@ucf.edu
Telephone: 407-823-0912

Online Availability
Yes
Track Description

The Nonprofit Management MNM - Public Administration MPA Dual Degree Track provides the opportunity for students to earn graduate degrees from two academic programs, the Master of Nonprofit Management and the Master of Public Administration, concurrently.

Students successfully completing this MNM/MPA Dual Degree program will have the skills and analytical techniques for successful careers in both the public and nonprofit sectors. The program emphasizes nonprofit management and public administration research, theory, policy and organizational administration to prepare future public service organizational leaders in public, nonprofit, social service, and private organizations. After successful completion of the MNM/MPA Dual Degree program, students will receive two diplomas - one for the Nonprofit Management MNM degree and one for the Public Administration MPA degree.

Students seeking admission to the MNM/MPA Dual Degree program should apply directly to the Dual Degree track of either the Public Administration MPA program or the Nonprofit Management MNM program. Only one application will be required. If admitted, the student will be active in the Dual Degree tracks of both the Public Administration MPA and the Nonprofit Management MNM programs.

Students previously admitted to the Public Administration MPA or the Nonprofit Management MNM program should consult with their adviser prior to completing 18 credit hours if interested in the MNM/MPA Dual Degree program.

The dual degree track (Master of Nonprofit Management/Master of Public Administration) consists of 54 credit hours. Each student completes all of the core courses for each program with 18 required core courses (54 credit hours), including the research methods and statistics courses (6 credit hours) and capstone courses from each program (6 credit hours).

Courses and credit hours used for undergraduate degrees cannot be counted toward the MPA/MNM track, except for Senior Scholar students who, with the permission of the MPA/MNM program director, may use up to 9 credit hours of graduate coursework in both their undergraduate degree and the dual degree program. No undergraduate-level courses will be accepted in the MPA/MNM dual degree track.

The dual degree program incorporates service learning in some of its courses. Service learning is hands-on learning that provides real-life experience in executing tangible projects such as strategic plans, grant proposals, and volunteer management case studies. It enhances the student’s understanding of the course core concepts, helps develop leadership skills and provides a networking opportunity with a community partner.

Total Credit Hours Required: 54 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

Brandon Ruff
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Core
42 Total Credits

- Complete the following:
  - PAD5145 - Volunteerism in Nonprofit Management (3)
  - PAD5146 - Nonprofit Resource Development (3)
  - PAD5850 - Grant and Contract Management (3)
  - PAD6035 - Public Administration in the Policy Process (3)
  - PAD6037 - Public Organization Management (3)
  - PAD6053 - Public Administrators in the Governance Process (3)
  - PAD6142 - Nonprofit Organizations (3)
  - PAD6207 - Public Financial Management (3)
  - PAD6208 - Nonprofit Financial Management (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6237 - Ethics and Governance in Nonprofit Management (3)
  - PAD6327 - Public Program Evaluation Techniques (3)
  - PAD6335 - Strategic Planning and Management (3)
  - PAD6417 - Human Resource Management (3)

Research Methods/Statistics Core Requirements
6 Total Credits

- Complete the following:
  - PAD6700 - Research Methods in Public Administration (3)
  - PAD6701 - Analytical Techniques for Public Administration (3)

Capstone Core Requirements
6 Total Credits

- Students will engage in a capstone experience for both the MPA and the MNM programs that builds upon the knowledge and skills gained from completing the core courses. Students will complete this requirement through enrollment in PAD 6149 - Nonprofit Administration and PAD 6062 - Advanced Concepts and Applications in Public Administration. Capstone courses may only be taken following the completion of all core courses. Capstone courses are only offered in fall and spring semesters.

Courses
6 Total Credits

- Complete the following:
  - PAD6062 - Advanced Concepts and Applications in Public Administration (3)
  - PAD6149 - Nonprofit Administration (3)

Grand Total Credits: 54

Track Details

Additional Program Requirements

Students must achieve a grade of "B-" (80%) or higher in every course listed under core requirements and in the Capstone courses PAD 6149 and PAD 6062. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Independent Learning

Independent learning is demonstrated throughout the curriculum, through the process of inquiry and dialogue. Tangible projects, such as research scholarly papers, internships, and the capstone experience also contribute to the self-development of MPA students. The research study and final report in the Capstone Experience will focus on reviewing and analyzing contemporary research in a student’s particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area. The capstone courses, PAD 6062 and PAD 6149, provide independent learning experience.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Play Therapy Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Program Website
https://ccie.ucf.edu/cesp/counselored/

Program Contact Information
Dalena Dillman Taylor PhD, LMHC, RPT-S
Associate Professor
dalena.taylor@ucf.edu
Telephone: 407-823-6106
ED 322-R

Is this program available 100% online?
No

Licensure Disclosure
The Play Therapy Graduate Certificate program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Play-Therapy-GC.pdf.

Program Description
The Graduate Certificate in Play Therapy is housed within the Counselor Education program in the College of Community Innovation and Education. The certificate program is designed to provide advanced training to students in the Counselor Education program and for practicing counselors and therapists working with children and adolescents.

The Play Therapy Graduate Certificate does not directly certify individuals in Play Therapy; however, it can be listed as a Graduate Certificate in Play Therapy as part of one's credentials. The educational courses are designed toward credentials to be registered as a play therapist. Applicants should also contact the Association for Play Therapy to verify the courses needed to be registered as a play therapist.

Total Credit Hours Required: 9 Credit Hours Minimum beyond the Master's Degree

Program Prerequisites
Admission is open to those with a bachelor's degree from an accredited institution recognized by UCF or those currently enrolled in or possessing a master's degree in counseling or a related field.
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
9 Total Credits

- Complete the following:
  - MHS6421 - Foundations of Play Therapy Theories and Techniques for Individuals and Groups (3)
  - MHS6422 - Advanced Theories and Techniques of Play Therapy (3)
  - MHS6403 - Family Play Therapy (3)

Grand Total Credits: 9

Program Details
Play Therapy Certificate program aligns with the requirements to obtain a credential as a registered play therapist through the Association for Play Therapy (www.a4pt.org). Specifically, APT requires 150 hours of instruction in certain categories. UCF’s play therapy courses and how they align to the requirements of APT are below:

MHS 6421: History of Play Therapy (5 hours), Play Therapy Seminal or Historically Significant Theories (30 hours), Play Therapy Skills and Methods (32.5)

MHS 6422: Play Therapy Seminal or Historically Significant Theories (25 hours), Play Therapy Skills and Methods (25 hours), Play Therapy Special Topics (17.5 hours)

MHS 6403: Play Therapy Special Topics (67.5 hours)

Police Leadership Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Program Website
https://ccie.ucf.edu/criminaljustice/
Program Contact Information

Eugene Paoline, III PhD
Professor
Eugene.Paoline@ucf.edu
Telephone: 407-823-2603
HS1, RM 321

Elexis Ritz
elexis.ritz@ucf.edu
Telephone: 407-823-6093
HS1 311

Is this program available 100% online?
Yes

UCF Online

Please note: Police Leadership Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. International applicants should be aware the program may not offer sufficient on-campus courses for F or J visa holders. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Police Leadership provides a theoretical and practical knowledge base for law enforcement executives in criminal justice, public administration or social work.

The Graduate Certificate in Police Leadership is designed to provide a theoretical and practical knowledge base for the law enforcement executive in criminal justice, public administration or social work.

Municipalities, county governments, and state agencies have been working to develop new technologies, cooperative business and government relationships, and new ways of fighting and deterring criminal behavior. The police manager, who previously had been concerned only with issues involving statutes, policies, and local jurisdictional issues, must now be concerned with human resource and management issues, employee assistance programs, ethical issues, and local, state, federal, and international government relations.

Students in the Police Leadership certificate must complete two required courses, one restricted elective and one course from the list of approved unrestricted electives, for a total of 12 credit hours.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - CJE5021 - Foundations of Law Enforcement (3)
  - CCJ6106 - Policy Analysis in Criminal Justice (3)

Elective Courses
6 Total Credits

- Complete all of the following
  - Complete at least 1 of the following:
    - CCJ6118 - Criminal Justice Organizations (3)
    - CJL5568 - Law and Social Control (3)
    - PAD5807 - Local Government Operations (3)
    - PAD6037 - Public Organization Management (3)
    - PAD6327 - Public Program Evaluation Techniques (3)
  - PD 6327 is an advanced program evaluation course. Those without a background in Public Administration are discouraged from enrolling in this course.
  - Complete at least 1 of the following:
    - CCJ5015 - The Nature of Crime (3)
    - CCJ5456 - The Administration of Justice (3)
    - CCJ6431 - Leadership and Ethics in Criminal Justice (3)
    - PAD5041 - Ethics and Values in Public Administration (3)
    - PAD6035 - Public Administration in the Policy Process (3)
    - PAD6417 - Human Resource Management (3)
  - PAD 6417 has a prerequisite of PAD 6700. Contact the Public Administration department for an override.

Grand Total Credits: 12

Prekindergarten Disabilities Graduate Certificate

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Program Website
https://ccie.ucf.edu/teachered/exceptional-student-education/

Program Contact Information
Mary Little PhD
Professor
mary.little@ucf.edu
Telephone: 407-823-3275
ED 315J

Is this program available 100% online?
Yes

UCF Online

Please note: Prekindergarten Disabilities Graduate Certificate may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Licensure Disclosure

The Prekindergarten Disabilities Graduate Certificate program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Prekindergarten-Disabilities-GC.pdf.

Program Description

The Graduate Certificate in Prekindergarten (Pre-K) Disabilities prepares graduate students to teach pre-kindergarten students with disabilities.

The Graduate Certificate in Prekindergarten (Pre-K) Disabilities is designed to provide additional knowledge and skills for professionals to meet the requirements for the Pre-K Disabilities ESE Endorsement. The four graduate courses focus on knowledge, skills, and competencies for working with children birth to age 5 with disabilities, developmental delays and/or at-risk conditions. They can be added to current teaching certification in any exceptional education field, primary education, elementary education (K-6), and/or early childhood education. Pending state approval, persons holding any of the Florida teaching certifications listed may apply the four certificate courses toward the State Prekindergarten (Pre-K) Endorsement (Administrative Rule 6A-4.01792).

Tuition support for these courses is available for eligible candidates through the Pre-K Disabilities Endorsement Tuition Support Program from the Florida Department of Education, Bureau of Exceptional Education and Student Support Services. More information is available at https://florida-ese.org/tuition-support.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

Admission is open to those with a bachelor’s degree in exceptional education or primary education from a regionally accredited institution, a master’s degree in varying exceptionalities or primary education from a regionally accredited institution, or if an individual has shown evidence of graduate course work in one of these areas: exceptional student education, preschool education (0-4), primary education (K-3), pre-kindergarten/primary education (PK-3), or early childhood education.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - EEX5702 - Planning Curriculum for Pre-Kindergarten Children with Disabilities (3)
  - EEX5750 - Communication with Parents and Agencies (3)
  - EEX6017 - Typical and Atypical Applied Child Development (3)
  - EEX6222 - Observation and Assessment of Young Children (3)

Grand Total Credits: 12

Public Administration Graduate Certificate

College

College of Community Innovation and Education

Department

School of Public Administration
Program Website
https://ccie.ucf.edu/public-administration/public-administration/graduate-certificate-public-administration/

Program Contact Information
Abdul-Akeem Sadiq, PhD
Professor
Director, Master of Public Administration
Abdul-akeem.sadiq@ucf.edu
Telephone: 407-823-3925

Nasrin Lakhani
Director, Advising and Student Support Services
nasrin@ucf.edu

Is this program available 100% online?
Yes

UCF Online
Please note: Public Administration Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description
The Graduate Certificate in Public Administration is designed to provide students with enhanced knowledge and skills in public service. In addition, the Graduate Certificate in Public Administration provides graduate-level continuing education for both in-service and pre-career students. The program emphasizes the managerial skills essential for local government programs in an evolving metropolitan environment. The knowledge gained can strengthen the student's professional standing and help open doors to managerial and leadership positions.

Credits earned in the certificate program may be applied toward the Master of Public Administration (MPA) degree. However, admission to the MPA degree program has separate requirements from those of the certificate program and students considering continuing into the master's degree should familiarize themselves with credit transfer policy and should consult with the academic advisor early in their certificate program. The Graduate Certificate in Public Administration requires that students complete 18 credit hours. Students must maintain at least a 3.0 grade point average in order to be awarded the Graduate Certificate. The certificate must be completed within seven years.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information
Brandon Ruff
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

18 Total Credits

- Complete the following:
  - PAD6700 - Research Methods in Public Administration (3)
  - PAD6035 - Public Administration in the Policy Process (3)
  - PAD6037 - Public Organization Management (3)
  - PAD6053 - Public Administrators in the Governance Process (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6417 - Human Resource Management (3)

Grand Total Credits: 18

**Program Details**

Students must achieve a grade of "B-" (80%) or better in every course. Grades 'C' or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

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**Public Administration MPA**

**College**

College of Community Innovation and Education

**Department**

School of Public Administration

**Program Website**

https://ccie.ucf.edu/public-administration/

**Program Handbook Link**

Public Administration MPA

**Program Contact Information**

**Abdul-Akeem Sadiq, PhD**
Professor
Director, Master of Public Administration
Abdul-akeem.sadiq@ucf.edu
Telephone: 407-823-3925

**Nasrin Lakhani, MNM**
Director, Advising and Student Support Services
nasrin@ucf.edu

**Is this program available 100% online?**

Yes

**UCF Online**

**Please note:** Public Administration (MPA) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

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2022-2023 Graduate Catalog
Program Description

The Master of Public Administration (MPA) program is accredited by the Network of Schools of Public Policy, Affairs and Administration (NASPAA) and nationally ranked by U.S. News and World Report.

The program provides exciting opportunities for students to prepare for employment or advance their careers in public and nonprofit organizations.

This degree has 2 tracks: Criminal Justice MS Dual Degree Track and Nonprofit Management MNM Dual Degree Track. Please scroll to the bottom of this page for further details on these Tracks.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core (See Program Details for Course Prerequisites)
27 Total Credits

- Complete the following:
  - PAD6035 - Public Administration in the Policy Process (3)
  - PAD6037 - Public Organization Management (3)
  - PAD6053 - Public Administrators in the Governance Process (3)
  - PAD6700 - Research Methods in Public Administration (3)
  - PAD6701 - Analytical Techniques for Public Administration (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6207 - Public Financial Management (3)
  - PAD6417 - Human Resource Management (3)
  - PAD6335 - Strategic Planning and Management (3)

Capstone
3 Total Credits

- Students will engage in a capstone experience that builds upon the knowledge and skills gained from completing the core courses in the MPA program. Students will complete this requirement through enrollment in PAD 6062 - Advanced Concepts and Applications in Public Administration. PAD 6062 is offered in fall and spring semesters only and should be taken following the completion of all core courses.

Course
3 Total Credits

- Complete the following:
  - PAD6062 - Advanced Concepts and Applications in Public Administration (3)

Electives (See Program Details for more information)
12 Total Credits

- Earn at least 12 credits from the following:
  - PAD6826 - Urban Policy and Regional Governance (3)
  - PAD5186 - Policy Advocacy for Social Justice (3)
  - PAD5887 - Energy Policy (3)
  - PAD5930 - Global Cities (3)
  - PAD6439 - Leadership in Public Service (3)
  - PAD6836 - Comparative Global Public Administration (3)
  - PAD6934 - Special Issues in Public Administration (3)
  - PAD6946 - Internship (3)
  - PAD6825 - Cross-Sectoral Governance (3)
  - PAD6705 - Public Sector Communications (3)

Grand Total Credits: 42
Program Details

Core Course Prerequisites
- PAD 6701 - Analytical Techniques for Public Administration - Prerequisite: PAD 6700
- PAD 6227 - Public Budgeting - Prerequisite PAD 6700
- PAD 6207 - Public Financial Management - Prerequisite PAD 6700 & PAD 6227

Electives Information
Elective courses offered within the School of Public Administration provide an emphasis on state and local governments; however, other emphases may be developed in consultation with the Program Director and Academic Advisor. With prior approval from the MPA Program Director, up to 6 credit hours of elective course work may be taken from outside the school. Students must show that elective courses taken outside of the school directly support a career in public administration. The MPA program of study does not accept undergraduate-level courses.

Students interested in a professional management career may take elective courses from the School of Public Administration’s graduate certificate programs in Public Budgeting and Finance, Public Policy Analysis, Nonprofit Management, Fundraising, Urban and Regional Planning, Research Administration, Social Justice in Public Service, and Emergency Management and Homeland Security to enhance their managerial skills. Any course offered by the school of Public Administration, a PAD prefix course, may be used as an elective for this program. Students interested in a research career can work with the Program Director and Academic Advisor to take advanced research courses to strengthen their analytical skills.

Students without practical administrative experience in the public sector are strongly advised to complete an internship (3 credit hours) as part of their electives.

The courses listed in the “Electives” section above and other PAD courses in the catalog may be used as program electives.

Additional Program Requirements
Students must achieve a grade of "B-" (80%) or higher in every course listed under core requirements and in the Capstone Experience (PAD 6062).

Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Students are expected to be computer literate and have computer internet access upon entry to the program.

Independent Learning
Independent learning is demonstrated throughout the curriculum through the process of inquiry, dialogue and service learning. Tangible projects such as scholarly research, papers, internships and the capstone experience also contribute to the self-development of MPA students. The research paper and Learning and Professional Development Portfolio in the Capstone Experience focus on reviewing and analyzing contemporary issues in the context of real-world applications.

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information
Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Track Website

https://ccie.ucf.edu/public-administration/

Track Handbook

Public Administration MPA, Criminal Justice MS Dual Degree Track

Track Contact Information

Abdul-Akeem Sadiq, PhD
Professor
Director, Public Administration Programs
Abdul-akeem.sadiq@ucf.edu
Telephone: 407-823-3925

Nasrin Lakhani, MNM
Director, Advising and Student Support Services

nasrin@ucf.edu

Online Availability

Yes

Track Description

The Public Administration MPA, Criminal Justice MS Dual Degree Track provides the opportunity for students to earn graduate degrees from two academic programs, the Master of Public Administration and Master of Science in Criminal Justice, concurrently.

Students successfully completing this MPA/MSCJ dual degree program will have the skills and analytical techniques for successful careers in both public administration and criminal justice. After successful completion of the MPA/MSCJ dual degree program, students will receive two diplomas, one for Public Administration MPA and the other for Criminal Justice MS.

The dual degree track (Master of Public Administration / Master of Criminal Justice) consists of 51 credit hours. Each student completes a core of 11 courses (33 credit hours), two research methods and statistics courses (6 credit hours), two electives (6 credit hours), and a capstone experience of two courses (6 credit hours).

Total Credit Hours Required: 51 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Core**

33 Total Credits

- Complete the following:
  - CCJ5015 - The Nature of Crime (3)
  - CCJ5456 - The Administration of Justice (3)
  - CCJ6106 - Policy Analysis in Criminal Justice (3)
  - CCJ6118 - Criminal Justice Organizations (3)
  - PAD6035 - Public Administration in the Policy Process (3)
  - PAD6037 - Public Organization Management (3)
  - PAD6053 - Public Administrators in the Governance Process (3)
  - PAD6207 - Public Financial Management (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6335 - Strategic Planning and Management (3)
  - PAD6417 - Human Resource Management (3)

**Research Methods/Statistics**
6 Total Credits

- Complete all of the following
  - Complete at least 1 of the following:
    - PAD6700 - Research Methods in Public Administration (3)
    - PAD6701 - Analytical Techniques for Public Administration (3)
  - Complete at least 1 of the following:
    - CCJ6704 - Research Methods in Criminal Justice (3)
    - CCJ6706 - Data Analysis in Criminal Justice I (3)

**Capstone**
6 Total Credits

- Complete all of the following
  - Complete the following:
    - PAD6062 - Advanced Concepts and Applications in Public Administration (3)
    - CJE6718 - Proseminar in Criminal Justice (3)
  - MPA Capstone course, PAD 6062, is offered in fall and spring semesters only and may be completed after all MPA core courses.

**Electives**
6 Total Credits

- Complete at least 2 of the following:
  - CJC5020 - Foundations of Corrections (3)
  - CJE5021 - Foundations of Law Enforcement (3)
  - CJ6020 - The Juvenile Justice System (3)
  - CJL6568 - Law and Social Control (3)
  - CJL6520 - American Criminal Courts (3)

Grand Total Credits: **51**

**Track Details**

**Additional Program Requirements**

Students must achieve a grade of "B" or higher in every CCJ/CJE course and a grade of "B-" or higher in every PAD course in the core courses, research methods/statistics courses, and the Capstone courses. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

**Independent Learning**

Independent learning is demonstrated throughout the curriculum, through the process of inquiry and dialogue. Tangible projects such as scholarly research, papers, internships, and the capstone experience also contribute to the self-development of students. The capstone courses, PAD 6062 and CJE 6718, provide the independent learning experience.
Financial Information

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Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Public Administration MPA - Public Administration MPA, Nonprofit Management MNM Dual Degree Track

Track Website
https://ccie.ucf.edu/public-administration/

Track Handbook
Public Administration MPA, Nonprofit Management MNM Dual Degree Track

Track Contact Information

Abdul-Akeem Sadiq, PhD
Professor
Director, Master of Public Administration
Abdul-akeem.sadiq@ucf.edu
Telephone: 407-823-3925

Nasrin Lakhani, MNM
Director Advising and Student Support Services
Nasrin@ucf.edu

Online Availability
Yes
**Track Description**

The Public Administration MPA – Nonprofit Management MNM Dual Degree Track provides the opportunity for students to earn graduate degrees from two academic programs, the Master of Public Administration and the Master of Nonprofit Management, concurrently. The program emphasizes nonprofit management and public administration research, theory, policy and organizational administration to prepare future public service organizational leaders in public, nonprofit, social service, and private organizations. After successful completion of the Dual Degree program, students will receive two diplomas - one for the Public Administration MPA and one for the Nonprofit Management MNM degree.

Students seeking admission to the MNM/MPA Dual Degree program should apply directly to the Dual Degree track of the Public Administration MPA program. Only one application will be required. If admitted, a student will be active in the Dual Degree tracks of both the Public Administration MPA and the Nonprofit Management MNM programs.

Students previously admitted to the Public Administration MPA or the Nonprofit Management MNM program should consult with their adviser prior to completing 18 credit hours if interested in the MNM/MPA Dual Degree program.

The dual degree track (Master of Public Administration / Master of Nonprofit Management) consists of 54 credit hours. Each student completes all the core courses for each program including 42 credit hours of core courses, 6 credit hours of research methods and statistics core courses and 6 credit hours of capstone courses.

Courses and credit hours used for undergraduate degrees cannot be counted toward the MPA/MNM track, except for Senior Scholar students who, with the permission of the MPA and MNM program directors, may use up to 9 credit hours of graduate coursework that were used in their undergraduate degree toward credit in the dual degree program.

**Total Credit Hours Required: 54 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

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**Institution Codes**  
GRE: 5233  
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Degree Requirements

Required Core Courses
42 Total Credits

- Complete the following:
  - PAD5145 - Volunteerism in Nonprofit Management (3)
  - PAD5146 - Nonprofit Resource Development (3)
  - PAD5850 - Grant and Contract Management (3)
  - PAD6035 - Public Administration in the Policy Process (3)
  - PAD6037 - Public Organization Management (3)
  - PAD6053 - Public Administrators in the Governance Process (3)
  - PAD6142 - Nonprofit Organizations (3)
  - PAD6207 - Public Financial Management (3)
  - PAD6208 - Nonprofit Financial Management (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6237 - Ethics and Governance in Nonprofit Management (3)
  - PAD6335 - Strategic Planning and Management (3)
  - PAD6327 - Public Program Evaluation Techniques (3)
  - PAD6417 - Human Resource Management (3)

Research Methods/Statistics Core Requirements
6 Total Credits

- Complete the following:
  - PAD6700 - Research Methods in Public Administration (3)
  - PAD6701 - Analytical Techniques for Public Administration (3)

Capstone Core Requirements:
6 Total Credits

- Students will engage in a capstone experience for both the MPA and the MNM programs that builds upon the knowledge and skills gained from completing the core courses. Students will complete this requirement through enrollment in PAD 6149 - Nonprofit Administration and PAD 6062 - Advanced Concepts and Applications in Public Administration. Capstone courses should only be taken following the completion of all core courses; they may not be combined with core courses in the same semester. Capstone courses are offered in the fall and spring semesters only.

Courses
6 Total Credits

- Complete the following:
  - PAD6149 - Nonprofit Administration (3)
  - PAD6062 - Advanced Concepts and Applications in Public Administration (3)

Grand Total Credits: 54

Track Details

Additional Program Requirements
Students must achieve a grade of "B-" (80%) or higher in every course listed under core requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Independent Learning

Independent learning is demonstrated throughout the curriculum, through the process of inquiry and dialogue. Tangible projects such as scholarly research, papers, internships, and the capstone experience also contribute to the self-development of students. The research paper and Learning and Professional Development portfolio in the Capstone Experience focus on reviewing and analyzing contemporary issues in order to help students acquire knowledge and skills pertaining to research-based best practices. The capstone courses, PAD 6062 and PAD 6149, provide the independent learning experience.

Financial Information

Graduate students may receive financial assistance through fellowships, assistancieships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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2022-2023 Graduate Catalog
Fellowship Information

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https://funding.graduate.ucf.edu

Public Affairs PhD

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/public-affairs-phd/

Program Handbook Link
Public Affairs PhD

Program Contact Information

Jeremy Hall PhD
Professor and Public Affairs Program Coordinator
Jeremy.Hall@ucf.edu
Telephone: 407-823-1921
DPAC, 448R

Edlira Dursun, MPA, MNM
Academic Program Coordinator
Edlira.Dursun@ucf.edu
Telephone: 407-823-1139
DPAC 446B

Is this program available 100% online?
No
Program Description

The Doctoral Program in Public Affairs is designed to prepare graduates to advance research and theory by exploring topics at the leading edge of public affairs. To achieve this goal, the program builds on a set of four foundational core courses that explore the intellectual history of public administration, the principal theories of public organizational theory and behavior, the public policy process, including policy formulation and implementation, and advanced public policy analysis. Students will appreciate and apply an understanding of social, economic, political, and technological factors that shape governance through formal and informal processes and actions.

The program matches the career goals of students through the interdisciplinary nature of course content, the interaction with faculty, and the flexibility inherent in the choice of program concentrations and electives. Those seeking advancement within public agencies or nonprofit organizations can choose a mix of electives, including course work from other UCF programs, while those seeking to teach at the college or university level will focus on specialization courses within their discipline.

More specifically, the graduates of this doctoral program will demonstrate the ability to: 1) attain and apply knowledge and understanding of the complex relationships that characterize public affairs and policy; 2) conduct and lead original research, 3) become professional individuals either in academia or in other positions related to public administration, public affairs, and policy.

Specialization Areas:

Students enrolled in the Doctoral Program in Public Affairs will have the opportunity to choose from one of nine specialization areas. Suggested areas of specialization are comprised of graduate courses offered by the university’s existing graduate degree programs. When pursuing electives intended for master’s level students, doctoral students are expected to complete additional readings and assignments in addition to those required for master’s students enrolled in those courses. Students complete four recommended courses (twelve credit hours) for their chosen specialization (substitutions will be allowed with the approval of the program director, and students may create their own specialization with advance approval from the program director) and six credit hours of directed research in which the student conducts independent research in their anticipated dissertation topic with their advisor. Students should note that the concentrations identified below are exemplary and not exclusive.

The Doctoral Program in Public Affairs’ specialization areas include but are not limited to:

- Public Policy Analysis
- Public Budgeting & Finance
- Public Management
- Urban Policy
- Emergency Management
- Nonprofit Management
- Collaborative Governance
- Comparative Public Administration
- Community and Global Health Services Research

For detailed explanations pertaining to each specialization, please visit the Doctoral Program in Public Affairs’ program page at: https://ccie.ucf.edu/public-administration/public-affairs-phd/

Program Tracks

The Doctoral Program in Public Affairs offers prospective applicants who do not have a graduate degree the opportunity to apply to the Public Affairs PhD - Public Administration MPA Dual Degree Track.

The Public Affairs PhD - Public Administration MPA Dual Degree Track provides academically talented students an opportunity to earn the Doctor of Philosophy in Public Affairs and the Master of Public Administration degrees concurrently. Students successfully completing the PhD/MPA Dual Degree program will have the skills and analytical techniques for careers in academia or in the public and nonprofit sectors. After successful completion of the PhD/MPA Dual Degree program, students will receive two diplomas, one for the Public Administration MPA degree and one for the Public Affairs PhD degree.

Students seeking admission to the PhD/MPA Dual Degree program should apply directly to the Public Affairs PhD - Public Administration MPA Dual Degree Track. Only one application will be required. If admitted, students will be active in both the Public Administration MPA and the Public Affairs PhD programs but will be required to complete all coursework for the MPA program prior to starting any coursework required for the PhD program.

Degree Requirements

Required Core Courses
24 Total Credits

- Details

Core Curriculum
12 Total Credits

- Complete the following:
  - PAD7006 - Intellectual History of Public Administration (3)
  - PAD7016 - Public Policy Processes and Theory (3)
  - PAD7106 - Public Organization Theory and Behavior (3)
  - PAD7308 - Advanced Public Policy Analysis (3)

Research Methods
12 Total Credits
Complete the following:
- PAD7706 - Advanced Research Design for Public Administration and Policy (3)
- PAD7701 - Quantitative Methods for Public Administration & Policy I (3)
- PAD7756 - Quantitative Methods for Public Administration and Policy II (3)
- PAD7709 - Advanced Qualitative Methods for Public Administration and Policy (3)

Area of Specialization
18 Total Credits
- Earn at least 18 credits from the following types of courses:
  Suggested areas of specialization are comprised of graduate courses offered by the School of Public Administration's existing graduate degree programs. Doctoral students are expected to complete additional readings and assignments in addition to those required for Master's students enrolled in those courses. Students complete four recommended courses for their chosen specialization (substitutions will be allowed with the approval of the program director, and students may create their own specialization with advance approval from the program director) and 6 credit hours of directed research in which the student conducts independent research in the area of their anticipated dissertation topic with their advisor. The concentrations identified below are exemplary and not exclusive. It is important to note that many students interested in pursuing a research career will find it necessary to supplement the quantitative methods sequence with additional coursework in analytic methods or public economics, which may also be provided through the directed study courses in consultation with the program director and their dissertation chair. Concentrations include but are not limited to: - Public Policy Analysis - Public Budgeting & Finance - Public Management - Urban Policy - Emergency Management - Nonprofit Management - Collaborative Governance - Comparative Public Administration See "Program Details" section below for suggested course sets

Dissertation
15 Total Credits
- Earn at least 15 credits from the following types of courses:
  PAF 7980 Doctoral candidates must enroll in PAF 7980 Doctoral Dissertation continuously (including summers) until they defend their Dissertation. Students are not permitted to register in more than 9 dissertation credit hours in any given semester and must take at least three credit hours. Students who have met the 15-credit hour dissertation requirement and have not defended their Dissertation must continue to register in subsequent semesters to meet the UCF College of Graduate Studies requirement of continuous enrollment; at which point, students can enroll in one credit hour each semester. The dissertation demonstrates the candidate's ability to select and masterfully approach an issue in their respective field by conducting independent research, analyzing, and interpreting results, and placing the study and its findings into a larger context. The defense also establishes the candidate's capability to skillfully communicate this process and its results. Each completed dissertation must be defended before a committee of the graduate faculty. Most of the committee members must approve dissertations. The determination is by vote of the committee. Where a determination is made that revisions are necessary, members can withhold signing the dissertation until additional modifications have been completed or leave it to the discretion of the Chair. Students must submit their final dissertation to the College of Graduate Studies once their committee has signed off.

Examinations
0 Total Credits
- Committee: The committee must include the prospective chair of the student's dissertation committee and three other members selected by the chair in consultation with the student. During or prior to the semester during which completion of the qualifying examination is anticipated, students must select a dissertation committee (3 members from the public administration faculty, one of whom will serve as chair, plus an outside member). This committee will oversee the qualifying examination, dissertation proposal, and dissertation. Core Exam: Once the first year of Core Courses is complete, students are required to complete a written core examination. The core examination will be integrative, with each substantive core course represented. The examination is a collective exercise, with all eligible students sitting for the examination simultaneously. Examinations will be scored by a faculty committee as Fail, Pass, or High Pass. Students who do not receive pass or high pass scores on the examination will be required to stand for a supplemental oral examination. The first year of coursework will consist of the following courses: PAD 7006 Intellectual History of Public Administration, PAD 7016 Public Policy Processes & Theory, PAD 7308 Advanced Public Policy Analysis, and PAD 7106 Public Organizational Theory & Behavior. Qualifying Examination: All students are required to stand for the Qualifying Examination at the completion of their course of study, prior to defending a prospectus and entering candidacy for the degree. The qualifying examination is an individual exercise, scheduled individually with the student’s dissertation chair and committee. The qualifying examination shall consist of an oral defense before the student’s committee of three publication-quality papers: one literature review, one conceptual paper developing theory in an area, and one empirical paper in which the student demonstrates their proficiency in research methods to answer a research question of their choosing. The qualifying examination is an individual exercise, tailored to each student’s interests. The final grading for qualifying exams will consist of a score of “High Pass” “Pass” or “Fail.” All students will have two opportunities to pass the core and qualifying exams. Students must pass each component of each examination. Any student failing any portion of either exam twice will be dismissed from the program with no opportunity for re-admittance to the PAF program.

Candidacy
0 Total Credits
- Students can officially obtain candidacy status when they have passed the core and qualifying exams, formed their Dissertation committee, have no more than six required courses remaining electives included, and all required paperwork has been completed and submitted. In addition, students admitted to their UCF doctoral program in Fall 2011 or a later term must complete all CITI Responsible Conduct of Research (RCR) training. Once they have obtained Candidacy status, students can register for dissertation hours. Students officially enter candidacy when the following work has been accomplished: 1. Pass Core and Qualifying Exams 2. Form an appropriate Dissertation Committee by the established university deadline: 1. Chair
(Graduate Faculty member who is eligible to chair a dissertation committee) 2. Minimum of four committee members (all must hold a Graduate Faculty or Graduate Faculty Scholar appointment) 3. At least three, and a majority of the committee, must be members of the Graduate Faculty 4. At least one member must be from outside the department (or college, if a college-wide program) 5. At least one member must have served previously on a thesis or dissertation committee that graduated a student, either at UCF or at another accredited institution. If the Chair does not have this experience, another graduate faculty member who has this experience may serve in this role as Vice-Chair. Under certain circumstances (see page 2), a graduate faculty scholar who has previous committee experience may serve as Vice-Chair. 3. Have no more than 6 total credit hours of coursework remaining (including electives) 4. Complete all required RCR Workshops and CITI Integrity Trainings. 5. Complete PAF Notification of Doctoral Candidacy form.

Grand Total Credits: 57
Program Details

Area of Specialization

Public Policy Analysis

- PAD 6035 - Public Administration in the Policy Process **3 Credit Hours**
- PAD 6307 - Public Policy Analysis and Management **3 Credit Hours**
- PAD 6616 - Economic Principles for Public Policy and Management **3 Credit Hours**
- PAD 6327 - Public Program Evaluation Techniques **3 Credit Hours**

*Additional courses available with program director approval

Public Budgeting & Finance

- PAD 6207 - Public Financial Management **3 Credit Hours**
- PAD 6227 - Public Budgeting **3 Credit Hours**
- PAD 6238 - Revenue Policy and Administration **3 Credit Hours**
- PAD 6260 - Fundamentals of Public Sector Accounting **3 Credit Hours**
- PAD 6616 - Economic Principles for Public Policy and Management **3 Credit Hours**

*Additional courses available with program director approval

Public Management

- PAD 6227 - Public Budgeting **3 Credit Hours**
- PAD 6335 - Strategic Planning and Management **3 Credit Hours**
- PAD 6417 - Human Resource Management **3 Credit Hours**
- PAD 6439 - Leadership in Public Service **3 Credit Hours**
- PAD 6705 - Public Sector Communications **3 Credit Hours**

*Additional courses available with program director approval

Urban Policy

- PAD 6200 - International Emergency and Crisis Management **3 Credit Hours**
- PAD 6339 - Housing Development and Planning **3 Credit Hours**
- PAD 6387 - Transportation Policy **3 Credit Hours**
- PAD 6716 - Information Systems for Public Managers and Planners **3 Credit Hours**
- URP 6711 - Sustainable Transportation Planning **3 Credit Hours**

*Additional courses available with program director approval

Emergency Management

- PAD 6357 - Urban Resilience **3 Credit Hours**
- PAD 6397 - Managing Emergencies and Crises **3 Credit Hours**
- PAD 6399 - Foundations of Emergency Management and Homeland Security **3 Credit Hours**
- PAD 6716 - Information Systems for Public Managers and Planners **3 Credit Hours**
- PAD 6825 - Cross-Sectoral Governance **3 Credit Hours**

*Additional courses available with program director approval

Nonprofit Management

- PAD 6142 - Nonprofit Organizations **3 Credit Hours**
- PAD 6327 - Public Program Evaluation Techniques **3 Credit Hours**
- PAD 6335 - Strategic Planning and Management **3 Credit Hours**
- PAD 6208 - Nonprofit Financial Management **3 Credit Hours**

*Additional courses available with program director approval

Collaborative Governance

- PAD 6825 - Cross-Sectoral Governance **3 Credit Hours**
- PAD 6829 - Network Analysis in Public Policy and Management **3 Credit Hours**
- PAD 7827 - Network Governance **3 Credit Hours**

*Additional courses available with program director approval

Comparative Public Administration

- PAD 5930 - Global Cities **3 Credit Hours**
- PAD 6357 - Urban Resilience **3 Credit Hours**
- PAD 6836 - Comparative Global Public Administration **3 Credit Hours**

*Additional courses available with program director approval
Public Affairs PhD - Public Affairs PhD, Criminal Justice Track

Track Website
https://ccie.ucf.edu/public-administration/public-affairs-phd/

Track Contact Information
Matt Nobles PhD
Professor
mnobles@ucf.edu
Telephone: 407-823-0821
HPA 1, Room 317

Online Availability
No

Track Description
New admissions to this track have been suspended effective Fall 2021. Prospective students interested in this track are encouraged to apply directly to the Public Affairs PhD program. Students are able to select or create specializations that best align with their research interests.

The Doctoral Program in Public Affairs is an interdisciplinary program drawing from the strengths of faculty in Criminal Justice, Health Management and Informatics, Public Administration, and Social Work. The Criminal Justice Track prepares students for academic positions in colleges and universities as well as research and leadership positions in public, nonprofit and private agencies. The dynamic mix of an interdisciplinary faculty with students of varied backgrounds creates a stimulating environment to examine contemporary organizational, institutional and community problems and issues. Graduates possess the theoretical, analytical and ethical foundation to produce new knowledge that impacts policies and programs and enhances institutional and community performance.

Students must complete 60 credit hours beyond the master's degree distributed in the following manner:

- a three-course, 9-credit hour required Public Affairs substantive core
- a six-course, 18-credit hour required Public Affairs methodological and statistical core
- a three-course, 9-credit hour required discipline-specific specialization
- a two-course, 6-credit hour unrestricted elective requirement
- a one course, 3-credit hour required Public Affairs practicum
- 15 credit hours of dissertation minimum

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites
Applicants must hold a master's degree from an accredited institution, preferably in criminal justice, health, public administration or social work. Applicants with a master's degree in a field not directly related to public affairs may be required to take courses at the master's level in preparation for doctoral level study.

College of Graduate Studies Contact Information
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Institution Codes
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GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
45 Total Credits

- Details

Public Affairs Substantive Core
9 Total Credits

- Complete the following:
  - PAF7000 - Foundations of Public Affairs: People, Places, Policies and Paradigms (3)
  - PAF7230 - Strategic Change and Management for Public Affairs (3)
  - PAF7317 - Social Inquiry and Public Policy (3)

Methodological and Statistical Core
18 Total Credits

- Complete all of the following
  - Complete the following:
    - PAF7802 - Advanced Research Methodology for Public Affairs (3)
    - PAF7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis (3)
    - PAF7805 - Advanced Statistics for Public Affairs II: Survey of Statistical Methods (3)
    - PAF7820 - Qualitative Methods for Public Affairs (3)
    - PAF7325 - Policy and Program Evaluation for Public Affairs (3)
  - Complete at least 1 of the following:
    - PAF7868 - Public Affairs Mixed Methods Research (3)
    - PAF7856 - Applications of Structural Equation Modeling in Public Affairs (3)

Community-based Research
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - PAF 7947 - Public Affairs Community-Based Research At the end of the required coursework, students will take the Community-Based Research course (PAF 7947). Led by a professor, the course provides the student with the opportunity to work within an interdisciplinary team to use their substantive learning and apply their methodological and statistical tools to a real community problem. This experiential learning brings the student out to the community while bringing the community into the university.

Track Specialization
15 Total Credits

- Complete all of the following
  - Complete at least 3 of the following:
    - CJE6456 - Seminar in Policing Urban Communities (3)
    - CJE6320 - Seminar in Police Administration (3)
    - CJE6706 - Seminar in Police Socialization and Culture (3)
    - CJC6135 - Seminar in Institutional Corrections (3)
    - CJC6165 - Seminar in Community Corrections (3)
    - CJC6486 - Seminar in Correctional Effectiveness (3)
    - CJJ6546 - Seminar in Policing and Prevention in the Juvenile Justice System (3)
    - CJJ6124 - Seminar in Prosecuting Juvenile Offenders (3)
    - CJJ6126 - Seminar in Juvenile Corrections (3)
    - CJL6568 - Law and Social Control (3)
  - Earn at least 6 credits from the following types of courses:
    - Choose two additional courses from the following list: See adviser for appropriate methodological elective - 3 Credit Hours Directed independent study - 3 Credit Hours Or other course that will add to the student's course of study. Requires approval of adviser - 3 Credit Hours

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - PAF 7980 - Dissertation Research

Grand Total Credits: 60
**Track Details**

A maximum of 6 credit hours of Independent Study may be used as electives with adviser’s approval.

Transfer work will only be accepted by the Public Affairs PhD program if taken as part of an approved plan of study for a doctoral program at UCF or elsewhere. A maximum of 6 credit hours taken at the doctoral level may be considered for transfer. The acceptance of transfer credit into the track specialization or elective component is dependent upon the approval of the Track Coordinator in consultation with the PAF Program Director. Transfer work will not be accepted into the PAF substantive or methodological core components.

A grade of B- or better is required in all substantive core and methodological core courses. Students receiving a grade of "C+" or lower will be required to repeat the course and receive a grade of B- or better prior to taking the Research Proficiency Exam and Qualifying Exam. Any student who receives more than one grade of C+ or lower in their doctoral course work may be dismissed from the program.

A minimum of 3.0 graduate status GPA and program of study GPA is required to maintain graduate student status and for graduation. Students with a GPA less than 3.0 may be dismissed from the program.

Any student who receives an "F" grade in their doctoral course work will be dismissed from the program.

**Assignment of Faculty Advisers**

Upon acceptance of a student into the program, the program director provides students with an initial orientation and a general advising session. The Track Coordinator in conjunction with the PAF Director helps the student throughout the foundation stage of the program, assisting in the clarification of interests and goals and facilitating the introduction of students to faculty and research interests that can advance the student’s program of study. Criminal Justice Track students will be advised by the Criminal Justice Track Coordinator. The Track Coordinator assists the student in selecting elective courses, finalizing the program of study, and facilitating discussion with faculty members who have similar research interests. Discussion and review of dissertation topics should take place with the faculty member who has agreed to chair the dissertation committee. The dissertation chair is to be selected by the student prior to commencing the dissertation prospectus.

**Research Proficiency Exam and Qualifying Exam**

Upon successful completion of the first year of substantive and methodological required courses, students are required to take a Research Proficiency Exam (RPE) and Integrative Qualifying Exam (IQE). These exams assess a student’s ability to integrate the curriculum knowledge and apply it in the realm of community problem solving as it relates to policy, administration, governance, and organizations. Students are expected to demonstrate proficiency in the PAF Core Competencies.

Students are given two opportunities to pass the RPE and the QE. Students who fail any section twice are dismissed from the program. Any student who fails any the RPE twice or the QE twice will not be readmitted into the PAF program. This policy includes all tracks and/or any master's to PhD program(s) within the PAF program. Please refer to the student handbook for further information.

**Candidacy Status**

Students can officially obtain candidacy status when they have successfully completed all course work, passed the research proficiency and qualifying exams, formed their Dissertation committee, have no more than six required courses remaining (electives included) and all required paperwork has been completed and submitted. In addition, students admitted to their UCF doctoral program in Fall 2011 or a later term must complete all CITI Responsible Conduct of Research (RCR) training. Once they have obtained Candidacy status, students can register for dissertation hours.

Students officially enter candidacy when the following work has been accomplished:

1. Pass Integrative and Research Proficiency Qualifying Exams
2. Form an appropriate Dissertation Committee by established university deadline:
   a. Chair (Graduate Faculty member who is eligible to chair a dissertation committee)
   b. Minimum of four committee members (all must hold a Graduate Faculty or Graduate Faculty Scholar appointment)
   c. At least three, and a majority of the committee, must be members of the Graduate Faculty
   d. At least one member must be from outside the department (or college, if a college-wide program)
   e. At least one member must have served previously on a thesis or dissertation committee that graduated a student, either at UCF or at another accredited institution. If the Chair does not have this experience, another graduate faculty member who has this experience may serve in this role as Vice Chair. Under certain circumstances (see page 2), a graduate faculty scholar who has previous committee experience may serve as Vice Chair.
3. Have no more than 6 total credit hours of coursework remaining (including electives)
4. Complete all required RCR Workshops and CITI Integrity Trainings
5. Complete PAF Notification of Doctoral Candidacy form

**Equipment Fee**

Full-time students in the Public Affairs Program pay a $40 equipment fee each semester that they are enrolled. Part-time students pay $20 per semester.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Public Affairs PhD - Public Affairs PhD, Governance and Policy Research Track

Track Website
https://ccie.ucf.edu/public-administration/public-affairs-phd/

Track Contact Information

Lawrence Martin PhD
Professor
lawrence.martin@ucf.edu
Telephone: 407-823-5731
DPAC 440C

Online Availability

No

Track Description

New admissions to this track have been suspended effective Fall 2021. Prospective students interested in this track are encouraged to apply directly to the Public Affairs PhD program. Students are able to select or create specializations that best align with their research interests.

The Governance and Policy Track in the Public Affairs PhD program prepares students to perform high-quality policy-relevant research concerned with governance and public policy issues, primarily those with national and global implications. Students are empowered to provide unbiased, evidence-based information that is directly relevant to real public-policy problems.

Students must complete 60 credit hours beyond the master's degree, including 15 courses (45 credit hours) above the master's level distributed in the following manner:

- a three-course, 9-credit required Public Affairs substantive core
- a six-course, 18-credit required Public Affairs methodological and statistical core
- a three-course, 9-credit required discipline-specific specialization
- a two-course, 6-credit hour electives (may be taken outside the student's discipline)
- a one course, 3-credit required Public Affairs Community-based Research
- 15 credit hours of dissertation minimum

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree

Track Prerequisites

Applicants must hold a master's degree from an accredited institution, preferably in criminal justice, health, public administration or social work. Applicants who do not have a master's degree in a field directly related to public affairs may be required to take courses at the master's level in preparation for doctoral level study.

2022-2023 Graduate Catalog
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
45 Total Credits

- Details

Public Affairs Substantive Core
9 Total Credits

- Complete the following:
  - PAF7000 - Foundations of Public Affairs: People, Places, Policies and Paradigms (3)
  - PAF7230 - Strategic Change and Management for Public Affairs (3)
  - PAF7317 - Social Inquiry and Public Policy (3)

Methodological and Statistical Core
18 Total Credits

- Complete all of the following
  - Complete the following:
    - PAF7802 - Advanced Research Methodology for Public Affairs (3)
    - PAF7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis (3)
    - PAF7805 - Advanced Statistics for Public Affairs II: Survey of Statistical Methods (3)
    - PAF7820 - Qualitative Methods for Public Affairs (3)
    - PAF7325 - Policy and Program Evaluation for Public Affairs (3)
  - Complete at least 1 of the following:
    - PAF7868 - Public Affairs Mixed Methods Research (3)
    - PAF7856 - Applications of Structural Equation Modeling in Public Affairs (3)

Community-based Research
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - PAF 7947 - Public Affairs Community-Based Research
At the end of the required coursework, students will take the Community-Based Research course (PAF 7947). Led by a professor, the course provides the student with the opportunity to work within an interdisciplinary team to use their substantive learning and apply their methodological and statistical tools to a real community problem. This experiential learning brings the student out to the community while bringing the community into the university.

Track Specialization
9 Total Credits

- Complete the following:
  - PAF7055 - Seminar in State and Local Government Policy Research (3)
  - PAF7510 - Seminar in Policy Evaluation and Performance Measurement (3)
  - PAF7858 - Advanced Seminar in Governance and Policy Research (3)

Elective
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - Choose two additional courses from the following courses: PAF 7757 - Seminar in Global Governance and Policy Research
  - Credit Hours - See adviser for appropriate methodological elective
  - Credit Hours - Directed independent study
  - Credit Hours - Or other course that will add to the student's course of study. Requires approval of adviser.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - PAF 7980 Dissertation Research

Grand Total Credits: 60
**Track Details**

Students are required to take a statistical assessment the summer semester prior to their entering the program fall semester. This assessment will be used to determine a student's statistical knowledge and competency. Students that receive a passing score will be exempt from taking a 6XXX level statistics course. Those students requiring the 6XXX level course will meet with the Track Coordinator to determine which course will meet the requirement. Students are required to complete and pass the course prior to registering in PAF 7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis. The 6XXX level course credit hours may be included in the student’s program of study as an elective.

A maximum of 6 credit hours of Independent Study may be used as electives with advisor's approval.

Transfer work will only be accepted by the Public Affairs PhD program if taken as part of an approved plan of study for a doctoral program at UCF or elsewhere. A maximum of 6 credit hours taken at the doctoral level may be considered for transfer. The acceptance of transfer credit into the track specialization and general elective component is dependent upon the approval of the Track Coordinator in consultation with the PAF Director. Transfer work will not be accepted into the PAF substantive or methodological core components.

A grade of B- or better is required in all courses. Students receiving a grade of "C+" or lower will be required to repeat the course and receive a grade of B- or better prior to taking the Qualifying Exam. Any student who receives more than one grade of "C+" or lower in their doctoral course work may be dismissed from the Public Affairs program.

A minimum of 3.0 graduate status GPA and program of study GPA is required to maintain graduate student status and for graduation. Students with a GPA less than 3.0 may be dismissed from the program.

Any student who receives an "F" grade in their doctoral course work will be dismissed from the program.

**Assignment of Faculty Advisers**

Upon acceptance of a student into the program, the PAF Program Director provides students with an initial orientation and a general advising session. The Track Coordinator in conjunction with the PAF Director helps the student throughout the foundation stage of the program, assisting in the clarification of interests and goals and facilitating the introduction of students to faculty and research interests that can advance the student’s program of study. Governance and Policy Research Track students will be advised by the Governance and Policy Research Track Coordinator. The Track Coordinator assists the student in selecting elective courses, finalizing the program of study, and facilitating discussion with faculty members who have similar research interests. Discussion and review of dissertation topics should take place with the faculty member who has agreed to chair the dissertation committee. The dissertation chair is to be selected by the student prior to commencing the dissertation prospectus.

**Qualifying Examination**

Upon successful completion of the first year of substantive and methodological required courses, students are required to take a Research Proficiency Exam (RPE) and Integrative Qualifying Exam (IQE). These exams assess a student's ability to integrate the curriculum knowledge and apply it in the realm of community problem solving as it relates to policy, administration, governance, and organizations. Students are expected to demonstrate proficiency in the PAF Core Competencies.

Students are given two opportunities to pass the RPE and the QE. Students who fail any section twice are dismissed from the program. Any student who fails any the RPE twice or the QE twice will not be readmitted into the PAF program. This policy includes all tracks and/or any master's to PhD program(s) within the PAF program. Please refer to the student handbook for further information.

**Candidacy Status**

Students can officially obtain candidacy status when they have successfully completed all course work, passed the research proficiency and qualifying exams, formed their Dissertation committee, have no more than six required courses remaining (electives included) and all required paperwork has been completed and submitted. In addition, students admitted to their UCF doctoral program in Fall 2011 or a later term must complete all CITI Responsible Conduct of Research (RCR) training. Once they have obtained Candidacy status, students can register for dissertation hours.

Students officially enter candidacy when the following work has been accomplished:

1. Pass Integrative and Research Proficiency Qualifying Exams
2. Form an appropriate Dissertation Committee by established university deadline:
   a. Chair (Graduate Faculty member who is eligible to chair a dissertation committee)
   b. Minimum of four committee members (all must hold a Graduate Faculty or Graduate Faculty Scholar appointment)
   c. At least three, and a majority of the committee, must be members of the Graduate Faculty
   d. At least one member must be from outside the department (or college, if a college-wide program)
   e. At least one member must have served previously on a thesis or dissertation committee that graduated a student, either at UCF or at another accredited institution. If the Chair does not have this experience, another graduate faculty member who has this experience may serve in this role as Vice Chair. Under certain circumstances (see page 2), a graduate faculty scholar who has previous committee experience may serve as Vice Chair.
3. Have no more than 6 total credit hours of coursework remaining (including electives)
4. Complete all required RCR Workshops and CITI Integrity Trainings
5. Complete PAF Notification of Doctoral Candidacy form

**Equipment Fee**

Full-time students in the Public Affairs Program pay a $40 equipment fee each semester that they are enrolled. Part-time students pay $20 per semester.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Public Affairs PhD - Public Affairs PhD, Health Services Management and Research Track

Track Website
https://ccie.ucf.edu/public-administration/public-affairs-phd/

Track Contact Information

Su-I Hou PhD
Professor
Su-I.Hou@ucf.edu
Telephone: 407-823-3344
DPAC, Room 404H

Online Availability
No

Track Description

New admissions to this track have been suspended effective Fall 2021. Prospective students interested in this track are encouraged to apply directly to the Public Affairs PhD program. Students are able to select or create specializations that best align with their research interests.

The Doctoral Program in Public Affairs is an interdisciplinary program that includes the professional and academic expertise of faculty in the fields of Criminal Justice, Health Management and Informatics, Public Administration, and Social Work. The Health Services Management and Research Track prepares students for academic positions in colleges and universities as well as research and leadership positions in public, nonprofit and for profit agencies and organizations.

A dynamic mix in the Public Affairs Doctoral Program of an interdisciplinary faculty and students from varied backgrounds creates a stimulating environment in which to examine contemporary organizational, institutional and community challenges. Graduates of the PAF Doctoral Program possess the theoretical, analytical and ethical foundation to discover new knowledge that will impact affirmatively public policy decisions and develop programs and systems that will enhance the delivery of services to an expectant and unyielding public.

Students must complete 60 credit hours beyond the master's degree distributed in the following manner:

- a three-course, 9-credit required Public Affairs substantive core
- a six-course, 18-credit required Public Affairs methodological and statistical core
- a three-course, 9-credit required discipline-specific specialization
- a two-course, 6-credit unrestricted elective requirement
- a one course, 3-credit required Public Affairs Community-based Research
- 15 credit hours of dissertation minimum

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree
Track Prerequisites

Applicants must hold a master's degree from an accredited institution, preferably in criminal justice, health, public administration or social work. Applicants with a master's degree in a field not directly related to public affairs may be required to take courses at the master's level in preparation for doctoral level study.

College of Graduate Studies Contact Information

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Millican Hall 230
Online Application
Graduate Admissions

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
45 Total Credits

- **Public Affairs Substantive Core**
  9 Total Credits
  - Complete the following:
    - PAF7000 - Foundations of Public Affairs: People, Places, Policies and Paradigms (3)
    - PAF7230 - Strategic Change and Management for Public Affairs (3)
    - PAF7317 - Social Inquiry and Public Policy (3)

- **Methodological and Statistical Core**
  18 Total Credits
  - Complete all of the following
    - Complete the following:
      - PAF7802 - Advanced Research Methodology for Public Affairs (3)
      - PAF7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis (3)
      - PAF7805 - Advanced Statistics for Public Affairs II: Survey of Statistical Methods (3)
      - PAF7820 - Qualitative Methods for Public Affairs (3)
      - PAF7325 - Policy and Program Evaluation for Public Affairs (3)
    - Complete at least 1 of the following:
      - PAF7868 - Public Affairs Mixed Methods Research (3)
      - PAF7856 - Applications of Structural Equation Modeling in Public Affairs (3)

- **Community-based Research**
  3 Total Credits
  - Earn at least 3 credits from the following types of courses:
    - PAF 7947 - Public Affairs Community-Based Research At the end of the required coursework, students will take the Community-Based Research course (PAF 7947). Led by a professor, the course provides the student with the opportunity to work within an interdisciplinary team to use their substantive learning and apply their methodological and statistical tools to a real community problem. This experiential learning brings the student out to the community while bringing the community into the university.

- **Track Specialization**
  15 Total Credits
  - Complete all of the following
    - Complete the following:
      - HSA7116 - Theories in Healthcare Management (3)
      - HSA7936 - Advanced Seminar in Health Economics (3)
      - HSA7938 - Advanced Seminar in Health Services Research (3)
    - Complete at least 2 of the following:
      - HSA6108 - Health Care Organization and Management II (3)
      - HSA6128 - Health Care Services Management (3)
      - HSA6342 - Health Care Human Resources (3)
      - PHC6000 - Epidemiology (3)
      - PHC6146 - Health Planning and Policy (3)
      - PHC6160 - Health Care Finance (3)
      - HSA7125 - Globalization and Health (3)

- **Dissertation**
  15 Total Credits
  - Earn at least 15 credits from the following types of courses:
    - PAF 7980 Dissertation Research

**Grand Total Credits:** 60
**Track Details**

A maximum of 6 credit hours of Independent Study may be used as electives with adviser’s approval.

Transfer work will only be accepted by the Public Affairs PhD program if taken as part of an approved plan of study for a doctoral program at UCF or elsewhere. A maximum of 6 credit hours taken at the doctoral level may be considered for transfer. The acceptance of transfer credit into the track specialization and a general elective component is dependent upon the approval of the Track Coordinator in consultation with the PAF Director. Transfer work will not be accepted into the PAF substantive or methodological core components.

A grade of B- or better is required in all substantive core and methodological core courses. Students receiving a grade of "C+" or lower will be required to repeat the course and receive a grade of B- or better prior to taking the Research Proficiency Exam and Qualifying Exam. Any student who receives more than one "C" in their doctoral course work may be dismissed from the program.

A minimum of 3.0 graduate status GPA and program of study GPA is required to maintain graduate student status and for graduation. Students with a GPA less than 3.0 may be dismissed from the program.

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**Assignment of Faculty Advisers**

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Students officially enter candidacy when the following work has been accomplished:

1. Pass Integrative and Research Proficiency Qualifying Exams
2. Form an appropriate Dissertation Committee by established university deadline:
   a. Chair (Graduate Faculty member who is eligible to chair a dissertation committee)
   b. Minimum of four committee members (all must hold a Graduate Faculty or Graduate Faculty Scholar appointment)
   c. At least three, and a majority of the committee, must be members of the Graduate Faculty
   d. At least one member must be from outside the department (or college, if a college-wide program)
   e. At least one member must have served previously on a thesis or dissertation committee that graduated a student, either at UCF or at another accredited institution. If the Chair does not have this experience, another graduate faculty member who has this experience may serve in this role as Vice Chair. Under certain circumstances (see page 2), a graduate faculty scholar who has previous committee experience may serve as Vice Chair.
3. Have no more than 6 total credit hours of coursework remaining (including electives)
4. Complete all required RCR Workshops and CITI Integrity Trainings
5. Complete PAF Notification of Doctoral Candidacy form

**Equipment Fee**

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Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Public Affairs PhD - Public Affairs PhD, Public Administration MPA Dual Degree Track

Track Website
https://ccie.ucf.edu/public-administration/public-affairs-phd/

Track Handbook
Public Affairs PhD

Track Contact Information

Jeremy Hall PhD
Professor and Public Affairs Program Coordinator
Jeremy.Hall@ucf.edu
Telephone: 407-823-1921
DPAC, 448R

Edlira Dursun, MPA, MNM
Academic Program Coordinator
Edlira.Dursun@ucf.edu
Telephone: 407-823-1139
DPAC 446B

Online Availability
No
Track Description

The Public Affairs PhD - Public Administration MPA Dual Degree Track provides academically talented students an opportunity to earn the Doctor of Philosophy in Public Affairs and the Master of Public Administration degrees concurrently. Students successfully completing the PhD/MPA Dual Degree program will have the skills and analytical techniques for careers in academia or in the public and nonprofit sectors. After successful completion of the PhD/MPA Dual Degree program, students will receive two diplomas, one for the Public Administration MPA degree and one for the Public Affairs PhD degree.

Students seeking admission to the PhD/MPA Dual Degree program should apply directly to the Public Affairs PhD - Public Administration MPA Dual Degree Track. Only one application will be required. If admitted, student will be active in both the Public Administration MPA and the Public Affairs PhD programs.

The Public Administration MPA Dual Degree track in the Public Affairs PhD program consists of 84 credit hours, including 63 credit hours of required courses, 6 credit hours of electives approved by the student's faculty adviser or program director, and 15 credit hours of dissertation hours. For required courses, students must first complete seven core courses plus the capstone course for the MPA program (24 credit hours) before enrolling in doctoral level courses. Doctoral level courses are reserved for students who have successfully completed all master's degree requirements. Once a student has completed all master's level coursework, then that student will take three Public Affairs substantive core courses and six Public Affairs methodological and statistical core courses for the PhD program (30 credit hours), plus five elective courses (15 credit hours).

Total Credit Hours Required: 84 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
69 Total Credits

- In addition to the following required courses, the MPA degree will include 6 credit hours of advanced research methods and quantitative methods in Public Affairs and 12 credit hours of electives that are incorporated into the prescribed PhD curriculum

Required Courses for MPA
24 Total Credits

- Complete the following:
  - PAD6035 - Public Administration in the Policy Process
  - PAD6037 - Public Organization Management
  - PAD6053 - Public Administrators in the Governance Process
  - PAD6207 - Public Financial Management
  - PAD6227 - Public Budgeting
  - PAD6335 - Strategic Planning and Management
  - PAD6417 - Human Resource Management
  - PAD6062 - Advanced Concepts and Applications in Public Administration

Public Affairs Substantive Core:
9 Total Credits

- Complete the following:
  - PAF7000 - Foundations of Public Affairs: People, Places, Policies and Paradigms
  - PAF7230 - Strategic Change and Management for Public Affairs
  - PAF7317 - Social Inquiry and Public Policy

Methodological and Statistical Core
18 Total Credits

- Complete all of the following
  - Complete the following:
Community-based Research
3 Total Credits

- Complete at least 1 of the following:
  - PAF7868 - Public Affairs Mixed Methods Research (3)
  - PAF7856 - Applications of Structural Equation Modeling in Public Affairs (3)

Track Specialization
9 Total Credits

- Complete the following:
  - PAD7026 - Advanced Seminar in Public Administration (3)
  - PAD7057 - Advanced Public Management (3)
  - PAD7827 - Network Governance (3)

Elective Courses
6 Total Credits

- Complete at least 6 credits from the following types of courses:
  - PAD 7317 - Program Design and Management 3 Credit Hours
  - PAD 7707 - Advanced Research in Public Administration 3 Credit Hours
  - Methodological elective approved by adviser 3 Credit Hours
  - Directed independent study 3 Credit Hours
  - Pre-approved methodological or statistical course 3 Credit Hours

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - PAF 7980 Dissertation Research

Grand Total Credits: **84**
Track Details

A maximum of 6 credit hours of Independent Study may be used as electives with adviser’s approval.

A grade of "B-" or better is required in all courses listed under the MPA requirement and Public Affairs requirements. Students receiving a grade below a "B-" in the Substantive Core or Methodological Core must repeat the course and receive an acceptable grade prior to taking the Research Proficiency Exam and Qualifying Exam. Any student who receives more than one grade of "C" in their doctoral course work may be dismissed from the program.

A minimum of 3.0 graduate status GPA and program of study GPA is required to maintain graduate student status and for graduation. Students with a GPA less than 3.0 may be dismissed from the program.

Any student who receives an "F" grade in their master’s level or doctoral course work will be dismissed from the program.

Research Proficiency Exam and Qualifying Exam

Upon successful completion of the first year of substantive and methodological required courses, students are required to take a Research Proficiency Exam (RPE) and Integrative Qualifying Exam (IQE). These exams assess a student’s ability to integrate the curriculum knowledge and apply it in the realm of community problem solving as it relates to policy, administration, governance, and organizations. Students are expected to demonstrate proficiency in the PAF Core Competencies.

Students are given two opportunities to pass the RPE and the QE. Students who fail any section twice are dismissed from the program. Any student who fails any the RPE twice or the QE twice will not be readmitted into the PAF program. This policy includes all tracks and/or any master’s to PhD program(s) within the PAF program. Please refer to the student handbook for further information.

Candidacy

Students can officially obtain candidacy status when they have successfully completed all course work, passed the research proficiency and qualifying exams, formed their Dissertation committee, have no more than six required courses remaining (electives included) and all required paperwork has been completed and submitted. In addition, students admitted to their UCF doctoral program in Fall 2011 or a later term must complete all CITI Responsible Conduct of Research (RCR) training. Once they have obtained Candidacy status, students can register for dissertation hours.

Students officially enter candidacy when the following work has been accomplished:

1. Pass Integrative and Research Proficiency Qualifying Exams
2. Form an appropriate Dissertation Committee by established university deadline:
   a. Chair (Graduate Faculty member who is eligible to chair a dissertation committee)
   b. Minimum of four committee members (all must hold a Graduate Faculty or Graduate Faculty Scholar appointment)
   c. At least three, and a majority of the committee, must be members of the Graduate Faculty
   d. At least one member must be from outside the department (or college, if a college-wide program)
   e. At least one member must have served previously on a thesis or dissertation committee that graduated a student, either at UCF or at another accredited institution. If the Chair does not have this experience, another graduate faculty member who has this experience may serve in this role as Vice Chair. Under certain circumstances (see page 2), a graduate faculty scholar who has previous committee experience may serve as Vice Chair.
3. Have no more than 6 total credit hours of coursework remaining (including electives)
4. Complete all required RCR Workshops and CITI Integrity Trainings
5. Complete PAF Notification of Doctoral Candidacy form

Additional Program Requirements

Students initially admitted to the MPA/PhD dual degree program who subsequently decide they only want to receive the MPA degree may have all applicable courses completed as part of the two degree programs applied to the MPA degree program without being counted as transfer courses.

Equipment Fee

Full-time students in the Public Affairs PhD Program pay a $40 equipment fee each semester that they are enrolled. Part-time students pay $20 per semester.

Independent Learning

Independent learning is demonstrated throughout the curriculum, through the process of inquiry and dialogue. Tangible projects, such as research scholarly papers and the dissertation contribute to the self development of MPA/PhD students.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Public Affairs PhD - Public Affairs PhD, Public Administration Track

Track Website
https://ccie.ucf.edu/public-administration/public-affairs-phd/

Track Contact Information

Thomas Bryer PhD
Assistant Professor
thomas.bryer@ucf.edu
Telephone: 407-823-0410
DPAC, 448A

Online Availability

No

Track Description

New admissions to this track have been suspended effective Fall 2021. Prospective students interested in this track are encouraged to apply directly to the Public Affairs PhD program. Students are able to select or create specializations that best align with their research interests.

The Doctoral Program in Public Affairs is an interdisciplinary program that includes the professional and academic expertise of faculty in the fields of Criminal Justice, Health Management and Informatics, Public Administration, and Social Work. The Public Administration Track prepares students for academic positions in colleges and universities as well as research and leadership positions in public, nonprofit and for profit agencies and organizations.

The Public Administration Track integrates the historical evolution of the public administration field, the current challenges in theory and practice in our increasingly interconnected society, and the future directions needed as a discipline and society to achieve responsive solutions to complex public problems.

Students must complete 60 credit hours beyond the master's degree distributed in the following manner:

- a three-course, 9-credit required Public Affairs substantive core
- a six-course, 18-credit required Public Affairs methodological and statistical core
- a three-course, 9-credit required discipline-specific specialization
- a two-course, 6-credit unrestricted elective requirement
- one course, 3-credit required Public Affairs Community-based Research
- 15 credit hours of dissertation minimum

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree
Track Prerequisites

Applicants must hold a master's degree from an accredited institution, preferably in criminal justice, health, public administration or social work. Applicants with a master's degree in a field not directly related to public affairs may be required to take courses at the master's level in preparation for doctoral level study.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
45 Total Credits

- Details

Public Affairs Substantive Core
9 Total Credits

- Complete the following:
  - PAF7000 - Foundations of Public Affairs: People, Places, Policies and Paradigms (3)
  - PAF7230 - Strategic Change and Management for Public Affairs (3)
  - PAF7317 - Social Inquiry and Public Policy (3)

Methodological and Statistical Core
18 Total Credits

- Complete all of the following
  - Complete the following:
    - PAF7802 - Advanced Research Methodology for Public Affairs (3)
    - PAF7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis (3)
    - PAF7805 - Advanced Statistics for Public Affairs II: Survey of Statistical Methods (3)
    - PAF7820 - Qualitative Methods for Public Affairs (3)
    - PAF7325 - Policy and Program Evaluation for Public Affairs (3)
  - Complete at least 1 of the following:
    - PAF7868 - Public Affairs Mixed Methods Research (3)
    - PAF7856 - Applications of Structural Equation Modeling in Public Affairs (3)

Community-based Research
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - PAF 7947 - Public Affairs Community-Based Research At the end of the required coursework, students will take the Community-Based Research course (PAF 7947). Led by a professor, the course provides the student with the opportunity to work within an interdisciplinary team to use their substantive learning and apply their methodological and statistical tools to a real community problem. This experiential learning brings the student out to the community while bringing the community into the university.

Track Specialization
15 Total Credits

- Complete all of the following
  - Complete the following:
    - PAD7026 - Advanced Seminar in Public Administration (3)
    - PAD7057 - Advanced Public Management (3)
    - PAD7827 - Network Governance (3)
  - Earn at least 6 credits from the following types of courses:
    - Choose two additional elective courses from the following: PAD 7317 - Program Design and Management 3 Credit Hours PAD 7707 - Advanced Research in Public Administration 3 Credit Hours See adviser for appropriate methodological elective 3 Credit Hours Directed independent study 3 Credit Hours Or other course that will add to the student's course of study. Requires approval of adviser. 3 Credit Hours

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - PAF 7980 Dissertation Research

Grand Total Credits: 60
**Track Details**

A maximum of 6 credit hours of Independent Study may be used as electives with adviser's approval.

Transfer work will only be accepted by the Public Affairs PhD program if taken as part of an approved plan of study for a doctoral program at UCF or elsewhere. A maximum of 6 credit hours taken at the doctoral level may be considered for transfer. The acceptance of transfer credit into the track specialization and a general elective component is dependent upon the approval of the Track Coordinator in consultation with the PAF Director. Transfer work will not be accepted into the PAF substantive or methodological core components.

A grade of B- or better is required in all courses, including Substantive Core, Methodological Core and Track Specialization/Elective courses. Students receiving a grade of C+ or below in the Substantive Core or Methodological Core courses must repeat the course and receive an acceptable grade prior to taking the Research Proficiency Exam and Qualifying Exam. Any student who receives more than one "C" in their doctoral coursework may be dismissed from the program.

A minimum of 3.0 graduate status GPA and program of study GPA is required to maintain graduate student status and for graduation. Students with a GPA less than 3.0 may be dismissed from the program.

Any student who receives an "F" grade in their doctoral coursework will be dismissed from the program.

**Assignment of Faculty Advisers**

Upon acceptance of a student into the program, the program director provides students with an initial orientation and a general advising session. The Track Coordinator in conjunction with the PAF Director helps the student throughout the foundation stage of the program, assisting in the clarification of interests and goals and facilitating the introduction of students to faculty and research interests that can advance the student's program of study. Public Administration Track students will be advised by the Public Administration Track Coordinator. The Track Coordinator assists the student in selecting elective courses, finalizing the program of study, and facilitating discussion with faculty members who have similar research interests. Discussion and review of dissertation topics should take place with the faculty member who has agreed to chair the dissertation committee. The dissertation chair is to be selected by the student prior to commencing the dissertation prospectus.

**Research Proficiency Exam and Qualifying Exam**

Upon successful completion of the first year of substantive and methodological required courses, students are required to take a Research Proficiency Exam (RPE) and Integrative Qualifying Exam (IQE). These exams assess a student's ability to integrate the curriculum knowledge and apply it in the realm of community problem solving as it relates to policy, administration, governance, and organizations. Students are expected to demonstrate proficiency in the PAF Core Competencies.

Students are given two opportunities to pass the RPE and the QE. Students who fail any section twice are dismissed from the program. Any student who fails any the RPE twice or the QE twice will not be readmitted into the PAF program. This policy includes all tracks and/or any master's to PhD program(s) within the PAF program. Please refer to the student handbook for further information.

**Candidacy Status**

Students can officially obtain candidacy status when they have successfully completed all course work, passed the research proficiency and qualifying exams, formed their Dissertation committee, have no more than six required courses remaining (electives included) and all required paperwork has been completed and submitted. In addition, students admitted to their UCF doctoral program in Fall 2011 or a later term must complete all CITI Responsible Conduct of Research (RCR) training. Once they have obtained Candidacy status, students can register for dissertation hours.

Students officially enter candidacy when the following work has been accomplished:

1. Pass Integrative and Research Proficiency Qualifying Exams
2. Form an appropriate Dissertation Committee by established university deadline:
   a. Chair (Graduate Faculty member who is eligible to chair a dissertation committee)
   b. Minimum of four committee members (all must hold a Graduate Faculty or Graduate Faculty Scholar appointment)
   c. At least three, and a majority of the committee, must be members of the Graduate Faculty
   d. At least one member must be from outside the department (or college, if a college-wide program)
   e. At least one member must have served previously on a thesis or dissertation committee that graduated a student, either at UCF or at another accredited institution. If the Chair does not have this experience, another graduate faculty member who has this experience may serve in this role as Vice Chair. Under certain circumstances (see page 2), a graduate faculty scholar who has previous committee experience may serve as Vice Chair.
3. Have no more than 6 total credit hours of coursework remaining (including electives)
4. Complete all required RCR Workshops and CITI Integrity Trainings
5. Complete PAF Notification of Doctoral Candidacy form

**Equipment Fee**

Full-time students in the Public Affairs Program pay a $40 equipment fee each semester that they are enrolled. Part-time students pay $20 per semester.
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information
Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Public Affairs PhD - Public Affairs PhD, Social Work Track
Track Website
https://ccie.ucf.edu/public-administration/public-affairs-phd/

Track Contact Information
Reshawna Chapple, PhD, LCSW
Associate Professor
rchapple@ucf.edu
407-823-2958
HS I, room 252

Online Availability
No
**Track Description**

New admissions to this track have been suspended effective Fall 2021. Prospective students interested in this track are encouraged to apply directly to the Public Affairs PhD program. Students are able to select or create specializations that best align with their research interests.

The Social Work Track in the Public Affairs PhD program prepares students for university faculty and research positions, as well as leadership roles in public, non-profit and private human service, health and community-based agencies, drawing upon research and evaluation skills.

The Social Work Track in the Public Affairs PhD program prepares students for university faculty and research positions, as well as leadership roles in public, non-profit and private human service, health and community-based agencies, drawing upon research and evaluation skills. The track is designed to: (1) to develop student learning and competencies for social work scholarship and research, incorporating disciplinary knowledge in interdisciplinary contexts, and (2) to foster student learning in domains relevant to social work research in the 21st Century; namely through the understanding and application of concepts and tools in knowledge translation, evaluation, evidence-based research, the design of innovative social ventures, and the development and testing of interventions for improving social service practice, social welfare and social policy. Students applying to this track must have a Master of Social Work (MSW) for consideration.

Students must complete 60 credit hours beyond the master's degree distributed in the following manner:

- a three-course, 9-credit required Public Affairs substantive core
- a six-course, 18-credit required Public Affairs methodological and statistical core
- a three-course, 9-credit required discipline-specific specialization
- a two-course, 6-credit unrestricted elective requirement
- one course, 3-credit required Public Affairs Community-based Research
- 15 credit hours of dissertation minimum

**Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree**

**Track Prerequisites**

Applicants must hold a master's degree in Social Work from an accredited institution

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

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2022-2023 Graduate Catalog
Degree Requirements

Required Courses
60 Total Credits

- Details

Public Affairs Substantive Core
9 Total Credits

- Complete the following:
  - PAF7000 - Foundations of Public Affairs: People, Places, Policies and Paradigms (3)
  - PAF7230 - Strategic Change and Management for Public Affairs (3)
  - PAF7317 - Social Inquiry and Public Policy (3)

Methodological and Statistical Core
18 Total Credits

- Complete all of the following
  - Complete the following:
    - PAF7802 - Advanced Research Methodology for Public Affairs (3)
    - PAF7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis (3)
    - PAF7805 - Advanced Statistics for Public Affairs II: Survey of Statistical Methods (3)
    - PAF7820 - Qualitative Methods for Public Affairs (3)
    - PAF7325 - Policy and Program Evaluation for Public Affairs (3)
  - Complete at least 1 of the following:
    - PAF7868 - Public Affairs Mixed Methods Research (3)
    - PAF7856 - Applications of Structural Equation Modeling in Public Affairs (3)

Community-based Research
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - PAF 7947 - Public Affairs Community-Based Research At the end of the required coursework, students will take the Community-Based Research course (PAF 7947). Led by a professor, the course provides the student with the opportunity to work within an interdisciplinary team to use their substantive learning and apply their methodological and statistical tools to a real community problem. This experiential learning brings the student out to the community while bringing the community into the university.

Track Specialization
15 Total Credits

- Complete all of the following
  - Complete the following:
    - SOW6383 - Social Work Administration (3)
    - SOW7492 - Theory Building in Social Work and Applied Social Science Disciplines (3)
    - SOW7494 - Conducting Evidence-based Practice Research in Social Work and Allied Fields (3)
  - Earn at least 6 credits from the following types of courses:
    - Choose two additional courses from the following: SOW 7397 - Social Entrepreneurship in Public and Social Sectors 3 Credit Hours See adviser for appropriate methodological elective 3 Credit Hours Directed reading 3 Credit Hours Or other course that will add to the student's course of study. Requires approval of adviser. 3 Credit Hours

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - PAF 7980 Dissertation Research

Grand Total Credits: 60
Track Details

A maximum of 6 credit hours of Independent Study may be used as electives with adviser's approval.

Transfer work will only be accepted by the Public Affairs PhD program if taken as part of an approved plan of study for a doctoral program at UCF or elsewhere. A maximum of 6 credit hours taken at the doctoral level may be considered for transfer. The acceptance of transfer credit into the track specialization or general elective component is dependent upon the approval of the Track Coordinator in consultation with the PAF Director. Transfer work will not be accepted into the PAF substantive or methodological core components.

A grade of B- or better is required in all Substantive Core and Methodological Core courses. Students receiving a grade of "C+" or lower will be required to repeat the course and receive a grade of B- or better prior to taking the Research Proficiency Exam and Qualifying Exam. Any student who receives more than one "C" in their doctoral course work may be dismissed from the program.

A minimum of 3.0 grade point average in the graduate status courses and program of study is required to maintain graduate student status and for graduation. Students with a GPA less than 3.0 may be dismissed from the program.

A grade of F in any doctoral course work will result in dismissal from the program.

Assignment of Faculty Advisers

Upon acceptance of a student into the program, the program director provides students with an initial orientation and a general advising session. The Track Coordinator in conjunction with the PAF Director helps the student throughout the foundation stage of the program, assisting in the clarification of interests and goals and facilitating the introduction of students to faculty and research interests that can advance the student's program of study. Social Work Track students will be advised by the Social Work Track Coordinator. The Track Coordinator assists the student in selecting elective courses, finalizing the program of study, and facilitating discussion with faculty members who have similar research interests. Discussion and review of dissertation topics should take place with the faculty member who has agreed to chair the dissertation committee. The dissertation chair is to be selected by the student prior to commencing the dissertation prospectus.

Research Proficiency Exam and Qualifying Exam

Upon successful completion of the first year of substantive and methodological required courses, students are required to take a Research Proficiency Exam (RPE) and Integrative Qualifying Exam (IQE). These exams assess a student's ability to integrate the curriculum knowledge and apply it in the realm of community problem solving as it relates to policy, administration, governance, and organizations. Students are expected to demonstrate proficiency in the PAF Core Competencies.

Students are given two opportunities to pass the RPE and the QE. Students who fail any section twice are dismissed from the program. Any student who fails any the RPE twice or the QE twice will not be readmitted into the PAF program. Please refer to the student handbook for further information.

Candidacy Status

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2. Form an appropriate Dissertation Committee by established university deadline:
   a. Chair (Graduate Faculty member who is eligible to chair a dissertation committee)
   b. Minimum of four committee members (all must hold a Graduate Faculty or Graduate Faculty Scholar appointment)
   c. At least three, and a majority of the committee, must be members of the Graduate Faculty
   d. At least one member must be from outside the department (or college, if a college-wide program)
   e. At least one member must have served previously on a thesis or dissertation committee that graduated a student, either at UCF or at another accredited institution. If the Chair does not have this experience, another graduate faculty member who has this experience may serve in this role as Vice Chair. Under certain circumstances (see page 2), a graduate faculty scholar who has previous committee experience may serve as Vice Chair.
3. Have no more than 6 total credit hours of coursework remaining (including electives)
4. Complete all required RCR Workshops and CITI Integrity Trainings
5. Complete PAF Notification of Doctoral Candidacy form

Equipment Fee

Full-time students in the Public Affairs Program pay a $40 equipment fee each semester that they are enrolled. Part-time students pay $20 per semester.
Financial Information

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Public Budgeting and Finance Graduate Certificate

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/

Program Contact Information

Abdul-Akeem Sadiq, PhD
Professor
Director, Master of Public Administration
Abdul-akeem.sadiq@ucf.edu
Telephone: 407-823-3925

Nasrin Lakhani
Director, Advising and Student Support Services
nasrin.lakhani@ucf.edu

Is this program available 100% online?
No

Licensure Disclosure

This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Public-Budgeting-and-Finance-GC.pdf.
**Program Description**

The Graduate Certificate in Public Budgeting and Finance is designed to meet the growing needs in our governments to understand and apply varied and complex budgeting and financial practices. The program is primarily aimed at students who wish to specialize in budgeting and finance careers in the public sector. The certificate curriculum prepares students to pursue the Certified Government Finance Officer designation from the Florida Government Finance Officers Association.

**Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

**Required Courses**

- Complete the following:
  - PAD6207 - Public Financial Management (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6238 - Revenue Policy and Administration (3)
  - PAD6616 - Economic Principles for Public Policy and Management (3)

**Electives**

- Complete at least 2 of the following:
  - PAD5356 - Managing Community and Economic Development (3)
  - PAD5850 - Grant and Contract Management (3)
  - PAD5855 - Introduction to Public Procurement (3)
  - PAD6208 - Nonprofit Financial Management (3)
  - PAD6234 - Public Capital and Debt (3)
  - PAD6254 - Economics of Land Use Planning and Development (3)
  - PAD6260 - Fundamentals of Public Sector Accounting (3)

**Grand Total Credits: 18**

**Program Details**

Students must achieve a grade of "B-" (80%) or better in every course. Grades ‘C’ or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

**Public Policy Analysis Graduate Certificate**

**College**

College of Community Innovation and Education

**Department**

School of Public Administration

**Program Website**

https://ccie.ucf.edu/public-administration/
Program Contact Information

Abdul-Akeem Sadiq, PhD
Professor
Director, Master of Public Administration
Abdul-akeem.sadiq@ucf.edu
Telephone: 407-823-3925

Edlira Dursun, MPA, MNM
Graduate Advisor (interim)
Edlira.dursun@ucf.edu
Telephone: 407-823-1139
DPAC 446B

Is this program available 100% online?
No

Program Description

The Public Policy Analysis Graduate Certificate is primarily designed to complement the Master of Public Administration (MPA) program by providing a formalized path for students to specialize in public policy analysis. This certificate is designed for students interested in a range of policy domains such as urban, environmental, transportation, economic development, emergency management, disaster, homeland security, and health. The program will prepare graduate students for professional careers as policy analysts and leaders in public service at all levels of government and in the private and nonprofit sectors, with a particular focus on public policy formulation, implementation, and evaluation. This Certificate may be completed entirely online.

The Graduate Certificate in Public Policy Analysis is comprised of 18 credit hours of graduate courses, including four required courses and two electives.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - PAD6035 - Public Administration in the Policy Process (3)
  - PAD6307 - Public Policy Analysis and Management (3)
  - PAD6616 - Economic Principles for Public Policy and Management (3)
  - PAD6327 - Public Program Evaluation Techniques (3)

Electives
6 Total Credits

- Complete at least 2 of the following:
  - PAD6238 - Revenue Policy and Administration (3)
  - PAD6701 - Analytical Techniques for Public Administration (3)
  - PAD6829 - Network Analysis in Public Policy and Management (3)
  - PAD5356 - Managing Community and Economic Development (3)
  - PAD6387 - Transportation Policy (3)
  - PAD6353 - Environmental Planning and Policy (3)
  - Course Not Found
  - CCJ6106 - Policy Analysis in Criminal Justice (3)
  - PHC6146 - Health Planning and Policy (3)

Grand Total Credits: 18

Program Details

Students must achieve a grade of "B-" (80%) or better in every course. Grades 'C' or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Public Policy MPP

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/public-policy/

Program Handbook Link
Public Policy MPP Handbook

Program Contact Information

Abdul-Akeem Sadiq PhD
Professor
Director Public Administration and Public Policy Programs
Abdul-Akeem.Sadiq@ucf.edu

Edlira Dursun MPA, MNM
Graduate Advisor (Interim)
Edlira.Dursun@ucf.edu
Telephone: 407-823-2604
DPAC 446B

Is this program available 100% online?
No
Program Description

The Master of Public Policy (MPP) is primarily a face-to-face, campus-based program, designed to prepare students for professional careers as policy analysts, policy evaluators, and leaders in the public sector. Students will learn and apply evidence-based public policy formulation, implementation, and evaluation framework in a range of policy domains including urban policy, environmental policy, educational policy, health policy, transportation policy, economic development policy, immigration policy, disaster policy, homeland security policy, science and technology policy, criminal justice policy, and international/global policy. The MPP will serve as a platform to adequately prepare students for doctoral studies in public administration.

Students will enhance and practice their knowledge and skills through the development of various core competencies including public policy and governance, law and economic principles, research methods and tools, program analysis and evaluation, organization management and network analysis, public leadership and decision-making process and specific courses dedicated to unique topics within public policy.

The Master of Public Policy (MPP) consists of 36 credit hours. Each student completes a core of six courses (18 credit hours), one Capstone Experience course (3 credit hours) and an advanced curriculum of electives (15 credit hours).

The face-to-face courses are offered in the evenings during the week at the UCF Downtown campus. The MPP program incorporates group projects in courses intended to develop leadership abilities while also providing an opportunity to demonstrate how students work as part of a team in most courses. These projects promote important intellectual and social skills and help to prepare students for work in a world in which teamwork and collaboration are increasingly the norms.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Core Courses (See Program Details for Course Prerequisites)
18 Total Credits

- Complete the following:
  - PAD6700 - Research Methods in Public Administration (3)
  - PAD6701 - Analytical Techniques for Public Administration (3)
  - PAD6035 - Public Administration in the Policy Process (3)
  - PAD6307 - Public Policy Analysis and Management (3)
  - PAD6327 - Public Program Evaluation Techniques (3)
  - PAD6616 - Economic Principles for Public Policy and Management (3)

Capstone
3 Total Credits

- Students will engage in a capstone experience that builds upon the knowledge and skills gained from completing the core courses in the MPP program. Students will complete this requirement through enrollment in PAD 6848 - Policy Analysis Capstone. The Capstone Experience course is offered in fall and spring semesters only and may be taken following the completion of all core courses. It may not be combined with a core course in the same semester.

Course
3 Total Credits

- Complete the following:
  - PAD6848 - Policy Analysis Capstone (3)

Electives
9 Total Credits

- Complete at least 3 of the following:
  - PAD5337 - Urban Design (3)
  - PAD6234 - Public Capital and Debt (3)
  - PAD6037 - Public Organization Management (3)
  - PAD6036 - Change Management in Public Organizations (3)
  - PAD6053 - Public Administrators in the Governance Process (3)
  - PAD6227 - Public Budgeting (3)
  - PAD6238 - Revenue Policy and Administration (3)
  - PAD6260 - Fundamentals of Public Sector Accounting (3)
  - PAD6335 - Strategic Planning and Management (3)
  - PAD6439 - Leadership in Public Service (3)

Policy Specialization Electives
6 Total Credits

- Select from the following courses or courses otherwise approved by the Program Director (3 Credit Hours each). Students take two policy specialization courses to focus on a specific policy domain, including but not limited to Urban Policy, Economic Development Policy, Environmental and Energy Policy, Transportation Policy, Education Policy, Health Policy, Science and Technology Policy, Disaster Policy, and Criminal Justice Policy.

Courses
6 Total Credits

- Complete at least 2 of the following:
  - PAD5337 - Urban Design (3)
  - PAD5356 - Managing Community and Economic Development (3)
  - CCJ6106 - Policy Analysis in Criminal Justice (3)
  - CCJ6485 - Issues in Justice Policy (3)
  - PAD6339 - Housing Development and Planning (3)
  - PAD6353 - Environmental Planning and Policy (3)
  - PAD6387 - Transportation Policy (3)
  - PAD6398 - Hazard Analysis and Disaster Planning (3)
  - PAD6399 - Foundations of Emergency Management and Homeland Security (3)
  - PHC6146 - Health Planning and Policy (3)
  - PAD6357 - Urban Resilience (3)
  - PAD5930 - Global Cities (3)
  - PAD6036 - Change Management in Public Organizations (3)
  - PAD6826 - Urban Policy and Regional Governance (3)

Grand Total Credits: 36
**Program Details**

Courses and credit hours used for undergraduate degrees cannot be applied toward the MPP degree, except for Senior Scholar students. Students approved as undergraduates at UCF to participate in the Senior Scholar program may, with the permission of the MPP Program Director, use up to 9 credit hours of graduate coursework taken as part of the bachelor's degree toward the MPP degree. However, no undergraduate-level courses will be accepted in the MPP program.

**Required Core Courses Prerequisites**

- PAD 6701 - Analytical Techniques for Public Administration - Prerequisite PAD 6700

**Additional Program Requirements**

Students must achieve a grade of "B-" (80%) or higher in every course listed under core requirements and in the Capstone Experience course.

Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

The School of Public Administration incorporates service-learning into some courses. Service-learning is a teaching method that provides a means for every student to enhance his or her academic program with experiential learning opportunities. Service-learning provides an opportunity for students to work with community partners by collecting and compiling data and producing quality products that will be beneficial to both students and organizations.

Students are expected to be computer literate and have computer internet access upon entry to the program.

**Independent Learning**

Independent learning is demonstrated throughout the curriculum through the process of inquiry, dialogue, and service-learning. Tangible projects, such as scholarly research, papers, internships, and the capstone experience also contribute to the self-development of MPP students. The research paper and Learning and Professional Development Portfolio in the Capstone Experience focus on creating, reviewing and analyzing contemporary issues in Public Policy.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Reading Education Graduate Certificate**

**College**

College of Community Innovation and Education

**Department**

School of Teacher Education

**Program Website**

https://ccie.ucf.edu/teached/k-12/reading-education/
Program Contact Information

Michelle Kelley EdD  
Professor  
michelle.kelley@ucf.edu  
Education Complex 315N

Is this program available 100% online?
No

Licensure Disclosure

The Graduate Certificate in Reading Education meets the Florida Department of Education Reading Endorsement requirements and prepares classroom teachers with an emphasis on evidence-based strategies for assessment and instruction of K-12 reading. The Reading Education Graduate Certificate program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Reading-Education-GC.pdf.

Program Description

The Graduate Certificate in Reading Education provides teachers with research-based strategies for teaching reading.

For the Reading Education certificate, students complete six required courses (18 credit hours total). Although there are no program course prerequisites, candidates who have had no previous children's or adolescent literature courses are strongly encouraged to take one course (LAE 5415 - Children's Literature in Elementary Education or LAE 5465 - Literature for Adolescents) prior to enrolling in the certificate program or at least prior to enrolling in RED 6846 - Reading Practicum.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Applicants must show proof of one of the following: Florida professional teaching certificate, Florida Department of Education Statement of Eligibility indicating that all requirements for professional (not temporary) certification have been met, completion of a state-approved initial teacher preparation program (undergraduate or graduate), or admission to a graduate-level state-approved preparation program.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

Mailing Address

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

Institution Codes

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

Degree Requirements

Required Courses  
18 Total Credits

- Complete the following:
  - RED5147 - Developmental Reading (3)
  - RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)
  - RED6845 - Advanced Evaluation and Instruction in Reading (3)
  - RED6846 - Reading Practicum (6)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

Grand Total Credits: 18

Program Details

*Online delivery course.

- RED 5147 - Developmental Reading **3 Credit Hours** *
- TSL 5085 - Teaching Language Minority Students in K-12 Classrooms **3 Credit Hours** *
Reading Education MEd

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/k-12/reading-education/

Program Handbook Link
Reading Education MEd

Program Contact Information
Michelle Kelley EdD
Professor
michelle.kelley@ucf.edu
Education Complex 315N

Is this program available 100% online?
Yes

UCF Online

Please note: Reading Education MEd may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

The College of Community Innovation and Education offers a Master of Education degree in Reading Education. The program prepares teachers for certification as specialized literacy professionals (e.g., literacy or instructional coach, reading expert, reading resource teacher, reading/language arts supervisor) in grades K-12 in public and private schools and other settings that provide literacy services. Based on evidence-based research, the curriculum includes assessment, intervention, and instruction in literacy. This includes the focus on content area and disciplinary literacy and leadership and coaching. There is considerable emphasis on practica with diverse learners from early childhood to adult levels. Professionals currently certified as Florida teachers are eligible to pursue a degree in the program. The Reading Education MEd program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Reading-Ed-MEd.pdf.

Program Description

The Master of Education in Reading Education program prepares teachers for certification as specialized literacy professionals (e.g., literacy or instructional coach, reading expert, reading resource teacher, reading/language arts supervisor) in grades K-12 in public and private schools and other setting that provide literacy services.

The Master of Education in Reading Education is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The Master of Education in Reading Education program requires a minimum of 30 credit hours beyond the bachelor's degree, including 9 credit hours of core courses, 15 credit hours of specialization courses, and 6 credit hours of a practicum. Students who do not currently hold a Florida ESOL Endorsement must select the specified Teaching English to Speakers of Other Languages course, TSL 5085, as a corequisite. All students must pass a final comprehensive exam, complete a portfolio according to program guidelines, and pass the Reading K-12 Subject Area Exam of the Florida Teacher Certification Examination.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Program Prerequisites
Possess or be fully eligible for a professional teaching certificate in one or more other teacher certification specializations in Florida.

The following courses meet state certification requirements or as support for the degree program. Choose one of the following from the clusters below, unless previously met in an undergraduate or similar course (substitutions will be approved by an advisor):

Children's Literature:
- LAE 5415 - Children's Literature in Elementary Education 3 Credit Hours
- LAE 5465 - Literature for Adolescents 3 Credit Hours

Language Arts Methods
- LAE 5319 - Methods of Elementary School Language Arts 3 Credit Hours
- LAE 5346 - Methods of Teaching English Language Arts 3 Credit Hours

Corequisite
Students who are not ESOL Endorsed must complete the following course:
- TSL 5085 - Teaching Language Minority Students in K-12 Classrooms 3 Credit Hours

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Core
9 Total Credits
- Complete the following:
  - EDF6432 - Measurement and Evaluation in Education (3)
  - RED5147 - Developmental Reading (3)
  - RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)

Specialization
15 Total Credits
- Complete the following:
  - RED6116 - Advanced Study in Foundations of Reading (3)
  - RED6336 - Teaching Content Area and Disciplinary Literacy (3)
  - RED6337 - Reading in the Secondary School (3)
  - RED6746 - Literacy Leadership and Coaching (3)
  - RED6845 - Advanced Evaluation and Instruction in Reading (3)

Practicum
6 Total Credits
- The MEd program requires a practicum experience. Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

Course
6 Total Credits
- Complete the following:
  - RED6846 - Reading Practicum (6)

Grand Total Credits: 30
Program Details

Additional Graduation Requirements

- All students must complete a comprehensive examination.
- Complete an electronic portfolio according to program guidelines. This portfolio requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices and Standards for Literacy Professionals.
- Pass Reading K-12 Subject Area Exam of the Florida Teacher Certification Examination.

Independent Learning

The MEd program also requires a practicum experience. Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Research Administration Graduate Certificate

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/

Program Contact Information

Angela White-Jones PhD
Program Director
Angela.White-Jones@ucf.edu
Telephone: 407-823-2604

Nasrin Lakhani, MNM
Director, Advising and Student Support Services
Nasrin@ucf.edu
Telephone: 407-823-0912

Is this program available 100% online?
Yes
UCF Online

Please note: Research Administration Graduate Certificate may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

This program is not available to international students who require majority of their classes to be in-person. Please visit http://global.ucf.edu/ for more information or call UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Research Administration is an 18-credit online certificate that provides an overview of the core concepts in research administration for those interested in management within research organizations. The Certificate is intended to meet the needs of individuals seeking a focused experience in order to prepare for or advance their careers in research management and leadership. It is appropriate for students who seek to expand their knowledge, but who do not wish to commit to a master's degree program.

Credit earned in the certificate program may be applied toward the Master of Research Administration (MRA) degree. However, admission to the MRA degree program has separate requirements from those of the certificate program. Students considering continuing into the master's degree should familiarize themselves with the credit transfer policy and consult with a faculty adviser early in their certificate program. The Graduate Certificate in Research Administration requires that students complete 18 credit hours of courses. Students must maintain at least a 3.0-grade point average in order to be awarded the Graduate Certificate. The certificate must be completed within seven years.

The Graduate Certificate in Research Administration requires 18 credit hours of online courses that provide an overview of the core concepts in research administration. Students take 12 credit hours of required courses and choose 6 credit hours of elective courses.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
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TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - PAD6742 - Introduction to Research Administration (3)
  - PAD6743 - Leadership and Organization Models in Research Administration (3)
  - PAD6747 - Audits in Research Administration (3)
  - PAD6741 - Research Integrity for Research Administrators (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - PAD6748 - Governance and Regulatory Issues for Sponsored Programs (3)
  - PAD6745 - Contracting for Sponsored Programs (3)
  - PAD6744 - Financial Management in Research Administration (3)
  - PAD6746 - Intellectual Property, Technology Transfer and Commercialization (3)

Grand Total Credits: 18

2022-2023 Graduate Catalog
Program Details

Students must achieve a grade of "B-" (80%) or better in every course. Grades 'C' or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Cost Per Credit Hour

For the Graduate Certificate in Research Administration, the cost per credit hour is $655.62.*

*Fee is subject to change

Research Administration MRA

College

College of Community Innovation and Education

Department

School of Public Administration

Program Website

https://ccie.ucf.edu/public-administration/research-administration/

Program Handbook Link

Research Administration MRA

Program Contact Information

Angela White-Jones PhD
Program Director
Angela.White-Jones@ucf.edu
Telephone: 407-823-2604

Nasrin Lakhani, MNM
Director, Advising and Student Support Services
Nasrin@ucf.edu
Telephone: 407-823-0912

Is this program available 100% online?

Yes

UCF Online

Please note: Master of Research Administration (MRA) may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

The Master in Research Administration provides the professional skills and management theories and techniques to prepare individuals to practice as highly trained and ethical research administrators. The completely online program builds a solid foundation in research administration and leadership that enables graduates to work in a variety of research organizations such as universities, hospitals and medical centers, industry, and research institutes and centers.

This program is a professional program and is considered a part-time program. For more information, please visit www.ce.ucf.edu/Program-Search/1381/Master-Of-Research-Administration/.

Graduates of the program will be able to: integrate the history and values of the profession into a professional identity; apply organizational development theories in leadership and human resource management; demonstrate knowledge of and compliance with the legal, ethical and regulatory framework that governs research; apply sound financial management concepts in proposal development and funded sponsored projects; negotiate and monitor sponsored contracts and subcontracts; write and evaluate grant proposals; apply the law in regards to intellectual property, technology transfer and commercialization; identify new areas for collaborative grant opportunities; and respond to financial and non-financial audits of research grants and contracts.

The Master in Research Administration program requires a minimum of 36 credit hours beyond the bachelor's degree. The program is offered completely online in a lock-step and cohort-based model. Students take two courses each semester and complete the degree program in two years (six semesters). In the final course students complete an evaluation project as a culminating activity that engages them in the application of theory, research policy, regulatory frameworks, ethics, and professional standards and practices within their area of focus.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

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Degree Requirements
Research Administration Concentration Core Courses
27 Total Credits

♦ Complete the following:
  - PAD6742 - Introduction to Research Administration (3)
  - PAD6748 - Governance and Regulatory Issues for Sponsored Programs (3)
  - PAD6743 - Leadership and Organization Models in Research Administration (3)
  - PAD6744 - Financial Management in Research Administration (3)
  - PAD6745 - Contracting for Sponsored Programs (3)
  - PAD6746 - Intellectual Property, Technology Transfer and Commercialization (3)
  - PAD6747 - Audits in Research Administration (3)
  - PAD6741 - Research Integrity for Research Administrators (3)
  - PAD6327 - Public Program Evaluation Techniques (3)

Additional Required Courses
9 Total Credits

♦ Complete the following:
  - PAD5850 - Grant and Contract Management (3)
  - PAD6417 - Human Resource Management (3)
  - PAD6335 - Strategic Planning and Management (3)

Grand Total Credits: 36
Program Details

Additional Program Requirements

- Students must achieve a grade of "B-" (80%) or higher in all Research Administration concentration courses.
- Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Cost Per Credit Hour

For the Master of Research Administration program, the cost per credit hour is $655.62.*

*Fee is subject to change

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry, dialogue and service learning. Tangible projects such as strategic plans, grant proposals, commercialization plans and case studies along with research projects, scholarly papers, internships, and presentations at professional conferences also contribute to the self development of our students.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

School Psychology EdS

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Program Website
https://ccie.ucf.edu/cesp/school-psychology/

Program Handbook Link
School Psychology EdS

Program Contact Information

Oliver W. Edwards PhD
Professor
oliver.edwards@ucf.edu
Telephone: 407-823-2401
Education 209H

Is this program available 100% online?
No
Licensure Disclosure

The School Psychology EdS program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-School-Psychology-EdS.pdf.

Program Description

The School Psychology EdS program is designed for students who wish to become certified School Psychologists. This specialist degree has a very specific curriculum to meet the respective licensing requirements for school psychologists.

The EdS in School Psychology is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The School Psychology Program is a unique specialization in psychology and education. This program is based on two assumptions. School psychologists can apply relevant knowledge and skills from a variety of disciplines to the learning and adjustment problems of preschool and school-age children. Also, relevant knowledge and skills can be transmitted through a variety of services including (a) consultation with teachers and parents, (b) direct and indirect services to children and young adults, and (c) direct and indirect services to school and community organizations. School psychologists may practice in public or private schools, colleges and universities, rehabilitation centers, hospitals, mental health clinics, government agencies, child guidance centers, penal institutions, and may develop private practices. Applicants with backgrounds in education, psychology or other closely related undergraduate majors may qualify for the School Psychology degree program.

The program involves formal preparation and practical experiences focusing on psychological foundations (human development, learning, and motivation), psychoeducational assessment, exceptional students, remediation or intervention techniques, counseling skills, as well as a full-time supervised internship of two semesters in the public school setting.

The School Psychology EdS degree requires a minimum of 74 credit hours beyond the bachelor’s degree, as well as a portfolio, practicum and research report at the completion of study. Please note that 62 credit hours are completed before internship. The research report and internship courses comprise 18 credit hours that are completed during the internship.

Total Credit Hours Required: 74 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

A baccalaureate degree in Education, Psychology, or related discipline.

Prerequisites or Co-requisites (DOE Certification)

- TSL 5085 - Teaching Language Minority Students in K-12 Classrooms 3 Credit Hours
- RED 5147 - Developmental Reading 3 Credit Hours
- EEX 6061 - Instructional Strategies Pre-K-6 3 Credit Hours
- EEX 6218 - Diagnostic Assessment and Intervention Planning in Exceptional Education 3 Credit Hours

College of Graduate Studies Contact Information

ggradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses
56 Total Credits

- Core
3 Total Credits
  - Complete the following:
    - EDF6401 - Statistics for Educational Data (3)

- Specialization
47 Total Credits
  - Complete the following:
    - SPS6601 - Introduction to Psychological Services in Schools (3)
    - SPS6606 - Consultation in School Psychology (3)
    - SPS6608 - Seminar in School Psychology (3)
    - SPS6801 - Developmental Bases of Diverse Behaviors (3)
    - SPS6225 - Behavioral and Observational Analysis of Classroom Interactions in Schools (3)
    - SPS5931 - Ethical and Legal Issues in School Psychological Services (3)
    - MHS6401 - Techniques of Counseling (3)
    - SPS6191 - Individual Psychoeducational Diagnosis I (4)
    - SPS6192 - Individual Psychoeducational Diagnosis II (4)
    - SPS6125 - Preschool Psychoeducational Assessment (3)
    - SPS6194 - Assessment of Special Needs (3)
    - SPS6206 - Psychoeducational Interventions (3)
    - SPS6700 - Advanced Psychoeducation and Data-Based Decision Making (3)
    - SPS605 - Building and Improving Relationship and Emotional Intelligence (3)
    - SPS6175 - Cultural Diversity and Nonbiased Assessment (3)

Research Report
6 Total Credits
  - Complete 1 of the following
    - Earn at least 6 credits from the following:
      - SPS6909 - Research Report (1 - 99)
    - Complete the following:
      - SPS6402 - Applied Prevention and Intervention in Schools I (3)
      - SPS6403 - Applied Prevention and Intervention in Schools II (3)

Practicum and Internship
18 Total Credits
  - Complete all of the following
    - Earn at least 6 credits from the following:
      - SPS6946L - Practicum in School Psychology (3)
    - Earn at least 12 credits from the following:
      - SPS6948 - School Psychology Internship (6)

Grand Total Credits: 74

Program Details

With the exception of SPS 5605 - Building and Improving Relationship and Emotional Intelligence, and SPS 6700 - Advanced Psychoeducation and Data-Based Decision Making, SPS courses are only open to students in the School Psychology Program.

Additional Program Requirements

- Complete an electronic portfolio that documents reflections on study and learning experiences throughout the program and receive approval by the School Psychology faculty.
- Pass a comprehensive exam.
- Pass the Florida Teacher Certification Examination (FTCE).

Equipment Fee

Students in the School Psychology EdS program pay a $90 equipment fee each semester that they are enrolled. A materials fee of $45 is charged for each of four assessment courses.

Independent Learning

A practicum and research report are required as the culminating independent learning experience.
Financial Information

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UCF Student Financial Assistance
Millican Hall 120
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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Secondary Education MEd

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
Program Contact Information

Janet Andreasen PhD
Senior Lecturer
janet.andreasen@ucf.edu
ED 123H

Elsie Olan PhD
Associate Professor
elsie.olan@ucf.edu
Telephone: 407-823-5179
Education 223 N

Su Gao PhD
Associate Professor
su.gao@ucf.edu
Telephone: 407-823-4834
ED 115 F

Scott Waring PhD
Professor
socsci@ucf.edu
ED 206J

Michele Regalla, PhD
Associate Professor
Michele.Regalla@ucf.edu
Telephone: 407-823-5791

Is this program available 100% online?
No

Program Description

The Master of Education (MEd) program in Secondary Education is designed for professionally certified and experienced educators who want to improve their knowledge and skills in teaching students and colleagues in their content area. Students engage in action research within the walls of their classroom.

Coursework includes secondary education courses as well as content-specific courses in each track.

This degree does not prepare students for initial, administrative, or supervisory certification.

This degree has 5 tracks: English Language Arts Education Track, Mathematics Education Track, Science Education Track, Social Science Education Track, and World Languages Education Track. Please scroll to the bottom of this page for further details on these Tracks.
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**  
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**  
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Program Details**

**Independent Learning**

The MEd requires a course-based action research study and completion of a culminating experience.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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**Grad Fellowships**  
Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

---

**Secondary Education MEd - Secondary Education MEd, English Language Arts Education Track**

**Track Website**


**Track Contact Information**

**Elsie Olan PhD**  
Associate Professor  
elsie.olan@ucf.edu  
Telephone: 407-823-5179  
Education 223 N

**Online Availability**

No
**Track Description**

The English Language Arts Education track in the Secondary Education MEd program is designed to meet the advanced knowledge and skill needs of the English classroom teacher.

The English Language Arts Education track in the Master of Education (MEd) in Secondary Education program requires 21 credit hours of core courses, including completion of a capstone research project or thesis. In addition, students take 12 credit hours of specialization courses.

**Total Credit Hours Required: 33-36 Credit Hours Minimum beyond the Bachelor’s Degree**

**Track Prerequisites**

Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

**College of Graduate Studies Contact Information**

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Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
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ETS PPI: 5233
**Degree Requirements**

**Required Courses**
33 - 36 Total Credits

- EDS 5356 - Mentoring and Clinical Supervision of Pre-professional Educators must be taken in first semester of the program.

**Core**
15 Total Credits

- Complete the following:
  - EDS 5356 - Mentoring and Clinical Supervision of Pre-professional Educators (3)
  - ESE 5344 - Managing the Secondary Classroom (3)
  - ESE 6036 - Contemporary Issues in Secondary Education (3)
  - EME 6053 - Teaching and Learning with Emerging Technologies (3)
  - LAE 5496 - Disciplinary Literacy in the Content Areas (3)

**Culminating Experience**
6 - 9 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF 6472 - Data-Driven Decision-Making for Instruction (3)
  - Complete 1 of the following
    - ESE 6427 - Capstone: Action Research in Secondary Education (3)
    - Earn at least 6 credits from the following types of courses:
      - LAE, MAE, SCE, or SSE 6971 Thesis

**Specialization:**
12 Total Credits

- Earn at least 12 credits from the following:
  - LAE 6637 - Research in Teaching English (3)
  - LAE 5295 - Writing Workshop (1 - 3)
  - LAE 5369 - Literacy Strategies in a Digital Age for Middle and High School (3)
  - LAE 5495 - Assessing Writing (3)
  - LAE 6296 - Advanced Writing Workshop (1 - 3)
  - LAE 6366 - Advanced Studies in Adolescent Literature (3)

**Grand Total Credits:** 33 - 36

**Track Details**

**Independent Learning**

The MEd requires a course-based action research study and completion of a capstone experience (research report or thesis).

**Financial Information**

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**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

2022-2023 Graduate Catalog
Secondary Education MEd - Secondary Education MEd, Mathematics Education Track

Track Website
https://ccie.ucf.edu/teachered/secondaryed/

Track Contact Information
Janet Andreasen PhD
Senior Lecturer
ED 123H
janet.andreasen@ucf.edu

Online Availability
No

Track Description
The Mathematics Education track in the Secondary Education MEd program is designed to meet the advanced knowledge and skill needs of the classroom teacher of mathematics.

The Mathematics Education track in the Secondary Education MEd program requires 21 credit hours of core courses, including completion of a capstone research project or thesis. In addition, students take 12 credit hours of specialization courses.

Total Credit Hours Required: 33-36 Credit Hours Minimum beyond the Bachelor’s Degree

Track Prerequisites
Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

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Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
33 - 36 Total Credits
- EDS 5356 - Mentoring and Clinical Supervision of Pre-professional Educators must be taken in first semester of the program.

**Core**
15 Total Credits
- Complete the following:
  - EDS5356 - Mentoring and Clinical Supervision of Pre-professional Educators (3)
  - ESE5344 - Managing the Secondary Classroom (3)
  - ESE6036 - Contemporary Issues in Secondary Education (3)
  - EME6053 - Teaching and Learning with Emerging Technologies (3)
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)

**Culminating Experience**
6 - 9 Total Credits
- Complete all of the following
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
- Complete 1 of the following
  - ESE6427 - Capstone: Action Research in Secondary Education (3)
- Earn at least 6 credits from the following types of courses:
  - LAE, MAE, SCE, or SSE 6971 Thesis

**Specialization**
12 Total Credits
- Complete all of the following
  - Complete the following:
    - MAE6337 - Teaching Algebra in the Secondary School (3)
    - MAE6338 - Teaching Geometry in the Secondary School (3)
- Complete at least 2 of the following:
  - MAE6517 - Diagnosis/Remediation of Difficulties in Mathematics for the Classroom Teacher (3)
  - MAE6641 - Problem Solving and Critical Thinking Skills (3)
  - MAE6656 - Using Technology in the Instruction of K-12 Mathematics (3)
  - MAE6899 - Seminar in Teaching Mathematics (3)
  - IDS6516 - Leadership Development for Mathematics and Science Teachers (3)
  - IDS6910 - Research in Mathematics and Science Education (3)
  - IDS6937 - Teaching Mathematics and Science Using Reform-Based Practices (3)
  - IDS6939 - Reforming Curriculum in Mathematics and Science Education (3)

Grand Total Credits: **33 - 36**

**Track Details**

**Independent Learning**
The MEd requires a course-based action research study and completion of a capstone experience (research report or thesis).

**Financial Information**
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2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
Phone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Secondary Education MEd - Secondary Education MEd, Science Education Track

Track Website

Track Contact Information

Su Gao PhD
Associate Professor
su.gao@ucf.edu
Phone: 407-823-4834
ED 115 F

Online Availability
No

Track Description

The Science Education track in the Secondary Education MEd program is designed to meet the advanced knowledge and skill needs of certified secondary science teachers, enabling them to expand their subject matter knowledge and professional teaching skills.

The Science Education track in the Secondary Education MEd program requires 21 credit hours of core courses, including completion of a capstone research project or thesis. In addition, students take 12 credit hours of specialization courses.

Total Credit Hours Required: 33-36 Credit Hours Minimum beyond the Bachelor’s Degree

Track Prerequisites

Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Phone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
33 - 36 Total Credits

- EDS 5356 - Mentoring and Clinical Supervision of Pre-professional Educators must be taken in first semester of the program.

Courses
15 Total Credits

- Complete the following:
  - EDS5356 - Mentoring and Clinical Supervision of Pre-professional Educators (3)
  - ESE5344 - Managing the Secondary Classroom (3)
  - ESE6036 - Contemporary Issues in Secondary Education (3)
  - EME6053 - Teaching and Learning with Emerging Technologies (3)
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)

Culminating Experience
6 - 9 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - Complete 1 of the following
    - Complete the following:
      - ESE6427 - Capstone: Action Research in Secondary Education (3)
  - Earn at least 6 credits from the following types of courses:
    - LAE, MAE, SCE, or SSE 6971 Thesis

Specialization
12 Total Credits

- Complete all of the following
  - Complete at least 2 of the following:
    - SCE5836 - Space and Physical Science for Educators (3)
    - ISC6146 - Environmental Education for Educators (3)
    - IDS6516 - Leadership Development for Mathematics and Science Teachers (3)
    - IDS6937 - Teaching Mathematics and Science Using Reform-Based Practices (3)
    - IDS6939 - Reforming Curriculum in Mathematics and Science Education (3)

Science Content Areas
- Earn at least 6 credits from the following types of courses:
  - Biology Focus HUN 5247 - Principles of Human Nutrition 3 Credit Hours IDS 5127 - Foundation of Bio-Imaging Science 3 Credit Hours BCH 6740 - Advanced Biochemistry 3 Credit Hours Any graduate-level course with prefix BSC, HSC, MCB, PCB, or ZOO Chemistry Focus BCH 6740 - Advanced Biochemistry 3 Credit Hours HUN 5247 - Principles of Human Nutrition 3 Credit Hours Any graduate-level course with prefix CHM or CHS Physics Focus Any graduate-level course with prefixes AST, OSE, PHY, or PHZ

Grand Total Credits: 33 - 36

Track Details

The Independent Learning

The MEd requires a course-based action research study and completion of a capstone experience (research report or thesis).

Financial Information

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Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Secondary Education MEd - Secondary Education MEd, Social Science Education Track

Track Website

Track Contact Information

Scott Waring PhD
Professor
socscied@ucf.edu
ED 206J

Online Availability

No

Track Description

The Social Science Education track in the Secondary Education MEd program is designed to meet the advanced knowledge and skill needs of the Social Science classroom teacher.

The Social Science Education track in the Secondary Education MEd program requires 21 credit hours of core courses, including completion of a capstone research project or thesis. In addition, students take 12 credit hours of specialization courses.

Total Credit Hours Required: 33-36 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

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gradadmissions@ucf.edu
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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
33 - 36 Total Credits
- EDS 5356 - Mentoring and Clinical Supervision of Pre-professional Educators must be taken in first semester of the program.

**Core**
15 Total Credits
- Complete the following:
  - EDS5356 - Mentoring and Clinical Supervision of Pre-professional Educators (3)
  - ESE5344 - Managing the Secondary Classroom (3)
  - ESE6036 - Contemporary Issues in Secondary Education (3)
  - EME6053 - Teaching and Learning with Emerging Technologies (3)
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)

**Culminating Experience**
6 - 9 Total Credits
- Complete all of the following
  - EDF6472 - Data-Driven Decision-Making for Instruction (3)
- Complete 1 of the following
  - ESE6427 - Capstone: Action Research in Secondary Education (3)
- Earn at least 6 credits from the following types of courses:
  - LAE, MAE, SCE, or SSE 6971 Thesis

**Specialization**
12 Total Credits
- Complete at least 4 of the following:
  - SSE5391 - Global Education: Theory and Practice (3)
  - SSE5776 - Democracy and Education (3)
  - SSE6348 - Foundations and Fundamentals of Teaching History in the K-12 Classroom (3)
  - SSE6388 - Digital History in the K-12 Classroom (3)
  - SSE6387 - Teaching with Film (3)
  - SSE6396 - Teaching with Primary Sources in the History Classroom (3)
  - SSE6636 - Contemporary Social Science Education (3)

Grand Total Credits: **33 - 36**

**Track Details**

**Independent Learning**
The MEd requires a course-based action research study and completion of a capstone experience (research report or thesis).

**Financial Information**
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**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

2022-2023 Graduate Catalog
Secondary Education MEd - Secondary Education MEd, World Languages Education Track

Track Website

Track Contact Information
Michele Regalla PhD
Associate Professor
Michele.Regalla@ucf.edu
Telephone: 407-823-5791

Online Availability
No

Track Description
The World Languages Education track in the Secondary Education MEd program is designed to meet the advanced knowledge and skill needs of the world languages and/or dual language classroom teacher.

The World Languages Education track in the Master of Education (MEd) in Secondary Education program requires 21 credit hours of core courses, including completion of a capstone research project or thesis. In addition, students take 12 credit hours of specialization courses.

Total Credit Hours Required: 33-36 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites
Evidence of eligibility for a professional teaching certificate in Florida in related area and/or sustained teaching experience within schools/colleges (approved by track coordinator).

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gradadmissions@ucf.edu
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ETS PPI: 5233
Degree Requirements

Required Courses
33 - 36 Total Credits

- EDS 5356 - Mentoring and Clinical Supervision of Pre-professional Educators must be taken in first semester of the program.

Core
15 Total Credits

- Complete the following:
  - EDS5356 - Mentoring and Clinical Supervision of Pre-professional Educators (3)
  - ESE5344 - Managing the Secondary Classroom (3)
  - ESE6036 - Contemporary Issues in Secondary Education (3)
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)
  - EME6053 - Teaching and Learning with Emerging Technologies (3)

Culminating Experience
6 - 9 Total Credits

- Complete all of the following
  - Complete the following:
    - EDF6472 - Data-Driven Decision-Making for Instruction (3)
  - Complete 1 of the following
    - Complete the following:
      - ESE6427 - Capstone: Action Research in Secondary Education (3)
      - Earn at least 6 credits from the following types of courses:
        - LAE, MAE, SCE, or SSE 6971 Thesis

Specialization
12 Total Credits

- Complete all of the following
  - Complete the following:
    - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
    - TSL6250 - Applied Linguistics in ESOL (3)
  - Complete at least 1 of the following:
    - FLE5345 - Teaching World Languages in K-12 Schools (3)
    - TSL5345 - Methods of ESOL Teaching (3)
  - Complete at least 1 of the following:
    - Course Not Found
    - TSL5525 - ESOL Cultural Diversity (3)
    - TSL6379 - Second Language Literacy (3)
    - TSL6143 - Curriculum and Instruction in Dual Language Programs (3)
    - TSL6377 - Bilingualism, Multiculturalism, and Biliteracy in the Dual Language Classroom (3)
    - TSL6443 - Assessment in Dual Language Programs (3)

Grand Total Credits: 33 - 36

Track Details

Independent Learning
The MEd requires a course-based action research study and completion of a capstone experience (research report or thesis).

Financial Information
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http://finaid.ucf.edu
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student’s graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Social Justice in Public Service Graduate Certificate

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/socialjustice

Program Contact Information

Staci Zavattaro PhD
Professor
Staci.Zavattaro@ucf.edu

Nasrin Lakhani
Director, Advising and Student Support Services
nasrin.lakhani@ucf.edu

Is this program available 100% online?
No

Program Description

The Social Justice in Public Service graduate certificate seeks to develop leaders who can understand how public policies influence social justice. Students will obtain a background in social justice, exploring topics such as human rights, income distribution and the role of markets. Students will understand factors that contribute to inequity among various groups, with a focus on providing theories and methods to analyze social justice issues in public service. They will understand principles of social justice as they apply to government and nonprofit sector in education, health, transportation.

Graduate Certificate in Social Justice in Public Administration consists of 15 credit hours. Each student will complete 6 credit hours of core courses and 9 credit hours of restricted electives.

This certificate is primarily a face-to-face program but students will be able to select electives from the list of restricted electives that may be offered on-line. Classes are offered at UCF Downtown campus in the evenings.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor’s Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Core
6 Total Credits

- Complete the following:
  - PAD5185 - Foundations of Social Justice for Public Service (3)
  - PAD5186 - Policy Advocacy for Social Justice (3)

Restricted Electives
9 Total Credits

- Complete at least 3 of the following:
  - EDF6886 - Multicultural Education (3)
  - INR6067 - Human Rights and Security (3)
  - INR6062 - Peace Studies (3)
  - INR6356 - Environmental Security (3)
  - PAD5356 - Managing Community and Economic Development (3)
  - PAD5930 - Global Cities (3)
  - PAD6357 - Urban Resilience (3)
  - PAD6825 - Cross-Sectoral Governance (3)
  - SYO6409 - Social Inequalities in Health (3)
  - SYO6404 - Food Insecurity and Health (3)

Grand Total Credits: 15

Program Details

Students must achieve a grade of "B-" (80%) or better in every course. Grades 'C' or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

The School of Public Administration incorporates service learning into some courses. Service learning is a teaching method that provides a means for every student to enhance his or her academic program with experiential learning opportunities. Service learning provides an opportunity for students to work with community partners by collecting and compiling data and producing quality products that will be beneficial to both students and organizations.

Students are expected to be computer literate and have computer internet access upon entry to the program.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Tangible projects, such as research scholarly papers and internships also contribute to the self-development of students.

Social Science Education Graduate Certificate

College

College of Community Innovation and Education

2022-2023 Graduate Catalog
Is this program available 100% online?

No

Program Description

The Social Science Education Graduate Certificate is for teachers who instruct students in social science content in grade levels K-12.

The program is designed to improve the quality of teaching and learning in social science classrooms. Graduates of the K-12 Social Science program form a strong infrastructure of teachers focusing on long-term impact in schools while helping students succeed in learning social science content. The focus of the K-12 Social Science Education Graduate Certificate is to provide all graduates with exceptional pedagogical and subject matter knowledge and skills by focusing on research-based, state-of-the-art best practices in social science education.

Other K-12 Social Science Education Programs

A Master of Education in K-12 Social Science Education is available. Students who successfully complete the graduate certificate may transfer credits from the Social Science Education Graduate Certificate into the MEd program, if they meet the acceptance criteria and are admitted into the MEd in Social Science Education program. In addition, the K-12 Social Science Education master’s program is closely allied with the Education PhD, Social Science Education Track. Graduates of the Social Science Education master’s program have been very successful in completing advanced graduate degrees.

The graduate certificate in Social Science Education includes four required courses chosen from the list of approved courses.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree
Degree Requirements

Required Courses
12 Total Credits

- Complete at least 4 of the following:
  - EDS5356 - Mentoring and Clinical Supervision of Pre-professional Educators (3)
  - SSE5391 - Global Education: Theory and Practice (3)
  - SSE5776 - Democracy and Education (3)
  - SSE5790 - Inquiry and Instructional Analysis in Social Science Education (3)
  - SSE6115 - Methods in Elementary School Social Science (3)
  - SSE6348 - Foundations and Fundamentals of Teaching History in the K-12 Classroom (3)
  - SSE6387 - Teaching with Film (3)
  - SSE6388 - Digital History in the K-12 Classroom (3)
  - SSE6396 - Teaching with Primary Sources in the History Classroom (3)
  - SSE6636 - Contemporary Social Science Education (3)

Grand Total Credits: 12

Special Education Graduate Certificate

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/exceptional-student-education/

Program Contact Information
Mary Little PhD
Professor
mary.little@ucf.edu
Telephone: 407-823-3275
ED 315J

Is this program available 100% online?
Yes

UCF Online

Please note: Special Education Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

The Special Education Graduate Certificate program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Special-Education-GC.pdf.

Program Description

The Graduate Certificate in Special Education provides out-of-field teachers and students with some of the coursework needed to meet state certification requirements in special education.

The Special Education certificate will help out-of-field teachers become more effective in their classrooms and will enhance the delivery of education to children and youth with disabilities.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

Required Courses  
18 Total Credits

- Complete the following:
  - EEX5051 - Exceptional Children in the Schools (3)  
  - EEX6061 - Instructional Strategies Pre-K-6 (3)  
  - EEX6065 - Programming for Students with Disabilities at the Secondary Level (3)  
  - EEX6107 - Teaching Spoken and Written Language (3)  
  - EEX6295 - Assessment and Curriculum Prescriptions for the Exceptional Population (3)  
  - EEX6612 - Methods of Behavioral Management (3)

Grand Total Credits: **18**

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**Student Athlete Support Services Graduate Certificate**

**College**

College of Community Innovation and Education

**Department**

Department of Educational Leadership & Higher Education

**Program Website**

https://ccie.ucf.edu/elhe/

**Program Contact Information**

Thomas Cox EdD  
thomas.cox@ucf.edu  
ED 315Q

**Is this program available 100% online?**

No

**Program Description**

This certificate is designed to assist entry level and current professionals to better perform associated duties in the various athletic academic content areas. Emphasis is on the development and expansion of student-athlete services to enhance academic success, leadership skills, administration of athletics in universities, and student development as an integral part of the student-athlete experience. Additionally, it is designed to expand their knowledge of topics relevant to student athletics including student development theory, organization and administration, athletics in American universities, and academic success in the student athlete. Those enrolled in the program must complete a practical internship. The program also provides a benefit to practicing athletic advisors and administrators and faculty interested in becoming more knowledgeable in these areas.

**Total Credit Hours Required: 16 Credit Hours Minimum beyond the Bachelor's Degree**
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
15 Total Credits

- Complete the following:
  - EDH6047 - Theories of College Student Development (3)
  - EDH6407 - Ethical and Legal Issues in Student Personnel (3)
  - EDH6635 - Organization and Administration of Higher Education (3)
  - EDH6655 - Athletics in the American University (3)
  - EDH6656 - Academic Success and the Student Athlete (3)

Internship
1 Total Credits

- Earn at least 1 credits from the following types of courses:
  - EDH 6946 - Internship Students will complete a 1 credit hour internship (15-20 hours) in an athlete services office or position approved by the faculty advisor.

Grand Total Credits: **16**

Supporting High Needs Populations Graduate Certificate

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Program Website
https://ccie.ucf.edu/lser/

Program Contact Information
Martha Lue-Stewart PhD
Professor
martha.stewart@ucf.edu
Telephone: 407-823-2036
ED 315S

Is this program available 100% online?
No
Program Description

Admission to this program has been suspended effective Fall 2022.

The Graduate Certificate in Supporting High Needs Populations offers additional education and training to the educational professional who works in urban settings.

The program is comprised of two graduate courses that address critical issues associated with life in urban schools and two graduate-level specialization electives tailored to personal areas of concentration.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor’s Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

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GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - EDF6725 - Critical Issues in the Study of High Needs Populations (3)
  - EDG6636 - Impact of Social Contexts on Teaching and Learning (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - EDF6155 - Lifespan Human Development and Learning (3)
  - EDF6886 - Multicultural Education (3)
  - EEX5051 - Exceptional Children in the Schools (3)
  - EEX6065 - Programming for Students with Disabilities at the Secondary Level (3)
  - EEX6342 - Seminar-Critical Issues in Special Education (3)
  - EGI6246 - Education of Special Populations of Gifted Students (3)
  - RED5147 - Developmental Reading (3)

Grand Total Credits: 12

Teacher Education MAT

College

College of Community Innovation and Education

Department

School of Teacher Education

Program Website

https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

Program Handbook Link

Teacher Education MAT
Program Contact Information

Janet Andreasen PhD
Senior Lecturer
janet.andreasen@ucf.edu
ED 123-H

Debra McGann EdD
Associate Lecturer
debra.mcgann@ucf.edu
ED 122C

Elsie Olan PhD
Associate Professor
elsie.olan@ucf.edu
Telephone: 407-823-5179
Education 223 N

Enrique Ortiz PhD
Professor
enrique.ortiz@ucf.edu
Telephone: 407-823-5222
Education 123G

Su Gao PhD
Associate Professor
su.gao@ucf.edu
Telephone: 407-823-4834
ED 115 F

Scott Waring PhD
Professor
socscied@ucf.edu
ED 206J

William Russell PhD
Professor
russell@ucf.edu
Telephone: 407-823-4345
Education 115J

Licensure Disclosure

This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/licensure-programs/.

Program Description

The Master of Arts in Teaching graduate program was created to allow individuals who are not certified to teach to become effective, certified teachers of secondary content areas.

The MAT program offers tracks in 10 secondary content areas: Art Education, English Education, Mathematics Education, Middle School Mathematics Education, Science Education-Biology, Science Education-Chemistry, Science Education-Physics, Science Education-Middle School, Social Science Education, and World Languages Education. Please scroll to the bottom of this page for further details on these Tracks. Graduation from this state-approved MAT includes the successful completion of a 6-hour internship, submission of a comprehensive portfolio, and passing scores on all sections of the Florida Teacher Certification Examination. The Master of Arts in Teaching admits in summer and fall terms only.

Students in the Mathematics Education and Science Education tracks may be eligible for Teacher Education Assistance for College and Higher Education (TEACH) grant. Please see education.ucf.edu/teach_grad.cfm for more information.
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**  
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**  
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Financial Information**

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**UCF Student Financial Assistance**  
Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**Grad Fellowships**  
Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Teacher Education MAT - Teacher Education MAT, Art Education Track**

**Track Website**

https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

**Track Handbook**

Teacher Education MAT

**Track Contact Information**

Debra McGann EdD  
Associate Lecturer  
debra.mcgann@ucf.edu  
ED 122C

**Online Availability**

Yes

**Licensure Disclosure**

The Teacher Education MAT, Art Education Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.
Track Description

The Teacher Education MAT, Art Education program is a state-approved initial teacher preparation program for students seeking certification to teach Art in grades K-12, including students previously certified to teach in another field.

The Master of Arts in Teaching is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The Teacher Education MAT, Art Education requires a minimum of 37 credit hours beyond the bachelor's degree. The program is a K-12 program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See http://ccie.ucf.edu/explore-via/

Total Credit Hours Required: 37 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
28 Total Credits
- EDG 6415 and TSL 5085 must be taken prior to internship.

Core
12 Total Credits
- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

Specialization
16 Total Credits
- Complete the following:
  - RED5147 - Developmental Reading (3)
  - ARE5359 - Teaching Art K-12 (4)
  - ARE6905 - Research Trends in Art Education (3)
  - ARE6251 - Art for Exceptionalities (3)
  - ARE6195 - Teaching Art Appreciation with Interdisciplinary Strategies (3)

Internship
6 Total Credits
- Earn at least 6 credits from the following types of courses:
  - ARE 6946 - Graduate Internship (6 Credit Hours taken over two semesters**)
  - The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. The two-semester internship must be completed over one academic year. One-semester traditional internships must be completed in spring. Students should ensure that they meet all requirements for Graduate Internship. - Complete EDG 6415 and TSL 5085.
  - Overall graduate GPA must be 3.0 or higher.
  - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship.
  - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at http://www.education.ucf.edu/clinicalexp/.
  - Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

Culminating Experience
3 Total Credits
- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

Grand Total Credits: **37**

Track Details

Additional Program Requirements
- Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Pass all required sections of the Florida Teacher Certification Examination.
- Students are recommended to have 30 credit hours of art course work to be prepared to take the subject area exam in Art for grades K-12. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

Equipment Fee
Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

Independent Learning
The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.

2022-2023 Graduate Catalog
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Teacher Education MAT - Teacher Education MAT, English Language Arts Education with ESOL and Reading Endorsement Track

Track Website
https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

Track Contact Information

Elsie Olan PhD
Associate Professor
elsie.olan@ucf.edu
Telephone: 407-823-5179
Education 223 N

Online Availability
No

Licensure Disclosure

The Teacher Education MAT, English Language Arts Education with ESOL Endorsement Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.
**Track Description**

The Teacher Education MAT, English Language Arts Education with ESOL and Reading Endorsement program is a state-approved initial teacher preparation program for students seeking certification to teach English in grades 6-12, including students previously certified to teach in another field.

**The Master of Arts in Teaching is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066).** Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The Teacher Education MAT, English Language Arts Education with ESOL and Reading Endorsement program requires a minimum of 48 credit hours beyond the bachelor's degree that includes ESOL and Reading endorsement. The program is a secondary (grades 6-12) program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All key assignments are critical components of learning since they are the primary means of assessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See [http://ccie.ucf.edu/explore-via/](http://ccie.ucf.edu/explore-via/)

**Total Credit Hours Required: 48 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233
Degree Requirements

Required Courses
39 Total Credits
No Rules
Core (Must be taken prior to internship)
12 Total Credits

- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)

Specialization
27 Total Credits

- Complete all of the following
  - Complete the following:
    - LAE6637 - Research in Teaching English (3)
    - LAE5338 - Teaching Writing in Middle and High School (3)
    - LAE5346 - Methods of Teaching English Language Arts (3)
    - LAE5465 - Literature for Adolescents (3)
    - TSL6250 - Applied Linguistics in ESOL (3)
  - Complete the following:
    - RED5147 - Developmental Reading (3)
    - RED5517 - Classroom Diagnosis and Development of Reading Proficiencies (3)
    - RED5948 - Practicum in Reading Assessment and Instruction (3)
  - Complete at least 1 of the following:
    - ESE6036 - Contemporary Issues in Secondary Education (3)
    - ESE5344 - Managing the Secondary Classroom (3)

Internship
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  LAE 6946 - Graduate Internship (6 Credit Hours taken over two semesters***) ***The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. On the job internships must be completed over one academic year. Traditional 6-credit Internships are completed in spring semester only. Students should ensure that they meet all requirements for Graduate Internship. Complete EDG 6415 and TSL 5085 prior to first semester internship. Overall graduate GPA must be 3.0 or higher. Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship. Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical and Field Experiences at http://www.education.ucf.edu/clinicalexp/- Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

Culminating Experience
3 Total Credits

- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

Grand Total Credits: 48
Track Details

Additional Program Requirements

- Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Students are recommended to have 30 credit hours of English course work to be prepared to take the subject area exam in English for grades 6-12. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.
- Pass all applicable sections of the Florida Teacher Certification Examination.

Equipment Fee

Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

Independent Learning

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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Telephone: 407-823-2827
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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Teacher Education MAT - Teacher Education MAT, Mathematics Education Track

Track Website

https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

Track Handbook

Teacher Education MAT

Track Contact Information

Janet Andreasen PhD
Senior Lecturer
janet.andreasen@ucf.edu
ED 123H

Online Availability

No
Licensure Disclosure

The Teacher Education MAT, Mathematics Education program is a state-approved initial teacher preparation program for students seeking certification to teach Mathematics in grades 6-12, including students previously certified to teach in another field. The Teacher Education MAT, Mathematics Education Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.

Track Description

The Teacher Education MAT, Mathematics Education program is a state-approved initial teacher preparation program for students seeking certification to teach Mathematics in grades 6-12, including students previously certified to teach in another field. A track is also available for Middle School Mathematics (grades 5-9).

The Master of Arts in Teaching is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

Students in the Mathematics Education and Science Education tracks may be eligible for Teacher Education Assistance for College and Higher Education (TEACH) grant. Please see education.ucf.edu/teach_grad.cfm for more information.

The Teacher Education MAT, Mathematics Education program requires a minimum of 39 credit hours beyond the bachelor's degree. The program is a secondary (grades 6-12) program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See http://ccie.ucf.edu/explore-via/

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
18 Total Credits

- **Details**

**Core (Must be taken prior to internship)**
12 Total Credits

- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)

**Methods**
6 Total Credits

- Complete the following:
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)
  - MAE5336 - Current Methods in Secondary School Mathematics (3)

**Elective Courses**
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ESE5344 - Managing the Secondary Classroom (3)
    - ESE6036 - Contemporary Issues in Secondary Education (3)
  - Complete at least 2 of the following:
    - MAE6337 - Teaching Algebra in the Secondary School (3)
    - MAE6338 - Teaching Geometry in the Secondary School (3)
    - MAE6656 - Using Technology in the Instruction of K-12 Mathematics (3)
    - MAE6641 - Problem Solving and Critical Thinking Skills (3)

**Internship**
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - MAE 6946 - Graduate Internship (6 Credit Hours taken over two semesters)***) ***The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. On the job internships must be completed over one academic year. Traditional 6-credit internships are completed in spring semester only. Students should ensure that they meet all requirements for Graduate Internship. - Complete EDG 6415 and TSL 5085 prior to first semester of internship. - Overall graduate GPA must be 3.0 or higher. - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship. - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical and Field Experiences at http://www.education.ucf.edu/clinicalexp/ Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

**Culminating Experience (taken in the final internship semester)**
3 Total Credits

- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

Grand Total Credits: 39
**Track Details**

**Additional Program Requirements**

- Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Pass all required sections of the Florida Teacher Certification Examination.
- Students are recommended to have 30 credit hours of mathematics course work to be prepared to take the subject area examination in mathematics grades 6-12. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

**Equipment Fee**

Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

**Independent Learning**

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

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Teacher Education MAT - Teacher Education MAT, Middle School Mathematics Education Track

**Track Website**

https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

**Track Handbook**

Teacher Education MAT

**Track Contact Information**

**Enrique Ortiz EdD**  
Professor  
enrique.ortiz@ucf.edu  
Telephone: 407-823-5222  
Education 123G

**Online Availability**

No
Licensure Disclosure

The Teacher Education MAT, Middle School Mathematics Education Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.

Track Description

The Teacher Education MAT, Middle School Mathematics Education program is a state-approved initial teacher preparation program for students seeking certification to teach mathematics in grades 5-9, including students previously certified to teach in another field.

The Master of Arts in Teaching is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The Teacher Education MAT, Middle School Mathematics Education is a state-approved initial teacher preparation program for students seeking certification to teach mathematics in grades 5-9, including students previously certified to teach in another field.

Students in the Mathematics Education and Science Education tracks may be eligible for Teacher Education Assistance for College and Higher Education (TEACH) grant. Please see https://ccie.ucf.edu/teachered/teach-grad/ for more information.

The Teacher Education MAT, Middle School Mathematics Education program requires a minimum of 39 credit hours beyond the bachelor’s degree. The program is a secondary (grades 5-9) program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See https://ccie.ucf.edu/explore-via/.

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor’s Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
18 Total Credits

- EDG 6415 and TSL 5085 must be taken prior to internship.

**Core Courses**
12 Total Credits

- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

**Methods Courses**
6 Total Credits

- Complete the following:
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)
  - MAE5327 - Teaching Middle School Mathematics (3)

**Elective Courses**
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ESE6036 - Contemporary Issues in Secondary Education (3)
    - ESE5344 - Managing the Secondary Classroom (3)
  - Complete at least 2 of the following:
    - MAE6337 - Teaching Algebra in the Secondary School (3)
    - MAE6338 - Teaching Geometry in the Secondary School (3)
    - MAE6641 - Problem Solving and Critical Thinking Skills (3)
    - MAE6656 - Using Technology in the Instruction of K-12 Mathematics (3)

**Internship**
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - MAE 6946 - Graduate Internship (6 Credit Hours taken over two semesters. The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. The two-semester internship must be completed over one academic year. One-semester traditional internships must be completed in spring. Students should ensure that they meet all requirements for Graduate Internship. - Complete EDG 6415 and TSL 5085 before first semester of internship. - Overall graduate GPA must be 3.0 or higher. - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship. - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at http://www.education.ucf.edu/clinicalexperience/ - Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

**Culminating Experience**
3 Total Credits

- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

Grand Total Credits: **39**
**Track Details**

**Additional Program Requirements**

- Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Pass all required sections of the Florida Teacher Certification Examination.
- Students are recommended to have 18 credit hours of mathematics coursework to be prepared to take the subject area exam in Middle Grades Mathematics for grades 5-9. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

**Equipment Fee**

Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

**Independent Learning**

The MAT requires a portfolio of both reflective practice/analysis of professional development and demonstration of attainment for all of the Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Teacher Education MAT - Teacher Education MAT, Middle School Science Education Track**

**Track Website**

https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

**Track Handbook**

Teacher Education MAT

**Track Contact Information**

**Su Gao PhD**  
Associate Professor  
su.gao@ucf.edu  
Telephone: 407-823-4834  
ED 115 F

**Online Availability**

No
Licensure Disclosure

This Teacher Education MAT, Middle School Science Education Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.

Track Description

The Teacher Education MAT, Middle School Science Education program is a state-approved initial teacher preparation program for students seeking certification to teach science in grades 5-9, including students previously certified to teach in another field.

The Master of Arts in Teaching is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The Teacher Education MAT, Middle School Science Education is a state-approved initial teacher preparation program for students seeking certification to teach science in grades 5-9, including students previously certified to teach in another field.

Students in the Mathematics Education and Science Education tracks may be eligible for Teacher Education Assistance for College and Higher Education (TEACH) grant. Please see https://ccie.ucf.edu/teachered/teach-grad/ for more information.

The Teacher Education MAT, Middle School Science Education program requires a minimum of 39 credit hours beyond the bachelor’s degree. The program is a secondary (grades 5-9) program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See https://ccie.ucf.edu/explore-via/.

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor’s Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
30 Total Credits
- EDG 6415 and TSL 5085 must be completed prior to internship.

Core Courses
12 Total Credits
- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

Specialization Courses
18 Total Credits
- Complete the following:
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)
  - SCE5325 - Teaching Middle School Science (3)
  - ISC6146 - Environmental Education for Educators (3)
  - SCE5836 - Space and Physical Science for Educators (3)
  - ESE5344 - Managing the Secondary Classroom (3)
  - ESE6036 - Contemporary Issues in Secondary Education (3)

Internship
6 Total Credits
- Earn at least 6 credits from the following types of courses:
  - SCE 6946 - Graduate Internship 6 Credit Hours (taken over two semesters). The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. The two-semester internship must be completed over one academic year. One-semester traditional internships must be completed in spring. Students should ensure that they meet all requirements for Graduate Internship.
  - Complete EDG 6415 and TSL 5085 before first semester of internship.
  - Overall graduate GPA must be 3.0 or higher. - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship. - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at http://www.education.ucf.edu/clinicalexp/ - Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

Culminating Experience
3 Total Credits
- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

Grand Total Credits: 39

Track Details

Additional Program Requirements
- Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Pass all required sections of the Florida Teacher Certification Examination.
- Students are recommended to have 18 credit hours of science course work to be prepared to take the subject area exam in Middle Grades Science for grades 5-9. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

Equipment Fee
Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

Independent Learning
The MAT requires a portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Teacher Education MAT - Teacher Education MAT, Science Education-Biology Track

Track Website
https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

Track Handbook
Teacher Education MAT

Track Contact Information

Su Gao, Ph.D.
Associate Professor
su.gao@ucf.edu
Telephone: 407-823-4834
ED 115 F

Online Availability
No

Licensure Disclosure

This Teacher Education MAT, Science Education-Biology Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.
Track Description

The Teacher Education MAT, Science Education-Biology program is a state-approved initial teacher preparation program for students seeking certification to teach Biology in grades 6-12, including students previously certified to teach in another field.

The Master of Arts in Teaching is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

Students in the Mathematics Education and Science Education tracks may be eligible for Teacher Education Assistance for College and Higher Education (TEACH) grant. Please see education.ucf.edu/teach_grad.cfm for more information.

The Teacher Education MAT, Science Education, Biology program requires a minimum of 39 credit hours beyond the bachelor’s degree. The program is a secondary (grades 6-12) program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See http://ccie.ucf.edu/explore-via/

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor’s Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
18 Total Credits

- EDG 6415 and TSL 5085 must be taken prior to internship.

**Core Courses**
12 Total Credits

- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

**Methods Courses**
6 Total Credits

- Complete the following:
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)
  - SCE5337 - Issues and Methods in Secondary School Science (3)

**Elective Courses**
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ESE5344 - Managing the Secondary Classroom (3)
    - ESE6036 - Contemporary Issues in Secondary Education (3)
  - Earn at least 6 credits from the following types of courses:
    - Students select 6 credit hours of electives with advisor approval.

**Internship**
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - SCE 6946 - Graduate Internship (6 Credit Hours, taken over two semesters). The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. The two-semester internship must be completed over one academic year. One-semester traditional internships must be completed in spring. Students should ensure that they meet all requirements for Graduate Internship. - Complete EDG 6415 and TSL 5085 before first semester of internship.
  - Overall graduate GPA must be 3.0 or higher.
  - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship. - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at http://www.education.ucf.edu/clinicalexp/ - Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

**Culminating Experience**
3 Total Credits

- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

**Grand Total Credits:** 39
**Track Details**

**Additional Program Requirements**

Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.

Pass all required sections of the Florida Teacher Certification Examination.

Students are recommended to have 30 credit hours of science course work to be prepared to take the subject area exam in Biology for grades 6-12. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

**Equipment Fee**

Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

**Independent Learning**

The MAT requires a portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the [College of Graduate Studies Funding website](http://funding.graduate.ucf.edu), which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [UCF Graduate Fellowships](https://funding.graduate.ucf.edu), which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**  
Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

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**Teacher Education MAT - Teacher Education MAT, Science Education-Chemistry Track**

**Track Website**


**Track Handbook**

Teacher Education MAT

**Track Contact Information**

**Su Gao PhD**  
Associate Professor  
su.gao@ucf.edu  
Telephone: 407-823-4834  
ED 115 F

**Online Availability**

No
Licensure Disclosure

This Teacher Education MAT, Science Education-Chemistry Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.

Track Description

The Teacher Education MAT, Science Education - Chemistry program is a state-approved initial teacher preparation program for students seeking certification to teach Chemistry in grades 6-12, including students previously certified to teach in another field.

The Master of Arts in Teaching is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

Students in the Mathematics Education and Science Education tracks may be eligible for Teacher Education Assistance for College and Higher Education (TEACH) grant. Please see education.ucf.edu/teach_grad.cfm for more information.

The Teacher Education MAT, Science Education - Chemistry program requires a minimum of 39 credit hours beyond the bachelor's degree. The program is a secondary (grades 6-12) program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See http://ccie.ucf.edu/explore-via/

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
18 Total Credits

- EDG 6415 and TSL 5085 must be completed prior to internship.

**Core Courses**
12 Total Credits

- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

**Methods Courses**
6 Total Credits

- Complete the following:
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)
  - SCE5337 - Issues and Methods in Secondary School Science (3)

**Elective Courses**
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ESE5344 - Managing the Secondary Classroom (3)
    - ESE6036 - Contemporary Issues in Secondary Education (3)
  - Earn at least 6 credits from the following types of courses:
    - Students earn 6 credit hours of elective courses approved by advisor.

**Internship**
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - SCE 6946 - Graduate Internship (6 Credit Hours, taken over two semesters). The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. The two-semester internship must be completed over one academic year. One-semester traditional internships must be completed in spring. Students should ensure that they meet all requirements for Graduate Internship. - Complete EDG 6415 and TSL 5085 before first semester of internship. - Overall graduate GPA must be 3.0 or higher. - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship. - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at http://www.education.ucf.edu/clinicalexps/ Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida - Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

**Culminating Experience**
3 Total Credits

- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

**Grand Total Credits:** 39
Track Details

Additional Program Requirements

- Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Pass all required sections of the Florida Teacher Certification Examination.
- Students are recommended to have 30 credit hours science course work to be prepared to take the subject area exam in Chemistry for grades 6-12. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

Equipment Fee

Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

Independent Learning

The MAT requires a portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Teacher Education MAT - Teacher Education MAT, Science Education-Physics Track

Track Website

https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

Track Handbook

Teacher Education MAT

Track Contact Information

Su Gao PhD
Associate Professor
su.gao@ucf.edu
Telephone: 407-823-4834
ED 115 F

Online Availability

No
Licensure Disclosure

The Teacher Education MAT, Science Education-Physics Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.

Track Description

The Teacher Education MAT, Science Education - Physics program is a state-approved initial teacher preparation program for students seeking certification to teach Physics in grades 6-12, including students previously certified to teach in another field.

The Master of Arts in Teaching is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

Students in the Mathematics Education and Science Education tracks may be eligible for Teacher Education Assistance for College and Higher Education (TEACH) grant. Please see education.ucf.edu/teach_grad.cfm for more information.

The Teacher Education MAT, Science Education - Physics program requires a minimum of 39 credit hours beyond the bachelor's degree. The program is a secondary (grades 6-12) program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See http://ccie.ucf.edu/explore-via/

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
18 Total Credits
- EDG 6415 and TSL 5085 must be taken prior to internship.

Core
12 Total Credits
- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

Methods
6 Total Credits
- Complete the following:
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)
  - SCE5337 - Issues and Methods in Secondary School Science (3)

Elective Courses
12 Total Credits
- Complete all of the following
  - Complete the following:
    - ESE5344 - Managing the Secondary Classroom (3)
    - ESE6036 - Contemporary Issues in Secondary Education (3)
  - Earn at least 6 credits from the following types of courses:
    Electives approved by advisor: 6 credits

Internship
6 Total Credits
- Earn at least 6 credits from the following types of courses:
  SCE 6946 - Graduate Internship (6 Credit Hours, taken over two semesters ***)
  - The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. The two-semester internship must be completed over one academic year. One-semester traditional internships must be completed in spring. Students should ensure that they meet all requirements for Graduate Internship. - Complete EDG 6415 and TSL 5085 before first semester of internship. - Overall graduate GPA must be 3.0 or higher. - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship. - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at http://www.education.ucf.edu/clinicalexp/ - Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

Culminating Experience
3 Total Credits
- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

Grand Total Credits: 39
Track Details

Additional Program Requirements

- Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Pass all required sections of the Florida Teacher Certification Examination.
- Students are recommended to have 30 credit hours of science course work to be prepared to take the subject area exam in Physics for grades 6-12. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

Equipment Fee

Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

Independent Learning

The MAT requires a portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Teacher Education MAT - Teacher Education MAT, Social Science Education Track

Track Website
https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

Track Handbook
Teacher Education MAT

Track Contact Information

Scott Waring PhD
Professor
socscied@ucf.edu
ED 206J

William Russell PhD
Professor
russell@ucf.edu
Education 115J

Online Availability
No

2022-2023 Graduate Catalog
Licensure Disclosure

The Teacher Education MAT, Social Science Education Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.

Track Description

The Teacher Education MAT, Social Science Education program is a state-approved initial teacher preparation program for students seeking certification to teach Social Science in grades 6-12, including students previously certified to teach in another field.

The Master of Arts in Teaching is a state-approved initial teacher preparation program that is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The Teacher Education MAT, Social Science Education program requires a minimum of 39 credit hours beyond the bachelor's degree. The program is a secondary (grades 6-12) program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Watermark access is required for the portfolio. See http://ccie.ucf.edu/explore-via/

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

ggradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
18 Total Credits
- EDG 6415 and TSL 5085 must be taken prior to internship.

Core Courses
12 Total Credits
- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

Methods
6 Total Credits
- Complete the following:
  - LAE5496 - Disciplinary Literacy in the Content Areas (3)
  - SSE5790 - Inquiry and Instructional Analysis in Social Science Education (3)

Elective Courses
12 Total Credits
- Complete the following:
  - ESE5344 - Managing the Secondary Classroom (3)
  - ESE6036 - Contemporary Issues in Secondary Education (3)
  - SSE6396 - Teaching with Primary Sources in the History Classroom (3)
  - SSE6636 - Contemporary Social Science Education (3)

Internship
6 Total Credits
- Earn at least 6 credits from the following types of courses:
  SSE 6946 - Graduate Internship (6 Credit Hours, taken over two semesters ***)
  **The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. The two-semester internship must be completed over one academic year. One-semester traditional internships must be completed in spring. Students should ensure that they meet all requirements for Graduate Internship.**
  - SSE 6946 - Graduate Internship (6 Credit Hours)
  - Complete EDG 6415 and TSL 5085 before first semester of internship.
  - Overall graduate GPA must be 3.0 or higher.
  - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship.
  - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at http://www.education.ucf.edu/clinicalexp/
  - Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

Culminating Experience
3 Total Credits
- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

Grand Total Credits: 39
**Track Details**

**Additional Program Requirements**
- Complete all key assignments in Via according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Pass all required sections of the Florida Teacher Certification Examination.
- Students are recommended to have 30 credit hours of social science course work to be prepared to take the subject area exam in Social Science for grades 6-12. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

**Equipment Fee**
Students in the Master of Arts in Teacher Education program pay a $64 equipment each semester that they are enrolled. Part-time students pay $32 per semester.

**Independent Learning**
The MAT requires a portfolio of both reflective practice/analysis of professional development and demonstration of attainment for all of the Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Via by Watermark is required for the portfolio. In addition, an internship is required.

**Financial Information**
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**
   Millican Hall 120
   Telephone: 407-823-2827
   Appointment Line: 407-823-5285
   Fax: 407-823-5241
   finaid@ucf.edu
   http://finaid.ucf.edu

**Fellowship Information**
Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**
   Telephone: 407-823-0127
   gradfellowship@ucf.edu
   https://funding.graduate.ucf.edu

**Teacher Education MAT - Teacher Education MAT, World Languages Education with ESOL Endorsement Track**

**Track Website**
https://ccie.ucf.edu/teachered/secondary-education/teacher-education-mat/

**Track Handbook**
Teacher Education MAT

**Track Contact Information**

**Michele Regalla PhD**
Associate Professor
Michele.Regalla@ucf.edu
Telephone: 4074823-0074
ED 122A

**Online Availability**
No
Licensure Disclosure

The Teacher Education MAT, World Languages Education Track has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CCIE-Teacher-Ed-MAT.pdf.

Track Description

The Teacher Education MAT, World Languages Education program is an initial teacher preparation program for students seeking certification to teach World Languages in grades K-12, including students previously certified to teach in another field.

The Master of Arts in Teaching is subject to any change in the Florida Administrative Code (State Board of Education Rule 6A-5.066). Students enrolled in this program should remain in close contact with their adviser to keep informed of any program changes implemented to comply with new state requirements.

The Teacher Education MAT, World Languages Education requires a minimum of 39 credit hours beyond the bachelor's degree. The program is a K-12 program for noneducation majors at the undergraduate level or teachers previously certified in another field.

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. In addition, an internship is required.

All teacher education candidates are required to complete Watermark requirements before being certified for graduation. Via™ by Watermark access is required for the portfolio. See http://ccie.ucf.edu/explore-via/

Total Credit Hours Required: 39 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
30 Total Credits

- EDG 6415 and TSL 5085 must be taken prior to internship.

Core Courses
12 Total Credits

- Complete the following:
  - EDG6415 - Principles of Instruction and Classroom Management (3)
  - EDF6237 - Principles of Learning and Introduction to Classroom Assessment (3)
  - EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3)
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)

Specialization
18 Total Credits

- Complete the following:
  - FLE5345 - Teaching World Languages in K-12 Schools (3)
  - RED5147 - Developmental Reading (3)
  - TSL5525 - ESOL Cultural Diversity (3)
  - TSL6143 - Curriculum and Instruction in Dual Language Programs (3)
  - TSL6250 - Applied Linguistics in ESOL (3)
  - TSL6440 - Assessment Issues in TESOL (3)

Internship
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - FLE 6946 - Graduate Internship (6 Credit Hours taken over two semesters***)

***The two semester requirement applies to on-the-job internships and most traditional internships. Traditional internships may be completed in one semester with advisor approval. The two-semester internship must be completed over one academic year. One-semester traditional internships must be completed in spring. Students should ensure that they meet all requirements for Graduate Internship. **Complete EDG 6415 and TSL 5085 before first semester of internship.** - Overall graduate GPA must be 3.0 or higher. - Passing scores on the appropriate Subject Area Examination and Professional Education Examination are required prior to admission to the second semester of graduate internship. - Students must apply and be approved for graduate internship. Deadline dates and applications are available through the Office of Clinical Experiences at http://www.education.ucf.edu/clinicalexp/ - Satisfactory completion of the Graduate Internship requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices at the beginning level in accordance with State Board of Education Rule 6A-5.065.

Culminating Experience
3 Total Credits

- Earn at least 3 credits from the following:
  - ESE6256 - Critical Issues in Secondary Education (1 - 3)

Grand Total Credits: 39

Track Details

Additional Program Requirements

- Complete all key assignments in Watermark according to program guidelines. This requires demonstration of professional growth, reflection, and proficiency in the Florida Educator Accomplished Practices.
- Pass all required sections of the Florida Teacher Certification Examination. Choose Spanish K-12 or French K-12.
- Students are recommended to have 30 credit hours of language course work (Spanish or French) to be prepared to take the subject area exam in Spanish or French for grades K-12. If students have difficulty passing the subject area examination, content-based coursework will be recommended. It is important to see an adviser if courses are difficult to schedule in content areas.

Equipment Fee

Students in the Master of Arts in Teacher Education program pay a $64 equipment fee each semester that they are enrolled. Part-time students pay $32 per semester.

Independent Learning

The MAT requires an online portfolio of both reflective practice/analysis of professional development and demonstration of attainment of the beginning level of performance for all Florida Educator Accomplished Practices (FEAPs). Multiple artifacts and reflective analysis are required for each of the accomplished practices. All portfolio entries are critical components of learning since they are the primary means of accessing the professional development of students as reflective practitioners. Watermark is required for the portfolio. In addition, an internship is required.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Urban and Regional Planning Graduate Certificate

College
College of Community Innovation and Education

Department
School of Public Administration

Program Website
https://ccie.ucf.edu/public-administration/

Program Contact Information

Chia-Yuan Yu, PhD
Assistant Professor
Chia-Yuan.Yu@ucf.edu
Telephone: 407-823-2604

Edlira Dursun, MPA, MNM
Academic PAdvisor
Edlira.Dursun@ucf.edu
Telephone: 407-823-1139

Is this program available 100% online?
No

Program Description
The Graduate Certificate in Urban and Regional Planning is designed to enhance knowledge, skills, and career development in the field of community, urban and regional planning.

Planning has been identified as one of the key policy issues in central Florida, which is a major growth area in the state.

The Urban and Regional Planning graduate certificate requires 18 credit hours of courses, including 12 credit hours of required courses and 6 credit hours of elective courses.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - PAD5336 - Introduction to Urban Planning (3)
  - PAD5337 - Urban Design (3)
  - PAD5338 - Land Use and Planning Law (3)
  - PAD6716 - Information Systems for Public Managers and Planners (3)

Restricted Electives
6 Total Credits

- Complete at least 2 of the following:
  - PAD5356 - Managing Community and Economic Development (3)
  - PAD6316 - Planning Methods (3)
  - PAD6387 - Transportation Policy (3)
  - PAD6397 - Managing Emergencies and Crises (3)
  - PAD6353 - Environmental Planning and Policy (3)
  - PAD6825 - Cross-Sectoral Governance (3)
  - PAD6847 - Planning Healthy Communities (3)

Grand Total Credits: 18

Program Details

Students must achieve a grade of "B-" (80%) or better in every course. Grades 'C' or lower cannot be used to fulfill certificate requirements. Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Urban and Regional Planning MS

College

College of Community Innovation and Education
**Program Website**
https://ccie.ucf.edu/public-administration/urban-regional-planning/

**Program Handbook Link**
Urban and Regional Planning MS Program Handbook

**Program Contact Information**

**Chia-Yuan Yu, PhD**
Program Director
Telephone: 407-823-5714
Chia-Yuan.Yu@ucf.edu

**Edlira Dursun, MNM, MPA**
Academic Advisor
Edlira.Dursun@ucf.edu
Telephone: 407-823-1139

**Is this program available 100% online?**
No

**Program Description**
The Master of Science in Urban and Regional Planning program is designed to produce graduates with the analytical skills and managerial knowledge to pursue successful careers in urban, metropolitan, and regional planning and closely related fields.

Students will receive an interdisciplinary, holistic educational experience emphasizing sustainability and socially responsible planning.

The Master of Science in Urban and Regional Planning consists of 42 credit hours. Each student completes a core of nine courses (27 credit hours), restricted elective courses (9 credit hours), and a Capstone project (6 credit hours).

The Master of Science in Urban and Regional Planning (MSURP) program is a face-to-face program. While some courses are offered online, students admitted to the MSURP program are expected to attend face-to-face classes offered weeknights on the downtown campus. The MSURP also incorporates community-based projects into most courses. Group projects are intended to develop leadership abilities while also providing an opportunity to show students are capable of working as part of a team. Group projects promote important intellectual and social skills and help to prepare students for work in a world in which teamwork and collaboration are increasingly the norms.

Courses and credit hours used for undergraduate degrees cannot be applied toward the MSURP degree, except for Senior Scholar students. UCF undergraduate students approved to participate in the Senior Scholar program may, with the permission of the MSURP program director, use up to 9 credit hours of graduate coursework from their bachelor's degree toward the MSURP degree. However, no undergraduate-level courses will be accepted in the MSURP program.

**Total Credit Hours Required: 42 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core Courses
27 Total Credits

- Complete the following:
  - PAD5336 - Introduction to Urban Planning (3)
  - PAD5337 - Urban Design (3)
  - PAD5338 - Land Use and Planning Law (3)
  - PAD5356 - Managing Community and Economic Development (3)
  - PAD6316 - Planning Methods (3)
  - PAD6353 - Environmental Planning and Policy (3)
  - PAD6387 - Transportation Policy (3)
  - PAD6716 - Information Systems for Public Managers and Planners (3)
  - PAD5930 - Global Cities (3)

Capstone or Final Product
6 Total Credits

- Complete all of the following
  - The final product will be a studio experience for six credit hours. Students work in teams for the final product in the planning degree program under the supervision of a faculty adviser. Students work closely with community partners in conducting an applied planning project. Part of the capstone experience is a presentation of their final project.
  - Complete the following:
    - IDS6953 - Urban and Regional Planning Capstone I (3)
    - IDS6954 - Urban and Regional Planning Capstone II (3)

Planning Electives
9 Total Credits

- Complete at least 3 of the following:
  - PAD6847 - Planning Healthy Communities (3)
  - PAD6920 - Visualization and Presentation Workshop for Urban Planners (3)
  - PAD6397 - Managing Emergencies and Crises (3)
  - PAD6254 - Economics of Land Use Planning and Development (3)
  - PAD6339 - Housing Development and Planning (3)
  - PAD6357 - Urban Resilience (3)
  - PAD6946 - Internship (3)
  - URP6711 - Sustainable Transportation Planning (3)
  - PAD6826 - Urban Policy and Regional Governance (3)

Grand Total Credits: 42
The Master of Science in Urban and Regional Planning consists of 42 credit hours. Each student completes a core of nine courses (27 credit hours), restricted elective courses (9 credit hours), and a Capstone project (6 credit hours).

The Master of Science in Urban and Regional Planning (MSURP) program is a face-to-face program. While some courses are offered online, students admitted to the MSURP program are expected to attend face-to-face classes offered weeknights on the downtown campus. The MSURP also incorporates community-based projects into most courses. Group projects are intended to develop leadership abilities while also providing an opportunity to show students can work as part of a team. Group projects promote important intellectual and social skills and help to prepare students for work in a world in which teamwork and collaboration are increasingly the norms.

Courses and credit hours used for undergraduate degrees cannot be applied toward the MSURP degree, except for Senior Scholar students. UCF undergraduate students approved to participate in the Senior Scholar program may, with the permission of the MSURP program director, use up to 9 credit hours of graduate coursework from their bachelor's degree toward the MSURP degree. However, no undergraduate-level courses will be accepted in the MSURP program.

Additional Program Requirements

Students must achieve a grade of "B-" (80%) or higher in every course listed under core requirements and in the Capstone Experience courses.

Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

The School of Public Administration incorporates service learning into some courses. Service learning is a teaching method that provides a means for every student to enhance his or her academic program with experiential learning opportunities. Service learning provides an opportunity for students to work with community partners by collecting and compiling data and producing quality products that will be beneficial to both students and organizations.

Students are expected to be computer literate and have computer internet access upon entry to the program.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Tangible projects, such as research scholarly papers, internships, and the Capstone/Final Project also contribute to the self-development of students. The planning study in the Capstone/Final Project will focus on reviewing and analyzing contemporary planning issues in order to help students acquire knowledge and skills pertaining to best practices in a variety of planning subfields. The Capstone/Final Project provides opportunities for independent learning experience.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/k-12/world-languages-education/

Program Contact Information
Donita Grissom PhD
Associate Lecturer
Donita.Grissom@ucf.edu
Telephone: 407-823-5791
ED 122N

Is this program available 100% online?
No

Program Description
The World Languages Education - English for Speakers of Other Languages (ESOL) graduate certificate builds knowledge and skills in teaching and assessing academic subjects and supporting second language acquisition and literacy for teaching English learners in PreK-12 schools.

The graduate certificate is designed for College of Community Innovation and Education students pursuing graduate initial certification degrees in secondary content areas, school leadership, or student support fields. Students who successfully complete this graduate certificate can expect to increase their marketability in educational professions that serve English learners in PreK-12 settings. This graduate certificate is designed to promote student success in PreK-12 schools but does not directly qualify students for teacher certification. Courses used to earn this certificate may not also be used to earn the World Languages Education - Languages Other Than English (LOTE) graduate certificate.

The World Languages Education, English for Speakers of Other Languages (ESOL) graduate certificate builds knowledge and skills in teaching and assessing academic subjects and supporting second language acquisition and literacy for teaching English learners in PreK-12 schools. The graduate certificate is designed for College of Community Innovation and Education students pursuing graduate initial certification degrees in secondary content areas, school leadership, or student support fields. To earn the certificate, students complete four required courses (12 credit hours total).

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

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gradadmissions@ucf.edu
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Online Application
Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
- Complete the following:
  - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
  - TSL5345 - Methods of ESOL Teaching (3)
  - TSL5525 - ESOL Cultural Diversity (3)
- Complete at least 1 of the following:
  - TSL6379 - Second Language Literacy (3)
  - TSL6250 - Applied Linguistics in ESOL (3)

Grand Total Credits: 12

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu
http://finaid.ucf.edu

World Languages Education - Languages Other Than English (LOTE) Graduate Certificate

College
College of Community Innovation and Education

Department
School of Teacher Education

Program Website
https://ccie.ucf.edu/teachered/k-12/world-languages-education/

Program Contact Information
Michele Regalla PhD
Associate Professor
Michele.Regalla@ucf.edu
Telephone: 4074823-0074
ED 122A

Is this program available 100% online?
No
Program Description

The World Languages Education - Languages Other Than English (LOTE) graduate certificate builds knowledge and skills in teaching and assessing academic subjects and supporting second language acquisition and literacy for teaching languages other than English. The graduate certificate is well suited for students pursuing a graduate degree in a language other than English or for students with graduate standing who are proficient in a LOTE that they would like to teach.

Students who successfully complete this graduate certificate can expect to increase their marketability in careers that include educational components such as instructing, training and lecturing. This graduate certificate is designed to promote student success in instructional settings, particularly in the PreK-12 school setting, but does not directly qualify students for teacher certification. Courses used to earn this certificate may not also be used to earn the World Languages Education - English for Speakers of Other Languages (ESOL) graduate certificate.

The World Languages Education, Languages Other Than English (LOTE) graduate certificate builds knowledge and skills in teaching and assessing academic subjects and supporting second language acquisition and literacy for teaching languages other than English. The graduate certificate is well suited for students pursuing a graduate degree in a language other than English or for students with graduate standing who are proficient in a LOTE that they would like to teach. To earn the certificate, students complete four required courses (12 credit hours total).

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

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ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - TSL5085 - Teaching Language Minority Students in K-12 Classrooms (3)
    - TSL6250 - Applied Linguistics in ESOL (3)
  - Complete all of the following
    - Complete at least 1 of the following:
      - TSL6379 - Second Language Literacy (3)
      - Course Not Found
    - Complete at least 1 of the following:
      - FLE5345 - Teaching World Languages in K-12 Schools (3)
      - TSL5345 - Methods of ESOL Teaching (3)
    - Note: Students can take either FLE 5345 or TSL 5345 but not both.

Grand Total Credits: 12

Financial Information

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http://finaid.ucf.edu
College of Engineering and Computer Science

Aerospace Engineering MSAE

College

College of Engineering and Computer Science

Department

Department of Mechanical and Aerospace Engineering

Program Website

http://www.mae.ucf.edu/

Program Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Is this program available 100% online?

Yes

UCF Online

Please note: Aerospace Engineering (MSAE) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Aerospace-Engineering-MS.pdf.

Program Description

The Master of Science in Aerospace Engineering (MSAE) is designed to prepare students for careers as engineers in aerospace.

Students must choose from four tracks: Accelerated BS to MSAE, Guidance Control and Dynamics, Space Systems Design and Engineering, and Thermofluid Aerodynamic Systems Design and Engineering. Please scroll to the bottom of this page for further details on these Tracks.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Financial Information

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Fellowship Information

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Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Aerospace Engineering MSAE - Aerospace Engineering MSAE, Accelerated BS to MSAE Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Online Availability
No

Licensure Disclosure

This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Aerospace-Engineering-MS.pdf.

Track Description

The Accelerated BS to MS track in the Aerospace Engineering MSAE program allows highly qualified undergraduate students in Aerospace Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program. Participation will enable completion of the Bachelor of Science and Master of Science degrees in five instead of six years for students enrolled in full-time course work.

The BSAE is awarded after completion of 128 total undergraduate student credit hours including 71 hours of engineering courses and all other university requirements, and the MSAE is awarded upon completion of the master's program. Courses designated in General Education Program and Common Program Prerequisites are usually completed in the first 60 hours (see engineering major requirements in the Undergraduate Catalog).

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

This track is available to University of Central Florida undergraduate majors in Aerospace Engineering and Mechanical Engineering only.
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**  
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**  
GRE: 5233  
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TOEFL: 5233  
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Degree Requirements

Undergraduate Requirements
0 Total Credits

- Please see the current edition of the Undergraduate Catalog and the College of Engineering website listed above for additional information about academics and accelerated programs.

Required/Track Courses
24 Total Credits

- Complete 1 of the following
  - Up to 12 credit hours of approved 5000- and 6000-level courses of grades "B" (3.0) or better may be counted toward the BS and MS degrees. Additional notes on the Accelerated Undergraduate and Graduate Program in Aerospace Engineering: Students who change degree programs and select this major must adopt the most current catalog. Students must earn at least a "B" (3.0) in each undergraduate and graduate engineering course for them to be counted toward the major. Accelerated Aerospace students must declare their interest in either the Space Systems Design and Engineering Track or the Thermofluid Aerodynamic Systems Design and Engineering Track by completing a Program of Study with their adviser.

  - Space Systems Design and Engineering Track
    - Complete all of the following
      - Complete the following:
        - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
        - EML5271 - Intermediate Dynamics (3)
        - EML5311 - System Control (3)
      - Complete at least 1 of the following:
        - EML5152 - Intermediate Heat Transfer (3)
        - EML5237 - Intermediate Mechanics of Materials (3)
        - EML5713 - Intermediate Fluid Mechanics (3)
      - Earn at least 12 credits from the following types of courses:
        - Elective Coursework as listed on the Space Systems Design and Engineering Track Catalog Page

  - Thermofluid Aerodynamic Systems Design and Engineering Track
    - Complete all of the following
      - Complete the following:
        - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
        - EML5152 - Intermediate Heat Transfer (3)
        - EML5713 - Intermediate Fluid Mechanics (3)
      - Complete at least 1 of the following:
        - EML5237 - Intermediate Mechanics of Materials (3)
        - EML5271 - Intermediate Dynamics (3)
        - EML5311 - System Control (3)
      - Earn at least 12 credits from the following types of courses:
        - Elective Coursework as listed on the Thermofluid Aerodynamic Systems Design and Engineering Track Catalog Page

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - EAS 6971 - Thesis
      - Additionally, all students pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar 0 Credit Hours
        - Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.

  - Nonthesis Option
    - Complete all of the following
      - Earn at least 3 credits from the following:
        - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
      - For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. In the case substitution XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research.
        - Earn at least 3 credits from the following types of courses:
          - Additional elective course as listed on the student's selected track catalog page

Grand Total Credits: 30
Track Details

Equipment Fee

Students in the Aerospace Engineering MSAE program pay a $90 equipment fee each semester that they are enrolled.

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis or EML 6085 - Research Methods in Mechanical and Aerospace Engineering. The nonthesis option independent learning experience is provided by the required course EML 6085 - Research Methods in Mechanical and Aerospace Engineering (3 credit hours). For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML 6085 as the student's independent learning experience. In the case substitution XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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Fellowship Information

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Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Aerospace Engineering MSAE - Aerospace Engineering MSAE, Guidance Control and Dynamics Track

Track Website

http://www.mae.ucf.edu/

Track Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Online Availability

Yes

Licensure Disclosure

This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Aerospace-Engineering-MS.pdf.

Track Description

The Master of Science in Guidance, Control and Dynamics (MSAE) is designed to prepare students for careers as engineers in the aerospace industry. The curriculum is developed with strong emphasis in courses related to guidance control and dynamics with applications in aerospace engineering.

The MSAE is awarded upon completion of a minimum of 30 credit hours, including 9 credit hours of required courses, 15 credit hours of elective courses selected from an approved list of courses, and an additional 6 credit hours in either a thesis or nonthesis option.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Track Prerequisites

Bachelor's degree in Aerospace Engineering or closely related discipline. A student with an undergraduate degree outside of the selected departmental discipline may also be required to satisfy an articulation program.

Prerequisites (or equivalent)

- MAP 2302 - Differential Equations
- EML 3034C - Modeling Methods in Mechanical and Aerospace Engineering
- EAS 4134 - High-Speed Aerodynamics
- EAS 4105 - Flight Mechanics
- EAS 4200 - Flight Structures

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Institution Codes

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GMAT: RZT-HT-58
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ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete all of the following
  - Complete the following:
    - EML5271 - Intermediate Dynamics (3)
    - EEL5630 - Digital Control Systems (3)
  - Complete at least 1 of the following:
    - EEL5173 - Linear Systems Theory (3)
    - EML5311 - System Control (3)

Elective Courses
15 Total Credits

- Complete at least 5 of the following:
  - EAS6403C - Attitude Determination and Control (3)
  - EAS6415 - Guidance, Navigation and Control (3)
  - EML5713 - Intermediate Fluid Mechanics (3)
  - EML5237 - Intermediate Mechanics of Materials (3)
  - EEL5432 - Satellite Remote Sensing (3)
  - EEE5542 - Random Processes I (3)
  - EAS6507 - Topics of Astrodynamics (3)
  - EAS5407C - Mechatronic Systems (3)
  - EAS6405 - Advanced Flight Dynamics (3)
  - EAS6414 - Estimation of Dynamical Systems in Aerospace Engineering (3)
  - EAS6722 - Multidisciplinary Optimization Under Uncertainty (3)
  - EEL5625 - Applied Control Systems (3)
  - EEL5669 - Introduction to Robotics and Autonomous Vehicles (3)
  - EEL5690 - Medical Robotics (3)
  - EEL5820 - Image Processing (3)
  - EEL6026 - Optimization of Engineering Systems (3)
  - EEL6616 - Adaptive Control (3)
  - EEL6619 - Nonlinear Robust Control and Applications (3)
  - EEL6621 - Nonlinear Control Systems (3)
  - EEL6662 - Advanced Robotics (3)
  - EEL6667 - Mobile Robotic Systems (3)
  - EEL6671 - Modern and Optimal Control Systems (3)
  - EEL6674 - Optimal Estimation for Control (3)
  - EEL6675 - Stochastic Control (3)
  - EEL6683 - Cooperative Control of Networked Autonomous Systems (3)
Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following

Thesis Option

- Complete all of the following
  - Earn at least 6 credits from the following types of courses:
    - EAS 6971 Thesis The thesis option requires 30 credit hours, at least half of which must be at the 6000 level and will include 6 credit hours of thesis credit. A student pursuing the thesis program may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic. Students must register for the course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.
  - Additionally, students pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar 0 Credit Hours

Nonthesis Option

- Complete all of the following
  - Earn at least 3 credits from the following:
    - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
    - The nonthesis option is primarily designed to meet the needs of part-time students and requires 30 credit hours of course work, at least one-half of which must be at the 6000 level. Students pursuing the nonthesis option are required to take one additional elective and take EML 6085 - Research Methods in Mechanical and Aerospace Engineering as part of their 30-credit-hour course requirement. *For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning. EML 6085 - Research Methods in Mechanical and Aerospace Engineering or XXX 6918 Directed Research fulfill the independent learning requirement and either course is required for nonthesis students.
  - Earn at least 3 credits from the following types of courses:
    - Additional elective course from suggested list above

Grand Total Credits: **30**

**Track Details**

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must be approved by the department and therefore students should consult with the MMAE Graduate Director for assistance in filling out their program of study.

A student with an undergraduate degree outside of the selected departmental discipline may also be required to satisfy an articulation program. Substitutions to the program of study must meet with the approval of the adviser and the department.

**Equipment Fee**

Students in the Aerospace Engineering MSAE program pay a $90 equipment fee each semester that they are enrolled.

**Independent Learning**

The independent learning requirement is met by successful completion of a master's thesis for the thesis option. The nonthesis option independent learning experience is provided by the required course, EML 6085 - Research Methods in Mechanical and Aerospace Engineering (3 credit hours). For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Aerospace Engineering MSAE - Aerospace Engineering MSAE, Space Systems Design and Engineering Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Online Availability

Yes

Licensure Disclosure

This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Aerospace-Engineering-MS.pdf.

Track Description

The Master of Science in Space Systems Design and Engineering (MSAE) is designed to prepare students for careers as engineers in aerospace. The program includes the fields of controls and dynamics, space environment, instrumentation and communications, structures and materials, thermal analysis, and design.

The MSAE is awarded upon completion of a minimum of 30 credit hours, including 12 credit hours of required courses, 12 credit hours of elective courses selected from an approved list of courses, and an additional 6 credit hours in either a thesis or nonthesis option.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

Bachelor's degree in Aerospace Engineering or closely related discipline. A student with an undergraduate degree outside of the selected departmental discipline may also be required to satisfy an articulation program.

Prerequisites (or equivalent)

- MAP 2302 - Differential Equations
- EML 3034C - Modeling Methods in Mechanical and Aerospace Engineering
- EAS 4134 - High-Speed Aerodynamics
- EAS 4105 - Flight Mechanics
- EAS 4200 - Flight Structures
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
    - EML5271 - Intermediate Dynamics (3)
    - EML5311 - System Control (3)
  - Complete at least 1 of the following:
    - EML5152 - Intermediate Heat Transfer (3)
    - EML5237 - Intermediate Mechanics of Materials (3)
    - EML5713 - Intermediate Fluid Mechanics (3)

Elective Courses
12 Total Credits

- Complete at least 4 of the following:
  - EAS6403C - Attitude Determination and Control (3)
  - EAS6415 - Guidance, Navigation and Control (3)
  - EEL6616 - Adaptive Control (3)
  - EEL6621 - Nonlinear Control Systems (3)
  - EML5152 - Intermediate Heat Transfer (3)
  - EML5713 - Intermediate Fluid Mechanics (3)
  - EML6211 - Continuum Mechanics (3)
  - EML6223 - Advanced Vibration Systems (3)
  - EML5237 - Intermediate Mechanics of Materials (3)
  - EML6155 - Convection Heat Transfer (3)
  - EML6157 - Radiation Heat Transfer (3)
  - EAS6808 - Space Environment and Payload Instrumentation (3)
  - EEL5432 - Satellite Remote Sensing (3)
  - EEE5542 - Random Processes I (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - EAS 6971 Thesis
        - EML 5090 - Mechanical and Aerospace Seminar
      - The thesis option requires 30 credit hours, at least half of which must be at the 6000 level and will include 6 credit hours of thesis credit. A student pursuing the thesis program may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic. Students must register for the course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.
      - Additionally, students pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar 0 Credit Hours
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 3 credits from the following:
        - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
      - The nonthesis option is primarily designed to meet the needs of part-time students and requires 30 credit hours of course work, at least one-half of which must be at the 6000 level. Students pursuing the nonthesis option are required to take one additional elective and take either EML 6085 - Research Methods in Mechanical and Aerospace Engineering (or XXX 6918 Directed Research, with approval)* as part of their 30-credit-hour course requirement. *For students who are not on campus and upon prior approval from the graduate coordinator, XXX 6918 Directed Research (3 credit hours) may be substituted as the student’s independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning. EML 6085 - Research Methods in Mechanical and Aerospace Engineering and XXX 6918 fulfill the independent learning requirement and either course is required for nonthesis students.
      - Earn at least 3 credits from the following types of courses:
        - Additional elective course from suggested list above

Grand Total Credits: 30
Track Details

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must be approved by the department and therefore students should consult with the MMAE Graduate Director for assistance in filling out their program of study.

Equipment Fee

Students in the Aerospace Engineering MSAE program pay a $90 equipment fee each semester that they are enrolled.

Independent Learning

The independent learning requirement is met by successful completion of a master’s thesis for the thesis option. The nonthesis option independent learning experience is provided by the required course, EML 6085 - Research Methods in Mechanical and Aerospace Engineering (3 credit hours). For students who are not on campus and upon prior approval from the graduate coordinator, XXX 6918 Directed Research (3 credit hours) may be substituted as the student's independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

Financial Information

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Fellowship Information

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gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Aerospace Engineering MSAE - Aerospace Engineering MSAE, Thermofluid Aerodynamic Systems Design and Engineering Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Online Availability

Yes

Licensure Disclosure

This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Aerospace-Engineering-MS.pdf.
**Track Description**

The Thermofluid Aerodynamics Systems Design and Engineering track in the Aerospace Engineering MSAE program is designed to prepare students for careers as engineers in aerospace. The program includes the fields of controls and dynamics, aerodynamics, propulsion, thermal analysis, and design.

The MSAE is awarded upon completion of a minimum of 30 credit hours, including 12 credit hours of required courses, 12 credit hours of elective courses selected from an approved list of courses, and an additional 6 credit hours in either a thesis or nonthesis option.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

Bachelor's degree in Aerospace Engineering or closely related discipline. A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program.

**Prerequisites (or equivalent)**

- MAP 2302 - Differential Equations
- EML 3034C - Modeling Methods in Mechanical and Aerospace Engineering
- EAS 4134 - High-Speed Aerodynamics
- EAS 4105 - Flight Mechanics
- EAS 4200 - Flight Structures

**College of Graduate Studies Contact Information**

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Millican Hall 230
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Graduate Admissions

**Mailing Address**
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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits
- Complete all of the following
  - Complete the following:
    - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
    - EML5152 - Intermediate Heat Transfer (3)
    - EML5713 - Intermediate Fluid Mechanics (3)
  - Complete at least 1 of the following:
    - EML5237 - Intermediate Mechanics of Materials (3)
    - EML5237 - Intermediate Mechanics of Materials (3)
    - EML5311 - System Control (3)

Elective Courses
12 Total Credits
- Complete all of the following
  - All students, both thesis and nonthesis, must complete at least 12 hours of electives from the list below after conferring with their adviser.
  - Complete at least 4 of the following:
    - EAS5123 - Intermediate Aerodynamics (3)
    - EAS6185 - Turbulent Flow (3)
    - EAS5315 - Rocket Propulsion (3)
    - EML5713 - Intermediate Fluid Mechanics (3)
    - EML6131 - Combustion Phenomena (3)
    - EML6725 - Computational Fluid Dynamics and Heat Transfer I (3)
    - EAS5302 - Direct Energy Conversion (3)
    - EML6726 - Computational Fluid Dynamics and Heat Transfer II (3)
    - EML6154 - Conduction Heat Transfer (3)
    - EML6157 - Radiation Heat Transfer (3)
    - EML6211 - Continuum Mechanics (3)
    - EML5237 - Intermediate Mechanics of Materials (3)
    - EML5532C - Computer-Aided Design for Manufacture (3)
    - EML5546 - Engineering Design with Composite Materials (3)
    - EML6547 - Engineering Fracture Mechanics in Design (3)
  - Other courses which may be taken: EAS 6807C - Aerospace Measurements Instrumentation 3 Credit Hours EML 6124 - Two-Phase Flow 3 Credit Hours

Thesis/Nonthesis Option
6 Total Credits
- Complete 1 of the following
  - Thesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - EAS 6971 - Thesis The thesis option requires 6 credit hours of thesis in addition to the required and elective courses listed above. A student pursuing the thesis program may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic. Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.
        - Additionally, all students pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar 0 Credit Hours
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 3 credits from the following:
        - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
      - The nonthesis option is primarily designed to meet the needs of part-time students and requires one additional elective and EML 6085 - Research Methods in Mechanical and Aerospace Engineering as part of their 30-credit-hour course requirement. * For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research. EML 6085 - Research Methods in Mechanical and Aerospace Engineering or (XXX 6918 Directed Research) fulfills the independent learning requirement for nonthesis students.
      - Earn at least 3 credits from the following types of courses:
        - Additional elective course

Grand Total Credits: 30
Track Details

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must be approved by the department and therefore students should consult with the MMAE Graduate Director for assistance in filling out their program of study. Both thesis and nonthesis options require 30 credit hours of courses and at least half of the credit hours in the program of study must be at the 6000 level. Substitutions to the program of study must meet with the approval of the adviser and the department.

Equipment Fee

Students in the Aerospace Engineering MSAE program pay a $90 equipment fee each semester that they are enrolled.

Independent Learning

The independent learning requirement is met by successful completion of a master’s thesis for the thesis option. The nonthesis option independent learning experience is provided by the required course EML 6085 - Research Methods in Mechanical and Aerospace Engineering (3 credit hours). For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML 6085 as the student's independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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https://graduate.ucf.edu/funding/

Aerospace Engineering PhD

College

College of Engineering and Computer Science

Department

Department of Mechanical and Aerospace Engineering

Program Website

http://www.mae.ucf.edu

Program Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Is this program available 100% online?

No
**Licensure Disclosure**

This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Aerospace-Engineering-PhD.pdf.

**Program Description**

The Aerospace Engineering PhD program offers students the opportunity, through both coursework and research, to meet the highest standards of academic achievement in the core areas: Aerodynamics. Aerospace Systems Design. Astrodynamics and Space Applications, Dynamics and Control. Propulsion. Structures and Materials.

The Doctor of Philosophy degree in Aerospace Engineering is intended for students who have earned an MS or BS degree in Aerospace Engineering, Mechanical Engineering or a closely related field of Engineering.

The Aerospace Engineering PhD program requires a minimum of 72 credit hours beyond a bachelor's degree. This program requires 15 Dissertation (EAS 7980) credit hours minimum and may include up to a total of 12 credit hours combined Directed (EAS 6918) or Doctoral Research (EAS 7919) and/or Independent Study (EAS 6908) with an approved Program of Study. At least 45 hours of the Program of Study must consist of formal coursework exclusive of Directed Research (EAS 6918), Doctoral Research (EAS 7919) and Independent Study (EAS 6908).

Students entering the program with a master's degree are required to complete 42 credit hours minimum, of which 15 credit hours must be formal coursework. The remaining 12 hours can be chosen by the student in consultation with the adviser and the dissertation committee and with the approval of the graduate program coordinator. These credit hours may include doctoral directed research hours or doctoral dissertation hours.

**Total Credit Hours Required:** 72 Credit hours minimum beyond the bachelor's degree 42 Credit hours minimum beyond the master's degree.

**Program Prerequisites**

Bachelor's or Master's degree in Aerospace or Mechanical Engineering or closely related discipline.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Seminar
0 Total Credits

- Earn at least 0 credits from the following types of courses:
  EML 5090 - Mechanical and Aerospace Seminar The MAE Graduate Seminar is a zero credit hour (S/U) course that is offered each fall and spring academic semesters. Prior to graduation, all MAE graduate students who are pursuing PhD dissertation required to register, participate, and receive a satisfactory (S) for four semesters of MAE Graduate seminar, with at least two of these taken prior to candidacy.

Elective Courses
57 Total Credits

- Earn at least 57 credits from the following:
  - EAS5123 - Intermediate Aerodynamics (3)
  - EAS5211 - Aeroelasticity (3)
  - EAS5302 - Direct Energy Conversion (3)
  - EAS5315 - Rocket Propulsion (3)
  - EAS5407C - Mechatronic Systems (3)
  - EAS5535 - Engineering Design for Aerospace Vehicles (3)
  - EAS6138 - Advanced Gas Dynamics (3)
  - EAS6185 - Turbulent Flow (3)
  - EAS6222 - Non-Destructive Evaluation of Aero-Structures (3)
Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  EAS/EML 7980 Doctoral Dissertation

Examinations
0 Total Credits

- In addition to the Qualifying Examination discussed above, the student must pass a Candidacy Examination and a Dissertation Defense Examination. The Candidacy Examination is taken near the end of the coursework and consists of a written and oral presentation of a research proposal. The MAE Department typically requires a PhD student to submit his/her Candidacy Exam in the academic semester immediately following his/her successful passing of the PhD Qualifying Exam. The Dissertation Defense Examination is an oral examination taken in defense of the written dissertation. The College of Engineering and Computer Science requires that all Dissertation Defense Examination announcements are approved by the student's advisor and posted on the College's website and on the Events Calendar of the College of Graduate Studies website at least two weeks prior to the defense date.

Dissertation Committee
0 Total Credits

- The Doctoral Advisory Committee must consist of a minimum of four members: two must be graduate faculty members from the MAE Department and one must be from outside the MAE Department and will serve as the external committee member. The committee Chair must be a member of the graduate faculty approved to direct dissertation. Join faculty members may serve as members from within the MAE Department as well as committee Chairs. Adjunct faculty and off-campus experts, if approved graduate faculty scholars, may serve as the external person in the committee. The UCF College of Graduate Studies reserves the right to review appointments to advisory committees, place a representative on any advisory committee or appoint a co-adviser. All committee members vote on acceptance or rejection of the dissertation proposal and the final dissertation. The dissertation proposal and final dissertation must be approved by a majority of the Doctoral Advisory Committee.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours (enrollment in dissertation hours begins the semester following the completion of these requirements). Evidence of meeting these requirements must be received by
the College of Graduate Studies by the day before the first day of classes for the semester in which a student wishes to enroll in dissertation hours. Completion of all coursework, except for dissertation hours. Successful completion of the Candidacy Examination. Successful defense of the written dissertation proposal. Formation of the Doctoral Advisory Committee, consisting of approved Graduate Faculty and Graduate Faculty Scholars. Submission of an approved Program of Study.

Grand Total Credits: 72

Financial Information

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Fellowship Information

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Grad Fellowships
 Telephone: 407-823-0127
 gradfellowship@ucf.edu
 https://graduate.ucf.edu/funding/

Applied Operations Research Graduate Certificate

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Program Website
https://iems.ucf.edu/

Program Contact Information
Mansooreh Mollaghasemi PhD
Associate Professor
mollagha@ucf.edu
Engineering 2, Room 312

Is this program available 100% online?
Yes

UCF Online

Please note: Applied Operations Research Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.
International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337. UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
**Program Description**

*This program has suspended admissions effective Fall 2020 including online.*


The Graduate Certificate in Applied Operations Research is designed to prepare individuals with an overview of Operations Research (OR) tools, develop competence in modeling programs and provide practice and hands-on experience. OR models and solution techniques provide a powerful arsenal for solving complex resource allocation and management problems. OR has been used to solve many of the scheduling, distribution, staffing and design problems in the industry. As more powerful desktop computers and software become available, the potential to apply OR models and methods to such problems will grow.

**Program Prerequisites**

Admission is open to those with a bachelor’s degree in industrial engineering or a closely related discipline from an accredited institution recognized by UCF.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
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Graduate Admissions

**College of Graduate Studies Contact Information**

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Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Required Courses
9 Total Credits

- Complete the following:
  - ESI5219 - Engineering Statistics (3)
  - ESI5306 - Operations Research (3)
  - ESI5531 - Discrete Systems Simulation (3)

Elective Course
3 Total Credits

- Complete at least 1 of the following:
  - ESI6336 - Queueing Systems (3)
  - ESI6358 - Decision Analysis (3)
  - ESI6418 - Linear Programming and Extensions (3)

Grand Total Credits: 12

**Biomedical Engineering MSBME**

**College**

College of Engineering and Computer Science

**Department**

Department of Mechanical and Aerospace Engineering

**Program Website**

http://www.mae.ucf.edu/
Program Contact Information

Dr. Alain Kassab
Professor
Alain.Kassab@ucf.edu
Telephone: (407) 823-5448
ENGR I, Room 381

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Biomedical-Engineering-MS.pdf.

Program Description
The Master of Science degree in Biomedical Engineering is designed to train graduates with professional skills enabling them to gain employment in the biomedical engineering industry or to enter competitive Biomedical Engineering PhD research programs. It also offers the option to UCF College of Medicine students to enrich education and professional careers by pursuing a tailored MSBME/MD program.

Graduates will have a command of the application of engineering principles to biological and health systems. They will gain skills in modern biomedical engineering tools, understanding of relevant physiology and biology, knowledge of contemporary topics in medical technology, and ability to engage in advanced engineering studies including elements of research, analysis, design and experimentation.

Career opportunities include research, design, analysis, testing and product development in the biomedical and rehabilitation industries, in clinical engineering, and in biomedical engineering.

The MSBME degree offers the following gateways into the program:
- MSBME for students with formal training in engineering or biomedical engineering who have earned a BS degree and are seeking postbaccalaureate education and training.
- MSBME along-the-way to engineering students who are admitted into the PhD program in MAE and engaged in BME research.
- MSBME to students in the BS-to-MS track.
- MSBME to recent BS graduates potentially interested in pursuing PhD research with a preference for admission to the UCF doctoral graduate program upon completion.
- A combined MD/MSBME to UCF College of Medicine MD students with an engineering background and interest who can pursue the degree with one additional year sandwiched between the end of the second and beginning of the third year of medical school. This program is aimed at MD students who wish to expand on their years one and two College of Medicine FIRE (Focused Individualized Research Experience) project into an MS thesis.

The program offers thesis and nonthesis options:
- Accelerated BS to MS - Thesis and Nonthesis options
- Biofluids Track - Thesis and Nonthesis options
- Biomechanics Track - Thesis and Nonthesis options
- MD/MSBME Track - Thesis only

Please scroll to the bottom of this page for further details on these Tracks.

The MSBME requires completion of 30 hours at the graduate level (a combination of 5000 and 6000 level classes) and will be offered with two options: (1) thesis (30 credit hours): 24 credit hours of coursework plus 6 credit hours of thesis with at least 15 credit hours at the 6000 level. (2) nonthesis options (30 credit hours): 30 credit hours of coursework with at least 15 credit hours at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student’s graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Biomedical Engineering MSBME - Biomedical Engineering MSBME, Accelerated BS to MSBME Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information

Dr. Alain Kassab
Professor
Alain.Kassab@ucf.edu
Telephone: (407) 823-5448
ENGR I, Room 381

Online Availability

No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Biomedical-Engineering-MS.pdf.
**Track Description**

The Accelerated Undergraduate/Graduate program in Biomedical Engineering allows highly qualified undergraduate majors in Mechanical Engineering and Aerospace Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program. Participation will enable completion of the Bachelor of Science and Master of Science degrees in five instead of six years for students enrolled in full-time course work.

The BSME or BSAE is awarded after completing all university requirements, including 128 total credit hours and 71 credit hours of engineering courses. The MSBME is awarded upon completion of the master's program. Courses designated in General Education Program and Common Program Prerequisites are usually completed in the first 60 hours (see engineering major requirements in the Undergraduate Catalog).

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

This track is available to University of Central Florida undergraduate majors in Mechanical or Aerospace Engineering only.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

**Undergraduate Requirements**

0 Total Credits

- Please see the current edition of the Undergraduate Catalog for additional information about this program.

**Required/Track Courses**

21 Total Credits

- Complete 1 of the following
  - Up to 12 credit hours of approved graduate level courses of grades "B" (3.0) or better may be counted toward the BS and MS degrees. Additional notes on the Accelerated Undergraduate and Graduate Program in Mechanical Engineering are as follows: Students who change degree programs and select this major must adopt the most current catalog. Students must earn at least a "B" (3.0) in each undergraduate and graduate engineering course for them to be counted toward the major. Qualified courses that may be selected for the Accelerated BS to MS are as follows based on track:
    - Biofluids Track
    - Complete all of the following
      - BMES6268C - Applied and Computational Biofluids (3)
      - BMES5216C - Mechanics of Biostructures I (3)
      - BMES5217C - Mechanics of Biostructures II (3)
      - BMES6500C - Bioinstrumentation (3)
      - BMES6935 - Topics in Biomedical Engineering (3)
      - EML6211 - Continuum Mechanics (3)
      - BMES5267 - Biofluid Mechanics (3)

- For the Biofluids Track, qualified courses that may be selected for the Accelerated BS to MS are: EML 6211 - Continuum Mechanics 3 Credit Hours BMES 5216C - Mechanics of Biostructures I 3 Credit Hours BMES 5217C - Mechanics of Biostructures II 3 Credit Hours BMES 5267 - Biofluid Mechanics 3 Credit Hours BMES 6268C - Applied and Computational Biofluids 3 Credit Hours Or a technical elective approved by the graduate program director

- Biomechanics Track
  - Complete all of the following
    - BMES5216C - Mechanics of Biostructures I (3)
    - BMES5217C - Mechanics of Biostructures II (3)
    - BMES6500C - Bioinstrumentation (3)
For the Biomechanics Track, qualified courses that may be selected for the Accelerated BS to MS are:
- EML 6211 - Continuum Mechanics 3 Credit Hours
- BME 5216C - Mechanics of Biostructures I
- BME 5217C - Mechanics of Biostructures II
- BME 6500C - Bioinstrumentation
- BME 6215 - Advanced Biomechanics 3 Credit Hours
- Or a technical elective approved by the graduate program director

Representative Electives
3 Total Credits
- Complete at least 1 of the following:
  - BME 5572 - Biomedical Nanotechnology (3)
  - BSC 5418 - Tissue Engineering (3)
  - EEE 5265 - Biomedical Effects and Applications of Electromagnetic Energy (3)
  - EEL 5272 - Biomedical Sensors (3)
  - EEL 5690 - Medical Robotics (3)
  - EMA 5060 - Polymer Science and Engineering (3)
  - EMA 5584 - Biomaterials (3)
  - EMA 5586 - Biocompatibility of Materials (3)
  - EML 5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
  - EML 5066 - Computational Methods in Mechanical and Aerospace Engineering (3)
  - EML 5237 - Intermediate Mechanics of Materials (3)
  - EML 5291 - MEMS Materials (3)
  - EML 5546 - Engineering Design with Composite Materials (3)

Thesis/Nonthesis Option
6 Total Credits
- Complete 1 of the following
  - Thesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following:
        - BME 6971 - Thesis (99)
      - Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the student's program of study and the proposed thesis topic. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website (www.cecs.ucf.edu) and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date. Additionally, all students pursuing the thesis option must enroll in the following course: EML 5936 - Mechanical and Aerospace Seminar 0 Credit Hours Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Additional elective coursework as listed in Representative Elective section above

Grand Total Credits: 30

Track Details
Up to 12 credit hours of approved graduate level courses of grades "B" (3.0) or better may be counted toward the BS and MS degrees. Additional notes on the Accelerated Undergraduate and Graduate Program in Mechanical Engineering are as follows:
- Students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "B" (3.0) in each undergraduate and graduate engineering course for them to be counted toward the major.

Independent Learning
The Independent Learning Requirement is met by successful completion of a master's thesis for the thesis option. For nonthesis students, the independent learning experience is provided by BME 6935 - Topics in Biomedical Engineering, one of the required courses.

2022-2023 Graduate Catalog
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information
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Grad Fellowships
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https://graduate.ucf.edu/funding/

Biomedical Engineering MSBME - Biomedical Engineering MSBME, Biofluids Track
Track Website
http://www.mae.ucf.edu/

Track Contact Information
Dr. Alain Kassab
Professor
Alain.Kassab@ucf.edu
Telephone: (407) 823-5448
ENGR I, Room 381

Online Availability
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Biomedical-Engineering-MS.pdf.

Track Description
The Biofluids track in the Master of Science degree in Biomedical Engineering provides graduates with professional skills enabling them to gain employment in the biomedical engineering industry or to enter competitive Biomedical Engineering PhD research programs. Career opportunities include research, design, analysis, testing and product development in the biomedical and rehabilitation industries, in clinical engineering, and in biomedical engineering.

Current research focuses on translational research in multiscale computational fluid dynamics for cardiovascular treatment planning, lung cancer treatment planning, upper airways fluid mechanics, bioacoustics for patient monitoring and bedside diagnosis.

The Master of Science in Biomedical Engineering requires 30 credit hours at the graduate level (a combination of 5000 and 6000 level courses) and offers both thesis and nonthesis options.

Thesis students take 15 credit hours of required courses, 6 credit hours of Biofluids courses, 3 credit hours of an approved elective, and 6 credit hours of thesis.

The nonthesis option is primarily designed to meet the needs of part-time students and requires 30 credit hours of coursework. Nonthesis students take 15 credit hours of required courses, 6 credit hours of Biofluids courses, and 9 credit hours of approved electives.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
**Track Prerequisites**

A bachelor's degree in Biomedical, Mechanical or Aerospace Engineering, or a closely related discipline.

**Prerequisites for non-engineering students applying to the program**

* Or equivalent (see graduate adviser)

- Calculus with Analytic Geometry I (MAC 2311C), Calculus with Analytic Geometry II (MAC 2312), Calculus with Analytic Geometry (MAC 2313), Ordinary Differential Equations (MAP 2302)
- Engineering Analysis - Statics (EGN 3310), Engineering Analysis - Dynamics (EGN 3321), and Solid Mechanics (EGM 3601)
- Thermodynamics (EGN 3343)*
- Fluid Mechanics I (EML 4702) and Fluid Mechanics II (EML 4703)
- Heat Transfer (EML 4142)
- Modeling Methods in Mechanical and Aerospace Engineering (EML 3034C)*
- Mechanical Engineering Measurements (EML 3303C)*

* Or equivalent (see graduate adviser)

**College of Graduate Studies Contact Information**

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Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

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Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233
Degree Requirements

Required Courses
15 Total Credits

- Complete the following:
  - BME5216C - Mechanics of Biostructures I (3)
  - BME5217C - Mechanics of Biostructures II (3)
  - BME6500C - Bioinstrumentation (3)
  - BME6935 - Topics in Biomedical Engineering (3)
  - EML6211 - Continuum Mechanics (3)

Biofluids Courses
6 Total Credits

- Complete the following:
  - BME5267 - Biofluid Mechanics (3)
  - BME6268C - Applied and Computational Biofluids (3)

Representative Electives
3 Total Credits

- Complete at least 1 of the following:
  - BME5572 - Biomedical Nanotechnology (3)
  - BSC5418 - Tissue Engineering (3)
  - EEE5265 - Biomedical Effects and Applications of Electromagnetic Energy (3)
  - EEL5272 - Biomedical Sensors (3)
  - EEL5690 - Medical Robotics (3)
  - EMA5060 - Polymer Science and Engineering (3)
  - EMA5584 - Biomaterials (3)
  - EMA5588 - Biocompatibility of Materials (3)
  - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
  - EML5066 - Computational Methods in Mechanical and Aerospace Engineering (3)
  - EML5237 - Intermediate Mechanics of Materials (3)
  - EML5291 - MEMS Materials (3)
  - EML5546 - Engineering Design with Composite Materials (3)
  - EML6068 - Finite Elements in Mechanical, Materials, and Aerospace Engineering II (3)
  - EML6299 - Advanced Topics on Miniaturization (3)
  - ESI5219 - Engineering Statistics (3)
  - ESI6247 - Experimental Design and Taguchi Methods (3)
  - ESI6609 - Industrial Engineering Analytics for Healthcare (3)
  - IDS5127 - Foundation of Bio-Imaging Science (3)
  - IDS6252 - Biomedical Nanotechnology (3)
  - IDS6253 - Bioanalytical Technology (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
  - Nonthesis Option

  Complete all of the following
  - Earn at least 6 credits from the following:
    - BME6971 - Thesis (99)

  Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the student's program of study and the proposed thesis topic. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website (www.cecs.ucf.edu) and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date. Additionally, all students pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar 0 Credit Hours Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.

  - Nonthesis Option
  - Earn at least 6 credits from the following types of courses:
    - Additional elective coursework as listed in Representative Elective section above

Grand Total Credits: 30
Track Details

All students must take at least 15 credit hours at the 6000 level. At least 24 credit hours of the program of study must be course work, exclusive of research and thesis hours.

All students must identify an adviser and file an official program of study prior to the completion of 9 credit hours of study. Students should consult with the MAE Graduate Program Director for assistance in filling out their program of study. The program of study must be approved by the department. Substitutions to the program of study must be approved by the student's faculty adviser and department. More information is available on the MAE departmental website (http://www.mae.ucf.edu/).

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis for the thesis option. For nonthesis students, the independent learning experience is provided by BME 6935 - Topics in Biomedical Engineering, one of the required courses.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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https://funding.graduate.ucf.edu

Biomedical Engineering MSBME - Biomedical Engineering MSBME, Biomechanics Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information

Dr. Alain Kassab
Professor
Alain.Kassab@ucf.edu
Telephone: (407) 823-5448
ENGR I, Room 381

Online Availability

No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Biomedical-Engineering-MS.pdf.
**Track Description**

The Biomechanics track in the Master of Science degree in Biomedical Engineering provides graduates with professional skills enabling them to gain employment in the biomedical engineering industry or to enter competitive Biomedical Engineering PhD research programs. Career opportunities include research, design, analysis, testing and product development in the biomedical and rehabilitation industries, in clinical engineering, and in biomedical engineering.

The current research focus is in biomechanics, developmental dysplasia of the hip, cellular mechanics and force-induced biochemical responses, image guided surgery, surgical robotics navigation and tracking, soft robotics, and biomechanics of movement rehabilitation and neural control of movement.

The Master of Science in Biomedical Engineering requires 30 credit hours at the graduate level (a combination of 5000 and 6000 level courses) and offers both thesis and nonthesis options.

Thesis students take 15 credit hours of required courses, 6 credit hours of Biomechanics courses, 3 credit hours of an approved elective, and 6 credit hours of thesis.

The nonthesis option is primarily designed to meet the needs of part-time students and requires 30 credit hours of coursework. Nonthesis students take 15 credit hours of required courses, 6 credit hours of Biomechanics courses, and 9 credit hours of approved electives.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

A bachelor's degree in Biomedical, Mechanical or Aerospace Engineering, or a closely related discipline. A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program.

**Prerequisites for non-engineering students applying to the program**

- Calculus with Analytic Geometry I (MAC 2311C), Calculus with Analytic Geometry II (MAC 2312), Calculus with Analytic Geometry (MAC 2313), Ordinary Differential Equations (MAP 2302)
- Engineering Analysis - Statics (EGN 3310), Engineering Analysis - Dynamics (EGN 3321), and Solid Mechanics (EGM 3601)
- Thermodynamics (EGN 3343)*
- Design and Analysis of Machine Components (EML 3500)
- Introduction to Vibrations and Controls (EML 4225)
- Modeling Methods in Mechanical and Aerospace Engineering (EML 3034C)*
- Mechanical Engineering Measurements (EML 3303C)*

* Or equivalent (see graduate adviser)

**College of Graduate Studies Contact Information**

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Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
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PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Required Courses
15 Total Credits

- Complete the following:
  - BME5216C - Mechanics of Biostructures I (3)
  - BME5217C - Mechanics of Biostructures II (3)
  - BME6500C - Bioinstrumentation (3)
  - BME6935 - Topics in Biomedical Engineering (3)
  - EML6211 - Continuum Mechanics (3)

Biomechanics Courses
6 Total Credits
Complete the following:
- BME6215 - Advanced Biomechanics (3)
- EML6067 - Finite Elements in Mechanical, Materials, and Aerospace Engineering I (3)

Representative Electives
3 Total Credits

- Complete at least 1 of the following:
  - BME5572 - Biomedical Nanotechnology (3)
  - BSC5418 - Tissue Engineering (3)
  - EEE5265 - Biomedical Effects and Applications of Electromagnetic Energy (3)
  - EEL5272 - Biomedical Sensors (3)
  - EMA5060 - Polymer Science and Engineering (3)
  - EMA5584 - Biomaterials (3)
  - EMA5588 - Biocompatibility of Materials (3)
  - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
  - EML5237 - Intermediate Mechanics of Materials (3)
  - EML5291 - MEMS Materials (3)
  - EML6068 - Finite Elements in Mechanical, Materials, and Aerospace Engineering II (3)
  - EML6299 - Advanced Topics on Miniaturization (3)
  - ESI5219 - Engineering Statistics (3)
  - ESI6247 - Experimental Design and Taguchi Methods (3)
  - ESI6609 - Industrial Engineering Analytics for Healthcare (3)
  - IDS5127 - Foundation of Bio-Imaging Science (3)
  - IDS6253 - Bioanalytical Technology (3)
  - EML6067 - Finite Elements in Mechanical, Materials, and Aerospace Engineering I (3)
  - Course Not Found
  - EML6725 - Computational Fluid Dynamics and Heat Transfer I (3)
  - BME5742C - Modeling Techniques and Methodologies in Bioengineering (3)
  - BME5267 - Biofluid Mechanics (3)
  - BME6268C - Applied and Computational Biofluids (3)
  - BME6215 - Advanced Biomechanics (3)
  - BME6525 - Methods in Neural-Machine Interfaces (3)
  - EML6712 - Mechanics of Viscous Flow (3)
  - EML6726 - Computational Fluid Dynamics and Heat Transfer II (3)
  - EML6725 - Computational Fluid Dynamics and Heat Transfer I (3)
  - EAS6185 - Turbulent Flow (3)
  - EML5290 - Introduction to MEMS and Micromachining (3)
  - CAP5516 - Medical Image Computing (3)
  - OSE6111 - Optical Wave Propagation (3)
  - CAP5510 - Bioinformatics (3)
  - STA5176 - Introduction to Biostatistics (3)
  - STA5206 - Statistical Analysis (3)
  - GMS6860 - Statistics for Biomedical Scientists (3)
  - EML6067 - Finite Elements in Mechanical, Materials, and Aerospace Engineering I (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following:
        - BME6971 - Thesis (99)
      - Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the student's program of study and the proposed thesis topic. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website (www.cecs.ucf.edu) and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date. Additionally, all students pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar 0 Credit Hours Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Additional elective coursework as listed in Representative Elective section above

Grand Total Credits: 30
Track Details

All students must take at least 15 credit hours at the 6000 level. At least 24 credit hours of the program of study must be course work, exclusive of research and thesis hours.

All students must identify an adviser and file an official program of study prior to the completion of 9 credit hours of study. Students should consult with the MAE Graduate Program Director for assistance in filling out their program of study. The program of study must be approved by the department.

Substitutions to the program of study must be approved by the student's faculty adviser and department. More information is available on the MAE departmental website (http://www.mae.ucf.edu/).

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis for the thesis option. For nonthesis students, the independent learning experience is provided by BME 6935 - Topics in Biomedical Engineering, one of the required courses.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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https://graduate.ucf.edu/funding/

Biomedical Engineering MSBME - Biomedical Engineering MSBME, MD/MSBME Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information

Dr. Alain Kassab
Professor
Alain.Kassab@ucf.edu
Telephone: (407) 823-5448
ENGR I, Room 381

Online Availability
No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Biomedical-Engineering-MS.pdf.
**Track Description**

The Biomedical Engineering MS program offers an MD/MSBME Track that enables qualified students to earn both the MD and the MSBME degrees.

For medical students, the combined MD/MSBME will run as a 5-year program where the students will complete the majority of the MSBME requirements in the third year after matriculation, prior to their clinical experiences. MD students apply and are admitted into the MSBME program in Fall. Upon successful completion of the Structure and Function and FIRE modules in their first year of medical school, students in the MD/MSBME program will receive 9 hours of credit toward the 30 credit hours required for the requirements of the MSBME degree. Medical students will complete the second year of the curriculum and take a year's leave of absence to take most of the MSBME degree requirements.

The Biomedical Engineering MS program requires a minimum of 30 credit hours for students who choose the MD/MSBME track. In this restricted admission MD track, students complete biomedical engineering core courses, concentration courses in Biofluids or Biomechanics, and a thesis.

For MD students in this track, the combined MD/MSBME will be a five-year program, where students complete the majority of the MSBME requirements in the third year (15 credit hours of coursework and 3 credit hours of thesis), receive 9 credit hours of transfer credit from their MD program toward the 30 credit hours required for the MSBME, defend their master's thesis and take the balance of 3 credit hours of thesis in the fifth year, and then graduate with both MD and MSBME degrees.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

Students interested in pursuing both the MD and MSBME degrees must apply and be accepted into medical school and the Biomedical Engineering MS program. Separate applications are required, but students wishing to pursue this joint degree program should indicate this and state their reasons on both applications. Information regarding admission and application to UCF’s MD program can be found at [https://med.ucf.edu/administrative-offices/student-affairs/admissions/](https://med.ucf.edu/administrative-offices/student-affairs/admissions/).

A bachelor's degree in Biomedical, Mechanical or Aerospace Engineering, or a closely related discipline is required. A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program.

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**College of Graduate Studies Contact Information**

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Graduate Admissions

**Mailing Address**

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PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core Courses
18 Total Credits

- Complete all of the following
  - Complete the following:
    - BMS6001 - Cellular Function and Medical Genetics (5)
    - BME6500C - Bioinstrumentation (3)
    - BME6935 - Topics in Biomedical Engineering (3)
    - EML6211 - Continuum Mechanics (3)
  - Earn at least 4 credits from the following:
    - BSC6433 - Biomedical Sciences II (5)
  - replace BME 5216C and BME 5217C (9 credit hours transferred into MS program of study)

Concentration
6 Total Credits

- Complete 1 of the following
  - Biofluids
    - Complete the following:
      - BME5267 - Biofluid Mechanics (3)
      - BME6268C - Applied and Computational Biofluids (3)
  - Biofluids
    - Complete the following:
      - BME5267 - Biofluid Mechanics (3)
      - BME6268C - Applied and Computational Biofluids (3)

Thesis
6 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - BME6971 - Thesis (99)
  - Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the student's program of study and the proposed thesis topic. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website (www.cecs.ucf.edu) and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date. Additionally, all students pursuing the thesis option must enroll in the following course: EML 5936 - Mechanical and Aerospace Seminar 0 Credit Hours Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.

Grand Total Credits: 30

Track Details

All students must take at least 15 credit hours at the 6000 level. At least 24 credit hours of the program of study must be course work, exclusive of research and thesis hours.

All students must identify an adviser and file an official program of study prior to the completion of 9 credit hours of study. Students should consult with the MAE Graduate Program Director for assistance in filling out their program of study. The program of study must be approved by the department.

Substitutions to the program of study must be approved by the student's faculty adviser and department. More information is available on the MAE departmental website (http://www.mae.ucf.edu/).

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis.
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information
Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Biomedical Engineering PhD

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Program Website
https://mae.ucf.edu/bmephd/

Program Contact Information
Alain J. Kassab, PhD
Professor
Alain.kassab@ucf.edu
Telephone: 407-823-5778
ENGR1 – 381F

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensing-Board-Contact-Info-Engineering.pdf.
Program Description

The Doctor of Philosophy degree in Biomedical Engineering trains and prepares graduates for successful careers in research and development in the biomedical industry, in academia, and in government research laboratories and agencies. The PhD in Biomedical Engineering graduates will have the advanced ability to apply their knowledge of mathematics, engineering, and science to formulate and solve relevant biomedical engineering problems and conduct high-quality research at the interface of engineering and medicine, the ability to communicate scientific and technical research effectively in writing and oral presentations, and the ability to conduct independent cutting-edge research and contribute to the existing body of knowledge.

The Doctor of Philosophy degree in Biomedical Engineering is intended for students with a master’s or a bachelor’s degree in Biomedical Engineering (BSBME), BS in Aerospace Engineering (BSAE), BS in Mechanical Engineering (BSME), Materials Science and Engineering, Chemical Engineering or a closely related discipline.

The PhD in BME degree offers the following gateways into the program:

- a PhD in BME for students with formal training in engineering or biomedical engineering who have earned an MS degree and are seeking higher level graduate education and research training.
- a PhD in BME with a MSBME along-the-way to engineering students who are admitted into the PhD program with a BS in biomedical engineering, mechanical engineering, aerospace engineering or a closely related discipline.

Program Prerequisites

For students who apply without a Biomedical Engineering BS or Mechanical Engineering BS, the following lists the minimum requirement of undergraduate coursework that must be successfully completed prior to consideration for admission to the program.

Students must have completed the mathematics foundations which includes the Calculus sequence through Differential Equations, Physics with Calculus foundations, and a programming course:

- Calculus I, II, III
- Differential equations
- Physics with Calculus I and II
- Programming language (Matlab, C, C++, Python, etc.)

And students must have completed courses from at least three of the following areas:

- Statics or Dynamics
- Thermodynamics, heat transfer, or fluid mechanics
- Engineering materials, solid mechanics, or biomechanics
- Engineering mathematics or statistics
- Electrical circuits, electronics, or signal processing

Students that do not meet the above criteria should specify their plans to complete these requirements prior to admission or outline how other non-didactic experiences could substitute for these requirements. Students who do not meet admission requirements may be conditionally admitted, whereby they would be required to articulate this required coursework during their first year of study. Courses taken to meet these requirements would not count towards their graduate degree.

Additional courses may be required to correct deficiencies. Students should contact the BME Graduate Program Director for more information.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Core Courses

21 Total Credits

- Complete the following:
  - BME5216C - Mechanics of Biostructures I (3)
  - BME5217C - Mechanics of Biostructures II (3)
- BME6500C - Bioinstrumentation (3)
- BME6935 - Topics in Biomedical Engineering (3)
- BME6231 - Continuum Biomechanics (3)
- BME5742C - Modeling Techniques and Methodologies in Bioengineering (3)
- ESI5219 - Engineering Statistics (3)

Representative Elective Courses

36 Total Credits

- Complete all of the following
  - Earn at least 36 credits from the following:
    - BME5267 - Biofluid Mechanics (3)
    - BME6268C - Applied and Computational Biofluids (3)
    - BME6215 - Advanced Biomechanics (3)
    - BME5572 - Biomedical Nanotechnology (3)
    - BME6525 - Methods in Neural-Machine Interfaces (3)
    - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
    - EML5237 - Intermediate Mechanics of Materials (3)
    - EML6067 - Finite Elements in Mechanical, Materials, and Aerospace Engineering I (3)
    - EML6068 - Finite Elements in Mechanical, Materials, and Aerospace Engineering II (3)
    - EML6725 - Computational Fluid Dynamics and Heat Transfer I (3)
    - EML6726 - Computational Fluid Dynamics and Heat Transfer II (3)
    - EML6712 - Mechanics of Viscous Flow (3)
    - EAS6185 - Turbulent Flow (3)
    - EML5291 - MEMS Materials (3)
    - EML6299 - Advanced Topics on Miniaturization (3)
    - EMA5584 - Biomaterials (3)
    - EMA5588 - Biocompatibility of Materials (3)
    - EMA5060 - Polymer Science and Engineering (3)
    - EEL5272 - Biomedical Sensors (3)
    - EEE5265 - Biomedical Effects and Applications of Electromagnetic Energy (3)
    - CAP5510 - Bioinformatics (3)
    - CAP5516 - Medical Image Computing (3)
    - IDS5127 - Foundation of Bio-Imaging Science (3)
    - IDS6253 - Bioanalytical Technology (3)
    - ESI5219 - Engineering Statistics (3)
    - ESI6247 - Experimental Design and Taguchi Methods (3)
    - ESI6609 - Industrial Engineering Analytics for Healthcare (3)
    - BSC5418 - Tissue Engineering (3)
    - STA5176 - Statistical Analysis (3)
    - STA5206 - Statistical Analysis (3)
    - GMS6860 - Statistics for Biomedical Scientists (3)
    - BME6908 - Independent Study (1 - 99)
    - OSE6111 - Optical Wave Propagation (3)

- Students can also take BME 7919 - Doctoral Research as part of their available Electives.

Qualifying Examination

0 Total Credits

- The Biomedical Engineering (BME) PhD Qualifying Examination (QE) is structured as a proposal-based examination. This format is to evaluate the topical and technical skills of the student required to conduct the proposed research. This proposal is to be a reflection of the student’s work and understanding. This examination is taken within the first two years into the PhD in BME program and must be successfully completed prior to the Candidacy Examination and Dissertation Proposal Defense.

Candidacy and Dissertation Defense Examinations

0 Total Credits

- In addition to the Qualifying Examination discussed above, the student must pass a Candidacy Examination and a Dissertation Defense Examination. The Candidacy Examination is taken near the end of the course work and consists of a written and oral presentation of a research proposal. The MAE department requires that a PhD student submits the candidacy exam the academic semester immediately following successfully passing the PhD Qualifying Exam.

Dissertation

15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - BME 7980 - Doctoral Dissertation

MAE Department Graduate Seminar Requirement

0 Total Credits

- EML 5090 is a zero (0) credit hour (S/U) course that is offered each fall and spring academic semesters. Prior to graduation, all MAE graduate students who are pursuing a PhD dissertation are required to register, participate, and receive a satisfactory (S) for four (4) semesters of MAE Graduate seminar, with at least two of these taken prior to candidacy.

2022-2023 Graduate Catalog
Grand Total Credits: 72

Program Details

The Doctor of Philosophy degree in Biomedical Engineering requires successful completion of a minimum of 72 credit hours at the graduate level beyond the BS (a combination of 5000, 6000, and 7000 level classes) and the successful defense of a PhD dissertation. Specifically, the PhD in BME program requires:

1. 57 hours coursework beyond the BS (comprised of a minimum of 27 hours of formal coursework exclusive of Independent Study (BME 6908), dissertation, and doctoral research hours, and 15 hours Doctoral Dissertation. At least one-half of the credit hours used to meet program requirements must be in 6000-level or 7000-level courses, including the allowed number of research and dissertation hours

2. Successful completion of the BME PhD Qualifying Examination.

3. Successful completion of the Candidacy examination.


5. Completion of four (4) zero credit hour MAE Seminars.

Because biomedical engineering is highly interdisciplinary and covers many areas of science and engineering, the specialized training of PhD in BME is best suited by a curriculum that has a strong foundation of required courses complemented by a rich number of Representative Electives which enables tailored education that best suits the research specialization of the PhD student. The curriculum consists of a core set of 7 required courses (21 hours) and an additional 12 elective courses (36 hours). The additional 12 elective courses could include independent study and directed research but must include a minimum of 6 hours of formal coursework chosen from a selection of graduate elective courses.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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https://graduate.ucf.edu/funding/

Civil Engineering MS

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Program Website
http://www.cece.ucf.edu/graduate

Program Handbook Link
Civil Engineering MS
Program Contact Information

Andrew Randall, Ph.D., P.E.
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MS.pdf.

Program Description

The Civil Engineering MS degree program reflects the very broad nature of the field, which encompasses the design, construction, and enhancement of the infrastructure of society. The program offers tracks in Smart Cities, Structural and Geotechnical Engineering, Transportation Systems Engineering, and Water Resources Engineering. Course work includes structural analysis and design, geotechnical engineering and foundations, transportation planning and operations, traffic engineering, construction engineering, and water resources engineering. Please scroll to the bottom of this page for further details on these tracks.

Faculty research interests include geotechnical studies of subsurface conditions, soil testing "superpave" mix design, intelligent transportation systems, traffic safety, structural dynamics, nonlinear structural analysis and software development, reinforced concrete, construction engineering, hydraulic modeling, coastal ocean modeling, stormwater management, and watershed management. Students completing the program find positions in consulting firms, construction, and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

The MS degree offers both thesis and nonthesis options with each requiring 30 credit hours of acceptable graduate work. The thesis option requires a 6 credit hour thesis project and the nonthesis option requires an additional 6 credit hours of electives and an end-of-program portfolio submission.

Make sure and contact your track/program’s coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Individual, independent research studies may be required in one or more courses. The research study and report will focus on reviewing and analyzing contemporary research in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area. In addition, students may engage in six credit hours of independent study during their studies.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Calculus and Differential Equations must be passed prior to applying to our Graduate Programs in all Tracks except Smart Cities. See your program for more information on other prerequisites.

1. MAC 2311 Calculus with Analytical Geometry 1
2. MAC 2312 Calculus with Analytical Geometry 2
3. MAC 2313 Calculus with Analytical Geometry 3
4. MAP 2302 Ordinary Differential Equations 1

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-5692
Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Civil Engineering MS - Civil Engineering MS, Smart Cities Track

Track Website
http://www.cece.ucf.edu/

Track Handbook
Civil Engineering MS

Track Contact Information
Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

Online Availability
Yes

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MS.pdf.
Track Description

In 2017, FUTURe CITy initiative was launched by the College of Engineering and Computer Science (CECS) and Civil, Environmental, and Construction Engineering (CECE) Department. FUTURe CITy initiative at UCF brings together a group of researchers and educators with a vision to synergistically explore the wide-ranging technological advances towards better serving urban residents. The initiative is a pioneering effort in the state and country. It is geared toward many aspects of CECE including: Smart transportation, Smart and resilient infrastructure, Smart and technological advancements in environmental engineering, and water resources.

The track is designed to help future Civil and Environmental Engineers to learn and adapt to the new challenges in the field of Smart Cities and be prepared for their professional roles through a state-of-the-art education. Elements of the track will bridge some of the gaps with other engineering disciplines and open the door for students to collaborate on research and education that are relevant to the cities of the future.

The Smart City Track in the Civil Engineering MS program is for students with appropriate science or engineering baccalaureate backgrounds. Both thesis and non-thesis options are available with each requiring 30 credit hours. The thesis option requires 3 credit hours of required course work, 9 credit hours of Core courses, 12 credit hours of elective graduate course work exclusive of thesis and research, and a thesis (6 credit hours). The non-thesis option requires 3 credit hours of required course work, 15 credit hours of required graduate Core courses, 12 credit hours of electives, and submission of an end-of-program portfolio. Each student must have an individual program of study approved by his/her faculty committee and have completed all required articulation course work as described below. At least one-half of the required credits must be taken at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

A Bachelor of Science degree in civil engineering or another closely related engineering degree. Applicants who are applying to the programs without a directly related undergraduate degree should closely check the prerequisites. Additional undergraduate courses may be required.

Applicants do not need to have Calculus 1 to 3 and Differential Equations to apply though it is preferred.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Course
3 Total Credits

- Complete the following:
  - CGN5341 - Interdisciplinary Introduction to Smart Cities' Applications (3)

Core Courses
9 Total Credits

- Complete at least 3 of the following:
  - CCE5220 - Sustainable Infrastructure Systems (3)
  - CEG6610 - Smart Underground Structures: Tunnels and Shafts (3)
  - CES6876 - Smart City Built Infrastructure (3)
  - CGN5617 - Infrastructure Systems Optimization and Identification (3)
  - CGN6342 - Modeling Human Behavior with Emerging Data (3)
  - CGN6343 - Cyber-Physical Systems and Smart Cities (3)
  - ENV6128 - Smart Air Quality Monitoring and Air Pollution Control (3)
  - ENV6533 - Smart Water and Wastewater Management (3)
  - STA5703 - Data Mining Methodology I (3)
  - TTE5531 - Active Mobility and Technologies: Synergy and Challenges (3)
  - TTE5532 - Policy Aspects of Smart City Transportation (3)
  - TTE6533 - Mobility in Smart Cities: Technologies and Application Areas (3)
- TTE6275 - Connected and Autonomous Vehicles (3)
- TTE6608 - Algorithms and Models for Smart Cities (3)
- CGN5340 - Internet of Things: Applications in Smart Cities (3)

Elective Courses
12 Total Credits

- Complete at least 4 of the following:
  - CAP5415 - Computer Vision (3)
  - CAP5610 - Machine Learning (3)
  - CAP5738 - Visualization Techniques for Data Analysis (3)
  - CEN5016 - Software Engineering (3)
  - CGN6655 - Regional Planning, Design, and Development (3)
  - EEL5825 - Machine Learning and Pattern Recognition (3)
  - EEL6026 - Optimization of Engineering Systems (3)
  - EEL6671 - Modern and Optimal Control Systems (3)
  - EEL6683 - Cooperative Control of Networked Autonomous Systems (3)
  - EMA5104 - Intermediate Structure and Properties of Materials (3)
  - EMA5504 - Modern Characterization of Materials (3)
  - EMA6626 - Mechanical Behavior of Materials (3)
  - HMG6449 - Smart Travel and Tourism (3)
  - PAD5337 - Urban Design (3)
  - PAD5930 - Global Cities (3)
  - PAD5356 - Managing Community and Economic Development (3)
  - PAD6339 - Housing Development and Planning (3)
  - PAD6387 - Transportation Policy (3)
  - PAD6716 - Information Systems for Public Managers and Planners (3)
  - STA5104 - Advanced Computer Processing of Statistical Data (3)
  - STA5206 - Statistical Analysis (3)
  - STA5825 - Stochastic Processes and Applied Probability Theory (3)
  - STA6704 - Data Mining Methodology II (3)
  - STA6707 - Multivariate Statistical Methods (3)
  - STA6709 - Spatial Statistics (3)
  - TTE6270 - Intelligent Transportation Systems (3)
  - TTE6667 - Discrete Choice Modeling in Transportation (3)
  - URP6711 - Sustainable Transportation Planning (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - XXX 6971 - Thesis A successful defense of the thesis is required. In addition, the College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Portfolio Requirement Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website. Make sure and contact your track/program's coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30
Track Details

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area.

Equipment Fee

Students in the Civil Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

Independent Learning

A research or design project serves as the independent learning experience for thesis students. Non-thesis students are required to take at least one of the courses marked with an asterisk (*), denoting an independent learning experience, and submission of an end-of-program portfolio.

Financial Information

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http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Civil Engineering MS - Civil Engineering MS, Structural and Geotechnical Engineering Accelerated BS to MS Track

Track Website
http://www.cece.ucf.edu/

Track Handbook
Civil Engineering MS
Track Contact Information

Andrew Randall PhD PE  
Professor  
Graduate Program Director  
andrew.randall@ucf.edu  
Telephone: 407-823-6429  
Engineering II, 211-L

TBD  
Graduate Student Services Coordinator  
Engineering II, 211-K  

Only works with undergraduate students to gain admission to the accelerated program:

Anna Canlon, M.Ed  
Academic Advisor III  
Anna Canlon@ucf.edu  
Telephone: 407-823-2455

Online Availability  
Yes

Licensure Disclosure  
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MS.pdf.

Track Description  
The Structural and Geotechnical Engineering Accelerated BS to MS track in the Civil Engineering MS program reflects the very broad nature of the field, which encompasses the design, construction, and enhancement of the structural and geotechnical infrastructure of society.

The program allows highly qualified undergraduate majors in Civil Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

The program's course work focuses on structural analysis and design, and geotechnical engineering and foundations, but may include electives in transportation planning and operations, traffic engineering, construction engineering, and water resources engineering.

Faculty research interests include geotechnical studies of subsurface conditions, soil testing "superpave" mix design, intelligent transportation systems, traffic safety, structural dynamics, nonlinear structural analysis and software development, reinforced concrete, construction engineering, hydraulic modeling, coastal ocean modeling, stormwater management, and watershed management. Students completing the program find positions in consulting firms, construction, and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

Curriculum  
The department offers a Structural and Geotechnical Engineering Accelerated BS to MS track in the Civil Engineering MS program to students with appropriate science or engineering baccalaureate backgrounds. See undergraduate engineering major requirements in the Undergraduate Catalog. Both a thesis option and a nonthesis option are available with each requiring 30 credit hours. The thesis option requires 12 credit hours of required courses, 12 credit hours of elective graduate course work (exclusive of thesis and research), and 6 credit hours of thesis. The nonthesis option requires 12 credit hours of required courses and 18 credit hours of elective graduate course work. The nonthesis option also requires submission of an end-of-program portfolio. The student must develop an individual program of study with a faculty adviser and must have background or articulation course work as described below. At least one-half of the required credits must be taken at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Track Prerequisites
Calculus and Differential Equations must be passed *prior to applying* to our Graduate Programs

1. MAC 2311 Calculus with Analytical Geometry 1
2. MAC 2312 Calculus with Analytical Geometry 2
3. MAC 2313 Calculus with Analytical Geometry 3
4. MAP 2302 Ordinary Differential Equations 1

Prerequisites (Articulation)

- CEG 4012 Geotechnical Engineering 2 (3 hours) Taught in Fall and Spring
- CEG 4203 Geotechnical Engineering Methods and Case Histories (3 hours) Taught in Fall only
- CES 4605 Steel Structures (3 hours) Taught in Fall and Spring
- CES 4702 Reinforced Concrete Structures (3 hours) Taught in Fall and Spring

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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  Geotechnical Engineering
  - Complete at least 2 of the following:
    - CEG6065 - Soil Dynamics (3)
    - CEG6115 - Foundation Engineering (3)
    - CEG6317 - Advanced Geotechnical Engineering (3)
    - TTE5835 - Pavement Engineering (3)
    - CGN5506 - Advanced Pavement and Civil Engineering Materials (3)

Structural Engineering

- Complete at least 2 of the following:
  - CES5144 - Matrix Methods for Structural Analysis (3)
  - CES5606 - Advanced Steel Structures (3)
  - CES5706 - Advanced Reinforced Concrete (3)
  - CES5821 - Masonry and Timber Design (3)
  - CES6010 - Structural Reliability (3)
  - CES6116 - Finite Element Structural Analysis (3)
  - CES6209 - Dynamics of Structures (3)
  - CES6220 - Wind and Earthquake Engineering (3)
  - CES6230 - Advanced Structural Mechanics (3)
  - CES6527 - Nonlinear Structural Analysis (3)
  - CES6715 - Prestressed Concrete Structures (3)

Non Thesis Students - Required Course Selection
0 Total Credits

- The following courses represent those with specific independent learning experiences and ALL NONTHESES STUDENTS MUST CHOOSE ONE of the courses from each group: Geotechnical Engineering CEG 5700 - Geo-Environmental Engineering CEG 6115 - Foundation Engineering CES 6170 Structural Engineering CES 5606 - Advanced Steel Structures CES 5706 - Advanced Reinforced Concrete CES 6715 - Prestressed Concrete Structures

Elective Courses
12 Total Credits

- Complete all of the following
  - Complete at least 4 of the following:
All students, both thesis and nonthesis, must complete at least 12 credit hours of approved electives (primarily from
the above two required course groups but also from the list above or other courses as approved by the student's
adviser). Please note that Directed Research (XXX 6918) is not permitted in the MS program of study.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following

  Thesis Option
  - Earn at least 6 credits from the following types of courses:
    XXX 6971 - Thesis Successful performance in a final defense of the thesis is required. In addition, the College of
    Engineering and Computer Science requires that all thesis defense announcements be approved by the student’s
    adviser and posted on the college’s website and on the university-wide Events Calendar at the College of Graduate
    Studies website at least two weeks before the defense date.

  Nonthesis Option

  - Complete all of the following

    Earn at least 6 credits from the following types of courses:
    Nonthesis students must complete 6 additional credit hours of electives from the lists above or other courses
    as approved by the student’s adviser. Please note that at least one course in the nonthesis program of study
    must be one of the courses in the section below: “Required Course Selection”, which denotes that this course
    provides an independent learning experience (marked by an asterisk) for the student.
    - Portfolio Requirement Students are required to complete a culminating experience. The culminating
      experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements
      are listed on the CECE website. Make sure and contact your programs coordinator early in your graduating
      semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services
      Coordinator should be able to tell you who the coordinator is for your degree program if you do not already
      know.

Grand Total Credits: 30

Track Details

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing
contemporary research or engineering issues in a student’s particular specialization within the profession in order to help students
acquire knowledge and skills pertaining to research-based best practices in that specialization area.

Equipment Fee

Students in the Civil Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay
$8 per semester.

Independent Learning

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to
take at least one of the courses designated in the “Non Thesis Students - Required Course Selection” section above, denoting an
independent learning experience, and submission of an end-of-program portfolio.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more
information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF
and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is
another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Civil Engineering MS - Civil Engineering MS, Structural and Geotechnical Engineering Track

Track Website
http://www.cece.ucf.edu/graduate

Track Handbook
Civil Engineering MS

Track Contact Information

Andrew Randall Ph.D., P.E.
Professor
Graduate Program Director
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Online Availability
Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MS.pdf.

Track Description

The Structural and Geotechnical Engineering track in the Civil Engineering MS program focuses on the engineering, analysis, design, and construction of the built infrastructure. The track emphasizes both: the above-ground engineering (primarily structures), the below-ground engineering (primarily geotechnical), as well as the interaction between the two systems. The program’s course work focuses on structural analysis and design, mechanics and materials, foundations, characterization of soils and geomaterials, and computational modeling in structural and geotechnical engineering. Faculty research interests include geotechnical studies of subsurface conditions, soil characterization and testing, pavement design, retaining structures, structural dynamics, nonlinear structural analysis and software development, reinforced and prestressed concrete design, bridge engineering, and pavements. Students completing the program find positions in consulting firms, design companies, construction, and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

Curriculum

The department offers a Structural and Geotechnical Engineering track in the Civil Engineering MS program to students with appropriate science or engineering baccalaureate backgrounds. Both a thesis option and a non-thesis option are available with each requiring 30 credit hours. The thesis option requires 12 credit hours of required courses, 12 credit hours of elective graduate course work (exclusive of thesis and research), and 6 credit hours of thesis. The nonthesis option requires 12 credit hours of required courses and 18 credit hours of elective graduate course work. The nonthesis option also requires the submission of an end-of-program portfolio. The student must develop an individual program of study with a faculty adviser and must have background or articulation course work as described below. At least one-half of the required credits must be taken at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Track Prerequisites

Research studies or projects are required in one or more courses.

Calculus and Differential Equations must be passed *prior to applying* to our Graduate Programs

1. MAC 2311 Calculus with Analytical Geometry 1
2. MAC 2312 Calculus with Analytical Geometry 2
3. MAC 2313 Calculus with Analytical Geometry 3
4. MAP 2302 Ordinary Differential Equations 1

Prerequisites (Articulation)

- CEG 4012 Geotechnical Engineering 2 (3 hours) Taught in Fall and Spring
- CEG 4203 Geotechnical Engineering Methods and Case Histories (3 hours) Taught in Fall only
- CES 4605 Steel Structures (3 hours) Taught in Fall and Spring
- CES 4702 Reinforced Concrete Structures (3 hours) Taught in Fall and Spring

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-5692
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

- 12 Total Credits

  - Complete all of the following
    - Geotechnical Engineering
      - Earn at least 6 credits from the following types of courses:
        - CEG 6115 - Foundation Engineering 3 Credit Hours
        - CEG 6515 - Retaining Structures and Slope Stability 3 Credit Hours
        - Any CES 5xxx or 6xxx course
    - Structural Engineering
      - Earn at least 6 credits from the following types of courses:
        - CES 5144 - Matrix Methods for Structural Analysis 3 Credit Hours
        - CES 6116 - Finite Element Structural Analysis 3 Credit Hours
        - Any CEG 5xxx or 6xxx course

**Elective Courses**

- 12 Total Credits

  - Complete all of the following
    - Earn at least 12 credits from the following types of courses:
      - All students, both thesis and nonthesis, must complete at least 12 credit hours of approved electives (primarily from the above two groups but also from the list below or other courses as approved by the student’s adviser). Please note that Directed Research (XXX 6918) is not permitted in the MS program of study.
      - Any CEG 5xxx or CEG 6xxx course
      - Any CES 5xxx or CES 6xxx course
      - TTE 5835 – Pavement Engineering 3 Credit Hours
      - CGN 5506 – Advanced Pavement and Civil Engineering Materials 3 Credit Hours

**Thesis/Nonthesis Option**

- 6 Total Credits

  - Complete 1 of the following
    - Thesis Option
      - Earn at least 6 credits from the following types of courses:
        - XXX 6971 - Thesis
        - Successful performance in a final defense of the thesis is required. In addition, the College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student’s adviser and posted on the college’s website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
    - Nonthesis Option
      - Complete all of the following
        - Earn at least 6 credits from the following types of courses:
          - Nonthesis students must complete 6 additional credit hours of electives from the lists above or other courses as approved by the student’s adviser. Please note that at least one course in the nonthesis program of study must be one of the courses in the section below: “Required Course Selection”, which denotes that this course provides an independent learning experience (marked by an asterisk) for the student.
          - Portfolio Requirement Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website.

**Grand Total Credits:** 30

**Track Details**

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student’s particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area.

**Equipment Fee**

Students in the Civil Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

**Independent Learning**

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses designated in the “Non Thesis Students - Required Course Selection” section above, denoting an independent learning experience, and submission of an end-of-program portfolio.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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2022-2023 Graduate Catalog
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Civil Engineering MS - Civil Engineering MS, Transportation Systems Engineering Accelerated BS to MS Track

Track Website
http://www.cece.ucf.edu/

Track Handbook
Civil Engineering MS

Track Contact Information

Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Only works with undergraduate students to gain admission to the accelerated program:

Anna Canlon, M.Ed
Academic Advisor III
Anna.Canlon@ucf.edu
Telephone: 407-823-2455

Online Availability
Yes

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil_Engineering-MS.pdf.

Track Description

The Transportation Systems Engineering Accelerated BS to MS track in the Civil Engineering MS program reflects the very broad nature of the field, which encompasses the design, construction, and enhancement of the transportation infrastructure of society. The program's course work focuses on transportation planning and operations, traffic engineering and construction engineering.

The program allows highly qualified undergraduate majors in Civil Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

Faculty research interests include intelligent transportation systems, traffic safety, traffic signal design, and construction engineering. Students completing the program find positions in consulting firms, construction, and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

The Transportation Systems Engineering Accelerated BS to MS track in the Civil Engineering MS program is for students with appropriate science or engineering baccalaureate backgrounds. See undergraduate engineering major requirements in the Undergraduate Catalog.

Both a thesis option and a nonthesis option are available with each requiring 30 credit hours of graduate courses. The thesis option requires 15 credit hours of required courses, 9 credit hours of elective courses (exclusive of thesis and research), and a thesis (6 credit hours). The nonthesis option requires 15 credit hours of required courses and 15 credit hours of elective graduate course work. The nonthesis option also requires submission of an end-of-program portfolio. The student must develop an individual program of study with a faculty adviser and must have background or articulation course work as described below. At least one-half of the required credits must be taken at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Track Prerequisites

A Bachelor of Science degree in civil engineering or another closely related engineering degree from UCF. Applicants who are applying to the programs without a directly related undergraduate degree should closely check the prerequisites. Additional undergraduate courses may be required.

Calculus and Differential Equations must be passed prior to applying to our Graduate Programs:

MAC 2311 Calculus with Analytical Geometry 1
MAC 2312 Calculus with Analytical Geometry 2
MAC 2313 Calculus with Analytical Geometry 3
MAP 2302 Ordinary Differential Equations 1

Prerequisites

- STA 3032 - Probability and Statistics for Engineers 3 Credit Hours
- TTE 3810 - Transportation Engineering 3 Credit Hour

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-5692
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
15 Total Credits

- Complete all of the following
  - Complete at least 4 of the following:
    - TTE5204 - Traffic Engineering (3)
    - TTE6205 - Highway Capacity (3)
    - TTE5805 - Geometric Design of Transportation Systems (3)
    - TTE5835 - Pavement Engineering (3)
    - TTE6256 - Traffic Operations (3)
    - TTE6270 - Intelligent Transportation Systems (3)
    - TTE6270 - Intelligent Transportation Systems (3)
    - TTE6526 - Planning and Design of Airports (3)
    - CGN6655 - Regional Planning, Design, and Development (3)
  - Complete at least 1 of the following:
    - ESI5219 - Engineering Statistics (3)
    - STA5206 - Statistical Analysis (3)

Non Thesis Students - Required Course Selection
0 Total Credits

- The following courses represent those with specific independent learning experiences and ALL NONTHESES STUDENTS MUST CHOOSE ONE of the courses from: TTE 5204 - Traffic Engineering TTE 5805 - Geometric Design of Transportation Systems TTE 6256 - Traffic Operations TTE 6315 - Traffic Safety Analysis TTE 6526 - Planning and Design of Airports

Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  All students, both thesis and nonthesis, must complete at least 9 additional credit hours of approved electives from the required courses above or other courses as approved by the student's adviser. Directed Research (XXX 6918) is not permitted in the MS program of study.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
  - Earn at least 6 credits from the following types of courses:
    TTE 6971 - Thesis A final defense of the thesis is required. In addition, the College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's advisor and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
    - Nonthesis Option
  - Complete all of the following
    - Earn at least 6 credits from the following types of courses:
      Two additional electives, which should preferably come from the above list, although other courses may be chosen with adviser's consent.
      - Portfolio Requirement Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website. Make sure and contact your program's coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30

Track Details

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student's particular specialization within the profession in order to help students independently acquire knowledge and skills pertaining to best practices in that specialization area.

Equipment Fee

Students in the Civil Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

Independent Learning

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses designated in the "Non Thesis Students - Required Course Selection" section above, denoting an independent learning experience, and submission of an end-of-program portfolio.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Civil Engineering MS - Civil Engineering MS, Transportation Systems Engineering Track

Track Website
http://www.cece.ucf.edu/graduate

Track Handbook
Civil Engineering MS

Track Contact Information

Andrew Randall Ph.D., P.E.
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Online Availability
Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MS.pdf.
**Track Description**

The Transportation Systems Engineering track in the Civil Engineering MS program reflects the very broad nature of the field, which encompasses the design, and enhancement of the transportation infrastructure of society. The program's course work focuses on transportation planning and traffic engineering.

Faculty research interests include intelligent transportation systems, traffic safety, and traffic signal design. Students completing the program find positions in consulting firms, and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

The Transportation Systems Engineering track in the Civil Engineering MS program is for students with appropriate science or engineering baccalaureate backgrounds. Both a thesis option and a nonthesis option are available with each requiring 30 credit hours of graduate courses. The thesis option requires 15 credit hours of required courses, 9 credit hours of elective courses (exclusive of thesis and research), and a thesis (6 credit hours). The nonthesis option requires 15 credit hours of required courses and 15 credit hours of elective graduate course work. The nonthesis option also requires submission of an end-of-program portfolio. The student must develop an individual program of study with a faculty adviser and must have background or articulation course work as described below. At least one-half of the required credits must be taken at the 6000 level.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

A Bachelor of Science degree in civil engineering or another closely related engineering degree. Applicants who are applying to the programs without a directly related undergraduate degree should closely check the prerequisites. Additional undergraduate courses may be required.

Calculus and Differential Equations must be passed prior to applying to our Graduate Programs

- MAC 2311 Calculus with Analytical Geometry 1
- MAC 2312 Calculus with Analytical Geometry 2
- MAC 2313 Calculus with Analytical Geometry 3
- MAP 2302 Ordinary Differential Equations 1

**Prerequisites**

- STA 3032 - Probability and Statistics for Engineers 3 Credit Hours
- TTE 3810 - Transportation Engineering 3 Credit Hours

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-5692  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233
Degree Requirements

Required Courses
15 Total Credits

- Complete all of the following
  - Complete at least 4 of the following:
    - TTE5204 - Traffic Engineering (3)
    - TTE5805 - Geometric Design of Transportation Systems (3)
    - TTE5835 - Pavement Engineering (3)
    - TTE6205 - Highway Capacity (3)
    - TTE6256 - Traffic Operations (3)
    - TTE6270 - Intelligent Transportation Systems (3)
    - TTE6275 - Connected and Autonomous Vehicles (3)
    - TTE6315 - Traffic Safety Analysis (3)
    - TTE6526 - Planning and Design of Airports (3)
    - TTE6625 - Mass Transportation Systems (3)
    - TTE6667 - Discrete Choice Modeling in Transportation (3)
    - CGN6655 - Regional Planning, Design, and Development (3)
  - Complete at least 1 of the following:
    - ESI5219 - Engineering Statistics (3)
    - STA5206 - Statistical Analysis (3)

Non Thesis Students - Required Course Selection
0 Total Credits

- The following courses represent those with specific independent learning experiences and ALL NONTHESS STUDENTS MUST CHOOSE ONE of the courses from: TTE 5204 - Traffic Engineering TTE 5805 - Geometric Design of Transportation Systems TTE 6256 - Traffic Operations TTE 6315 - Traffic Safety Analysis TTE 6526 - Planning and Design of Airports

Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  - All students, both thesis and nonthesis, must complete at least 9 additional credit hours of approved electives from the required courses above or other courses as approved by the student's adviser. Directed Research (XXX 6918) is not permitted in the MS program of study.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - TTE 6971 - Thesis A final defense of the thesis is required. In addition, the College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's advisor and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - Two additional electives, which should preferably come from the above list, although other courses may be chosen with adviser's consent.
      - Portfolio Requirement Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website. Make sure and contact your program's coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30
**Track Details**

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student's particular specialization within the profession in order to help students independently acquire knowledge and skills pertaining to best practices in that specialization area.

**Equipment Fee**

Students in the Civil Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

**Independent Learning**

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses designated in the "Non Thesis Students - Required Course Selection" section above, denoting an independent learning experience, and submission of an end-of-program portfolio.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Civil Engineering MS - Civil Engineering MS, Water Resources Engineering Accelerated BS to MS Track**

**Track Website**

http://www.cece.ucf.edu/

**Track Handbook**

Civil Engineering MS
Track Contact Information

Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Only works with undergraduate students to gain admission to the accelerated program:

Anna Canlon, MEd
Academic Advisor III
Anna Canlon@ucf.edu
Telephone: 407-823-2455

Online Availability
Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MS.pdf.

Track Description

The Water Resources Engineering Accelerated BS to MS track in the Civil Engineering MS program reflects the very broad nature of the field, which encompasses the design, construction, and enhancement of the sustainable infrastructure for society. The program’s course work focuses on water resources modeling, hydraulics and hydrology.

The program allows highly qualified undergraduate majors in Civil Engineering to begin taking graduate-level courses that will count toward their master’s degree while completing their baccalaureate degree program.

Water Resource faculty research interests include ecohydraulic and ecohydrologic modeling, groundwater and surface hydrology, sea level rise and other climate change impact assessments, stormwater management, tide, wind-wave and hurricane storm surge modeling, and environmental water resources management. Students completing the program find positions in consulting firms, construction and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

The Water Resources Engineering Accelerated BS to MS track in the Civil Engineering MS program is for students with appropriate science or engineering baccalaureate backgrounds. See undergraduate engineering major requirements in the Undergraduate Catalog.

Both thesis and non-thesis options are available with each requiring 30 credit hours. The thesis option requires 15 credit hours of required courses, 9 credit hours of elective graduate course work exclusive of thesis and research, and a thesis (6 credit hours). The nonthesis option requires 15 credit hours of required graduate course work, 15 credit hours of electives, and submission of an end-of-program portfolio. Each student must have an individual program of study approved by his/her faculty committee and have completed all required articulation course work as described below. At least one-half of the required credits must be taken at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor’s Degree

Track Prerequisites

A Bachelor of Science degree in civil engineering or another closely related engineering degree from UCF.

Prerequisites (Articulation)

- CWR 4120 – Hydrology (3 hrs) Taught in Fall and Spring
- CWR 4202C Hydraulics (3 hrs) Taught all 3 semesters
- CWR 4124 – Hydrogeology (3 hrs) Taught in Spring
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-5692
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete at least 5 of the following:
  - CWR5125 - Groundwater Hydrology (3)
  - CWR5205 - Hydraulic Engineering (3)
  - CWR5515 - Numerical Methods in Civil and Environmental Engineering (3)
  - CWR5545 - Water Resources Engineering (3)
  - CWR5634 - Water Resources in a Changing Environment (3)
  - CWR6102 - Advanced Hydrology (3)
  - CWR6126 - Groundwater Modeling (3)
  - CWR6235 - Open Channel Hydraulics (3)
  - CWR6235 - Open Channel Hydraulics (3)
  - CWR6535 - Modeling Water Resources Systems (3)
  - CWR6539 - Finite Elements in Surface Water Modeling (3)

Non Thesis Students - Required Course Selection
0 Total Credits

- The following courses represent those with specific independent learning experiences and ALL NONTHERESIS STUDENTS MUST CHOOSE ONE of the courses from: CWR 6102 - Advanced Hydrology CWR 6126 - Groundwater Modeling CWR 6235 - Open Channel Hydraulics CWR 6535 - Modeling Water Resources Systems

Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  All students, both thesis and nonthesis, must complete at least 9 additional credit hours of approved electives from the required courses above or other courses as approved by the student's adviser. Directed Research (XXX 6918) is not permitted in the MS program of study.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  Thesis Option
  - Earn at least 6 credits from the following types of courses:
    CWR 6971 - Thesis A successful defense of the thesis is required. In addition, the College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  Nonthesis Option
  - Complete all of the following
    - Earn at least 6 credits from the following types of courses:
      Two additional electives, which should preferably come from the above list, although other courses may be chosen with adviser's consent.
    - Portfolio Requirement Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. the portfolio requirements are listed on the CECE website. Make sure and contact your program's coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30
**Track Details**

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student’s particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area.

**Equipment Fee**

Students in the Civil Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

**Independent Learning**

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses designated in the ‘Non Thesis Students - Required Course Selection’ section above, denoting an independent learning experience, and submission of an end-of-program portfolio.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

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**Civil Engineering MS - Civil Engineering MS, Water Resources Engineering Track**

**Track Website**

http://www.cece.ucf.edu/graduate

**Track Handbook**

Civil Engineering MS

**Track Contact Information**

**Andrew Randall, Ph.D., P.E.**  
Professor  
andrew.randall@ucf.edu  
Telephone: 407-823-6429  
Engineering II, 211-L

**TBD**

Graduate Student Services Coordinator  
Engineering II, 211-K

**Online Availability**

Yes

**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MS.pdf.
Track Description

The Water Resources Engineering track in the Civil Engineering MS program reflects the very broad nature of the field, which encompasses the design, construction, and enhancement of the sustainable infrastructure for society. The program’s course work focuses on water resources modeling, hydraulics and hydrology.

Water Resource faculty research interests include ecohydraulic and ecohydrologic modeling, groundwater and surface hydrology, sea level rise and other climate change impact assessments, stormwater management, tide, wind-wave and hurricane storm surge modeling, and environmental water resources management, and stormwater management. Students completing the program find positions in consulting firms, construction and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

The Water Resources Engineering track in the Civil Engineering MS program is for students with appropriate science or engineering baccalaureate backgrounds. Both thesis and non-thesis options are available with each requiring 30 credit hours. The thesis option requires 15 credit hours of required courses, 9 credit hours of elective graduate course work exclusive of thesis and research, and a thesis (6 credit hours). The nonthesis option requires 15 credit hours of required graduate course work, 15 credit hours of electives, and submission of an end-of-program portfolio. Each student must have an individual program of study approved by his/her faculty committee and have completed all required articulation course work as described below. At least one-half of the required credits must be taken at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor’s Degree

Track Prerequisites

A Bachelor of Science degree in civil engineering or another closely related engineering degree. Applicants who are applying to the programs without a directly related undergraduate degree should closely check the prerequisites.

Calculus and Differential Equations must be passed prior to applying to our Graduate Programs

1. MAC 2311 Calculus with Analytical Geometry 1
2. MAC 2312 Calculus with Analytical Geometry 2
3. MAC 2313 Calculus with Analytical Geometry 3
4. MAP 2302 Ordinary Differential Equations 1

Prerequisites (Articulation)

- CWR 4120 - Hydrology (3 hrs) Taught in Fall and Spring
- CWR 4202C Hydraulics (3 hrs) Taught all 3 semesters
- CWR 4124 – Hydrogeology (3 hrs) Taught in Spring

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-5692
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
15 Total Credits

- Complete at least 5 of the following:
  - CWR5125 - Groundwater Hydrology (3)
  - CWR5205 - Hydraulic Engineering (3)
  - CWR5515 - Numerical Methods in Civil and Environmental Engineering (3)
  - CWR5545 - Water Resources Engineering (3)
  - CWR5634 - Water Resources in a Changing Environment (3)
  - CWR6102 - Advanced Hydrology (3)
  - CWR6126 - Groundwater Modeling (3)
  - CWR6235 - Open Channel Hydraulics (3)
  - CWR6236 - River Engineering and Sediment Transport (3)
  - CWR6535 - Modeling Water Resources Systems (3)
  - CWR6539 - Finite Elements in Surface Water Modeling (3)

Non Thesis Students - Required Course Selection
0 Total Credits

- The following courses represent those with specific independent learning experiences and ALL NONTHESIS STUDENTS MUST CHOOSE ONE of the courses from:
  - CWR 6102 - Advanced Hydrology
  - CWR 6126 - Groundwater Modeling
  - CWR 6535 - Modeling Water Resources Systems

Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  All students, both thesis and nonthesis, must complete at least 9 additional credit hours of approved electives from the required courses above or other courses as approved by the student's adviser. Directed Research (XXX 6918) is not permitted in the MS program of study.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - CWR 6971 - Thesis
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - Two additional electives, which should preferably come from the above list, although other courses may be chosen with adviser's consent.
      - Portfolio Requirement: Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website. Make sure and contact your program's coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30

Track Details

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area.

Equipment Fee

Students in the Civil Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

Independent Learning

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses designated in the "Non Thesis Students - Required Course Selection" section above, denoting an independent learning experience, and submission of an end-of-program portfolio.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Civil Engineering MSCE

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Program Website
http://www.cece.ucf.edu/graduate

Program Handbook Link
Civil Engineering MSCE

Program Contact Information

Andrew Randall Ph.D., P.E.
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Is this program available 100% online?
Yes

UCF Online

Please Note: Civil Engineering MSCE may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

2022-2023 Graduate Catalog
**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MSCE.pdf.

**Program Description**

The Master of Science in Civil Engineering degree is designed for students who have an undergraduate degree in Civil Engineering or another closely related engineering degree. Graduate work and research in civil engineering reflect the very broad nature of the field, which encompasses the design, construction, and enhancement of the infrastructure of society.

The program includes course work in structural analysis and design, geotechnical engineering and foundations, transportation planning and operations, traffic engineering, construction engineering, water resources engineering, and smart cities.

Faculty research interests include geotechnical studies of subsurface conditions, soil testing "superpave" mix design, intelligent transportation systems, traffic safety, structural dynamics, nonlinear structural analysis and software development, reinforced concrete, construction engineering, hydraulic modeling, coastal ocean modeling, stormwater management, and watershed management. Students completing the program find positions in consulting firms, construction, and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

This degree has 2 tracks: Accelerated BS to MSCE Track and Construction Engineering Accelerated BS to MSCE Track. Please scroll to the bottom of this page for further details on these Tracks.

The Civil Engineering MSCE program requires a minimum of 30 credit hours beyond the bachelor's degree, and both thesis and nonthesis options are available. The thesis option requires 24 credit hours of formal graduate-level course work and 6 credit hours of thesis. The nonthesis option requires 30 hours of formal course work and completion of a culminating experience. For nonthesis MS students, the culminating experience is submission of a portfolio that satisfies program requirements. It is strongly suggested that part-time students pursue the nonthesis option.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Program Prerequisites**

A Bachelor of Science degree in civil engineering or another closely related engineering degree.

**Calculus and Differential Equations must be passed for admission to this Graduate Programs**

1. MAC 2311 Calculus with Analytical Geometry 1
2. MAC 2312 Calculus with Analytical Geometry 2
3. MAC 2313 Calculus with Analytical Geometry 3
4. MAP 2302 Ordinary Differential Equations 1

**College of Graduate Studies Contact Information**

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**Mailing Address**

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PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

Elective Courses (See Program Details For Groupings)

24 Total Credits

- Earn at least 24 credits from the following:
  - CEG6065 - Soil Dynamics (3)
  - CEG6115 - Foundation Engineering (3)
  - CEG6317 - Advanced Geotechnical Engineering (3)
  - CES5144 - Matrix Methods for Structural Analysis (3)
  - CES5325 - Bridge Engineering (3)
  - CES5606 - Advanced Steel Structures (3)
Non Thesis Students - Required Course Selection
0 Total Credits
- Nonthesis students must take at least one course where a research project is required (one course marked with an asterisk - See Program Details Section Below for asterisks).

Thesis/Nonthesis Option
6 Total Credits
- Complete 1 of the following
  Thesis Option
  - Earn at least 6 credits from the following types of courses:
    XXX 6971 - Thesis (with the course prefix of CGN, CEG, CES, CWR or TTE) For those pursuing the thesis option, students must complete 6 credit hours of thesis and successfully defend the thesis. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  Nonthesis Option
  - Complete all of the following
    - Earn at least 6 credits from the following types of courses:
      Nonthesis students must complete at least 6 additional credit hours of electives from the lists above or other
courses as approved by the student's adviser. Please note that at least one course in the nonthesis program of study must be one of the courses in the "Program Details" section below that has an asterisk, which denotes that this course provides an independent learning experience for the student.

- Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of their portfolio of activities by the course Withdrawal date of the semester prior to their intended graduation. The portfolio requirements are listed on the CECE website. Make sure and contact your program's coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: **30**

### Program Details

Students must develop an individual plan of study with a faculty adviser by their second semester of study. At least one-half of the required credits must be taken at the 6000 level.

Research studies are required in one or more courses. The research study and report will focus on reviewing and analyzing contemporary research in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area. In addition, students may engage in directed independent studies, directed research or a research report during their studies. Courses with asterisks represent those with specific independent learning experiences, and all nonthesis students must choose at least one course with an asterisk.

#### Geotechnical Engineering
- **CEG 6065 - Soil Dynamics** 3 Credit Hours *
- **CEG 6115 - Foundation Engineering** 3 Credit Hours
- **CEG 6317 - Advanced Geotechnical Engineering** 3 Credit Hours

#### Structural Engineering
- **CES 5144 - Matrix Methods for Structural Analysis** 3 Credit Hours
- **CES 5325 - Bridge Engineering** 3 Credit Hours *
- **CES 5606 - Advanced Steel Structures** 3 Credit Hours
- **CES 5706 - Advanced Reinforced Concrete** 3 Credit Hours
- **CES 5821 - Masonry and Timber Design** 3 Credit Hours
- **CES 6010 - Structural Reliability** 3 Credit Hours
- **CES 6116 - Finite Element Structural Analysis** 3 Credit Hours
- **CES 6209 - Dynamics of Structures** 3 Credit Hours *
- **CES 6220 - Wind and Earthquake Engineering** 3 Credit Hours
- **CES 6230 - Advanced Structural Mechanics** 3 Credit Hours
- **CES 6527 - Nonlinear Structural Analysis** 3 Credit Hours
- **CES 6715 - Prestressed Concrete Structures** 3 Credit Hours *
- **CES 6840 - Composite Steel Concrete Structures** 3 Credit Hours *

#### Transportation Engineering
- **TTE 5204 - Traffic Engineering** 3 Credit Hours
- **TTE 5805 - Geometric Design of Transportation Systems** 3 Credit Hours
- **TTE 5835 - Pavement Engineering** 3 Credit Hours
- **TTE 6205 - Highway Capacity** 3 Credit Hours *
- **TTE 6256 - Traffic Operations** 3 Credit Hours
- **TTE 6270 - Intelligent Transportation Systems** 3 Credit Hours *
- **TTE 6315 - Traffic Safety Analysis** 3 Credit Hours *
- **TTE 6526 - Planning and Design of Airports** 3 Credit Hours
- **TTE 6625 - Mass Transportation Systems** 3 Credit Hours
- **CGN 6655 - Regional Planning, Design, and Development** 3 Credit Hours

#### Water Resources Engineering
- **CWR 5125 - Groundwater Hydrology** 3 Credit Hours
- **CWR 5205 - Hydraulic Engineering** 3 Credit Hours
- **CWR 5515 - Numerical Methods in Civil and Environmental Engineering** 3 Credit Hours
- **CWR 5545 - Water Resources Engineering** 3 Credit Hours
- **CWR 5634 - Water Resources in a Changing Environment** 3 Credit Hours
- **CWR 6102 - Advanced Hydrology** 3 Credit Hours *
- **CWR 6126 - Groundwater Modeling** 3 Credit Hours *
- **CWR 6235 - Open Channel Hydraulics** 3 Credit Hours
- **CWR 6236 - River Engineering and Sediment Transport** 3 Credit Hours
- **CWR 6535 - Modeling Water Resources Systems** 3 Credit Hours *

#### Construction Engineering and Management
- **CCE 5205 - Decision Support for Infrastructure Projects** 3 Credit Hours
- **CCE 5006 - Infrastructure Systems Management** 3 Credit Hours
- **CCE 5220 - Sustainable Infrastructure Systems** 3 Credit Hours
- **CCE 5937 - Construction Contracts** 3 Credit Hours
Students in the Civil Engineering MSCE program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one course where a research project is required and submit an end-of-program portfolio.

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

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Fax: 407-823-5241
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http://finaid.ucf.edu

Civil Engineering MSCE - Civil Engineering MSCE, Accelerated BS to MSCE Track

Track Website
http://www.cece.ucf.edu/

Track Handbook
Civil Engineering MSCE

Track Contact Information

Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Only works with undergraduate students to gain admission to the accelerated program:

Anna Canlon, MEd
Academic Advisor III
Anna Canlon@ucf.edu
Telephone: 407-823-2455

Online Availability
Yes
**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MSCE.pdf.

**Track Description**

The Master of Science in Civil Engineering degree is designed for students who have an undergraduate degree in Civil Engineering or another closely related engineering degree. See undergraduate engineering major requirements in the Undergraduate Catalog. Graduate work and research in civil engineering reflect the very broad nature of the field, which encompasses the design, construction, and enhancement of the infrastructure of society.

The program allows highly qualified undergraduate majors in Civil Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

The Master of Science in Civil Engineering (MSCE), Accelerated BS to MSCE degree is designed for students who have an undergraduate degree in Civil Engineering or another closely related engineering degree. Graduate work and research in civil engineering reflects the very broad nature of the field, which encompasses the design, construction, and enhancement of the infrastructure of society. The program includes course work in structural analysis and design, geotechnical engineering and foundations, transportation planning and operations, traffic engineering, construction engineering, and water resources engineering.

Faculty research interests include geotechnical studies of subsurface conditions, soil testing "superpave“ mix design, intelligent transportation systems, traffic safety, structural dynamics, nonlinear structural analysis and software development, reinforced concrete, construction engineering, hydraulic modeling, coastal ocean modeling, stormwater management, and watershed management. Students completing the program find positions in consulting firms, construction, and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

The Civil Engineering MSCE program requires a minimum of 30 credit hours beyond the bachelor's degree, and both thesis and nonthesis options are available. The thesis option requires 24 credit hours of formal graduate-level course work and 6 credit hours of thesis. The nonthesis option requires 30 hours of formal course work and completion of a culminating experience. For nonthesis MS students, the culminating experience is submission of a portfolio that satisfies program requirements. It is strongly suggested that part-time students pursue the nonthesis option.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

A Bachelor of Science degree in civil engineering or another closely related engineering degree from UCF.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Elective Courses (See Program Details For Groupings)

24 Total Credits

- Earn at least 24 credits from the following:
  - CEG6065 - Soil Dynamics (3)
  - CEG6115 - Foundation Engineering (3)
  - CEG6317 - Advanced Geotechnical Engineering (3)
  - CES5144 - Matrix Methods for Structural Analysis (3)
  - CES5325 - Bridge Engineering (3)
  - CES5606 - Advanced Steel Structures (3)
  - CES5706 - Advanced Reinforced Concrete (3)
  - CES5821 - Masonry and Timber Design (3)
  - CES6010 - Structural Reliability (3)
  - CES6116 - Finite Element Structural Analysis (3)
  - CES6209 - Dynamics of Structures (3)
  - CES6220 - Wind and Earthquake Engineering (3)

2022-2023 Graduate Catalog
Non Thesis Students - Required Course Selection

0 Total Credits

- Nonthesis students must take at least one course where a research project is required (one course marked with an asterisk - See Program Details Section Below for asterisks).

Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - XXX 6971 - Thesis (with the course prefix of CGN, CEG, CES, CWR or TTE) For those pursuing the thesis option, students must complete 6 credit hours of thesis and successfully defend the thesis. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - Nonthesis students must complete at least 6 additional credit hours of electives from the lists above or other courses as approved by the student's adviser. Please note that at least one course in the nonthesis program of study must be one of the courses in the "Program Details" section below that has an asterisk, which denotes that this course provides an independent learning experience for the student.
        - Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of their portfolio of activities by the course Withdrawal date of the semester prior to their intended graduation. The portfolio requirements are listed on the CECE website.

Grand Total Credits: 30

Track Details

Students must develop an individual plan of study with a faculty adviser by their second semester of study. At least one-half of the required credits must be taken at the 6000 level.

Research studies are required in one or more courses. The research study and report will focus on reviewing and analyzing contemporary research in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area. In addition, students may engage in directed independent studies, directed research or a research report during their studies. Courses with asterisks represent those with specific independent learning experiences, and all nonthesis students must choose at least one course with an asterisk.

Geotechnical Engineering

- CEG 6065 - Soil Dynamics 3 Credit Hours *
- CEG 6115 - Foundation Engineering 3 Credit Hours
- CEG 6317 - Advanced Geotechnical Engineering 3 Credit Hours

**Structural Engineering**
- CES 5144 - Matrix Methods for Structural Analysis 3 Credit Hours
- CES 5325 - Bridge Engineering 3 Credit Hours *
- CES 5606 - Advanced Steel Structures 3 Credit Hours
- CES 5706 - Advanced Reinforced Concrete 3 Credit Hours
- CES 5821 - Masonry and Timber Design 3 Credit Hours
- CES 6010 - Structural Reliability 3 Credit Hours
- CES 6116 - Finite Element Structural Analysis 3 Credit Hours
- CES 6209 - Dynamics of Structures 3 Credit Hours *
- CES 6220 - Wind and Earthquake Engineering 3 Credit Hours *
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- CES 6527 - Nonlinear Structural Analysis 3 Credit Hours
- CES 6715 - Prestressed Concrete Structures 3 Credit Hours *
- CES 6840 - Composite Steel Concrete Structures 3 Credit Hours *

**Transportation Engineering**
- TTE 5204 - Traffic Engineering 3 Credit Hours
- TTE 5805 - Geometric Design of Transportation Systems 3 Credit Hours
- TTE 5835 - Pavement Engineering 3 Credit Hours
- TTE 6205 - Highway Capacity 3 Credit Hours *
- TTE 6256 - Traffic Operations 3 Credit Hours
- TTE 6620 - Intelligent Transportation Systems 3 Credit Hours *
- TTE 6315 - Traffic Safety Analysis 3 Credit Hours *
- TTE 6526 - Planning and Design of Airports 3 Credit Hours
- TTE 6625 - Mass Transportation Systems 3 Credit Hours
- CGN 6655 - Regional Planning, Design, and Development 3 Credit Hours

**Water Resources Engineering**
- CWR 5125 - Groundwater Hydrology 3 Credit Hours
- CWR 5205 - Hydraulic Engineering 3 Credit Hours
- CWR 5515 - Numerical Methods in Civil and Environmental Engineering 3 Credit Hours
- CWR 5634 - Water Resources Engineering 3 Credit Hours
- CWR 6102 - Advanced Hydrology 3 Credit Hours *
- CWR 6126 - Groundwater Modeling 3 Credit Hours *
- CWR 6235 - Open Channel Hydraulics 3 Credit Hours
- CWR 6236 - River Engineering and Sediment Transport 3 Credit Hours
- CWR 6535 - Modeling Water Resources Systems 3 Credit Hours *

**Construction Engineering and Management**
- CCE 5205 - Decision Support for Infrastructure Projects 3 Credit Hours
- CCE 5006 - Infrastructure Systems Management 3 Credit Hours
- CCE 5220 - Sustainable Infrastructure Systems 3 Credit Hours
- CCE 5937 - Construction Contracts 3 Credit Hours
- CCE 6036 - Advanced Construction Planning and Control 3 Credit Hours *
- CCE 6211 - Design and Monitoring of Construction Processes 3 Credit Hours *
- CCE 6045 - Cost Analysis of Sustainable Infrastructure Systems 3 Credit Hours

**Equipment Fee**

Students in the Civil Engineering MSCE program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

**Independent Learning**

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one course where a research project is required and submit an end-of-program portfolio.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Civil Engineering MSCE - Civil Engineering MSCE, Construction Engineering Accelerated BS to MSCE Track

Track Website
http://www.cece.ucf.edu/

Track Handbook
Civil Engineering MSCE

Track Contact Information

Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Only works with undergraduate students to gain admission to the accelerated program:

Anna Canlon, Med

Academic Advisor III
Anna Canlon@ucf.edu
Telephone: 407-823-2455

Online Availability

Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-MSCE.pdf.
**Track Description**

The Master of Science in Civil Engineering, Construction Engineering Accelerated BS to MSCE track is designed for students who have an undergraduate degree in Civil Engineering or another closely related engineering degree. See undergraduate engineering major requirements in the Undergraduate Catalog.

Graduate work and research in civil engineering reflect the very broad nature of the field, which encompasses the design, construction, and enhancement of the infrastructure of society.

The program allows highly qualified undergraduate majors in Civil Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

The Master of Science in Civil Engineering (MSCE), Construction Engineering Accelerated BS to MSCE Track is designed for students who have an undergraduate degree in Civil Engineering or another closely related engineering degree. Graduate work and research in civil engineering reflects the very broad nature of the field, which encompasses the design, construction, and enhancement of the infrastructure of society. The program includes course work in structural analysis and design, geotechnical engineering and foundations, transportation planning and operations, traffic engineering, construction engineering, and water resources engineering.

Faculty research interests include geotechnical studies of subsurface conditions, soil testing "superpave" mix design, intelligent transportation systems, traffic safety, structural dynamics, nonlinear structural analysis and software development, reinforced concrete, construction engineering, hydraulic modeling, coastal ocean modeling, stormwater management, and watershed management. Students completing the program find positions in consulting firms, construction, and construction-related industries, in city, county, state, and federal government agencies, and academic institutions.

The Civil Engineering MSCE, Construction Engineering Accelerated BS to MSCE Track program requires a minimum of 30 credit hours beyond the bachelor’s degree, and both thesis and nonthesis options are available. The thesis option requires 24 credit hours of formal graduate-level course work and 6 credit hours of thesis. The nonthesis option requires 30 hours of formal course work and completion of a culminating experience. For nonthesis MS students, the culminating experience is submission of a portfolio that satisfies program requirements. It is strongly suggested that part-time students pursue the nonthesis option.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

A Bachelor of Science degree in civil engineering or another closely related engineering degree from UCF.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-5692  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**  
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**  
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233

**Degree Requirements**

Elective Courses (See Program Details For Groupings)

24 Total Credits

- Earn at least 24 credits from the following:
  - CEG6065 - Soil Dynamics (3)  
  - CEG6115 - Foundation Engineering (3)  
  - CEG6317 - Advanced Geotechnical Engineering (3)  
  - CES5144 - Matrix Methods for Structural Analysis (3)  
  - CES5325 - Bridge Engineering (3)  
  - CES5606 - Advanced Steel Structures (3)  
  - CES5706 - Advanced Reinforced Concrete (3)  
  - CES5821 - Masonry and Timber Design (3)  
  - CES6010 - Structural Reliability (3)  
  - CES6116 - Finite Element Structural Analysis (3)  
  - CES6209 - Dynamics of Structures (3)  
  - CES6220 - Wind and Earthquake Engineering (3)  
  - CES6230 - Advanced Structural Mechanics (3)  
  - CES6527 - Nonlinear Structural Analysis (3)  
  - CES6715 - Prestressed Concrete Structures (3)  
  - TTE5204 - Traffic Engineering (3)
Non Thesis Students - Required Course Selection
0 Total Credits

- Nonthesis students must take at least one course where a research project is required (one course marked with an asterisk - See Program Details Section Below for asterisks).

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  Thesis Option
  - Earn at least 6 credits from the following types of courses:
    XXX 6971 - Thesis (with the course prefix of CGN, CEG, CES, CWR or TTE) For those pursuing the thesis option, students must complete 6 credit hours of thesis and successfully defend the thesis. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.

Nonthesis Option

- Complete all of the following
  - Earn at least 6 credits from the following types of courses:
    Nonthesis students must complete at least 6 additional credit hours of electives from the lists above or other courses as approved by the student's adviser. Please note that at least one course in the nonthesis program of study must be one of the courses in the "Program Details" section below that has an asterisk, which denotes that this course provides an independent learning experience for the student.
    - Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of their portfolio of activities by the course Withdrawal date of the semester prior to their intended graduation. The portfolio requirements are listed on the CECE website. Make sure and contact your program’s coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30

Track Details

Students must develop an individual plan of study with a faculty adviser by their second semester of study. At least one-half of the required credits must be taken at the 6000 level.

Research studies are required in one or more courses. The research study and report will focus on reviewing and analyzing contemporary research in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to research-based best practices in that specialization area. In addition, students may engage in directed independent studies, directed research or a research report during their studies. Courses with asterisks represent those with specific independent learning experiences, and all nonthesis students must choose at least one course with an asterisk.

Geotechnical Engineering
- CEG 6065 - Soil Dynamics 3 Credit Hours *
- CEG 6115 - Foundation Engineering 3 Credit Hours
- CEG 6317 - Advanced Geotechnical Engineering 3 Credit Hours
Structural Engineering

- CES 5144 - Matrix Methods for Structural Analysis 3 Credit Hours
- CES 5325 - Bridge Engineering 3 Credit Hours *
- CES 5606 - Advanced Steel Structures 3 Credit Hours
- CES 5706 - Advanced Reinforced Concrete 3 Credit Hours
- CES 5821 - Masonry and Timber Design 3 Credit Hours
- CES 6010 - Structural Reliability 3 Credit Hours
- CES 6116 - Finite Element Structural Analysis 3 Credit Hours
- CES 6209 - Dynamics of Structures 3 Credit Hours *
- CES 6220 - Wind and Earthquake Engineering 3 Credit Hours
- CES 6300 - Advanced Structural Mechanics 3 Credit Hours
- CES 6527 - Nonlinear Structural Analysis 3 Credit Hours
- CES 6715 - Prestressed Concrete Structures 3 Credit Hours *
- CES 6840 - Composite Steel Concrete Structures 3 Credit Hours *
- CES 6910 - Research in Structural Engineering 3 Credit Hours

Transportation Engineering

- TTE 5204 - Traffic Engineering 3 Credit Hours
- TTE 5805 - Geometric Design of Transportation Systems 3 Credit Hours
- TTE 5835 - Pavement Engineering 3 Credit Hours
- TTE 6205 - Highway Capacity 3 Credit Hours *
- TTE 6256 - Traffic Operations 3 Credit Hours *
- TTE 6270 - Intelligent Transportation Systems 3 Credit Hours *
- TTE 6315 - Traffic Safety Analysis 3 Credit Hours *
- TTE 6526 - Planning and Design of Airports 3 Credit Hours
- TTE 6625 - Mass Transportation Systems 3 Credit Hours
- CGN 6655 - Regional Planning, Design, and Development 3 Credit Hours

Water Resources Engineering

- CWR 5125 - Groundwater Hydrology 3 Credit Hours
- CWR 5205 - Hydraulic Engineering 3 Credit Hours
- CWR 5515 - Numerical Methods in Civil and Environmental Engineering 3 Credit Hours
- CWR 5545 - Water Resources Engineering 3 Credit Hours
- CWR 5634 - Water Resources in a Changing Environment 3 Credit Hours
- CWR 6102 - Advanced Hydrology 3 Credit Hours *
- CWR 6126 - Groundwater Modeling 3 Credit Hours *
- CWR 6235 - Open Channel Hydraulics 3 Credit Hours
- CWR 6236 - River Engineering and Sediment Transport 3 Credit Hours
- CWR 6535 - Modeling Water Resources Systems 3 Credit Hours *

Construction Engineering and Management

- CCE 5205 - Decision Support for Infrastructure Projects 3 Credit Hours
- CCE 5006 - Infrastructure Systems Management 3 Credit Hours
- CCE 5220 - Sustainable Infrastructure Systems 3 Credit Hours
- CCE 5937 - Construction Contracts 3 Credit Hours
- CCE 6036 - Advanced Construction Planning and Control 3 Credit Hours *
- CCE 6211 - Design and Monitoring of Construction Processes 3 Credit Hours *
- CCE 6045 - Cost Analysis of Sustainable Infrastructure Systems 3 Credit Hours

Equipment Fee

Students in the Civil Engineering MSCE program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

Independent Learning

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one course where a research project is required and submit an end-of-program portfolio.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Civil Engineering PhD

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Program Website
http://www.cece.ucf.edu/graduate

Program Handbook Link
Civil Engineering PhD

Program Contact Information
Andrew Randall P.h.D., P.E.
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineerimg II, 211-L

Ana Lucia Salas ’18, M.S.
Graduate Student Services Coordinator
AnaLucia.Salas@ucf.edu
Telephone: 407-823-1299
Engineering II, 211-K

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Civil-Engineering-PhD.pdf
Program Description

The Civil Engineering PhD program reflects the very broad nature of the field, which encompasses the design, construction, and enhancement of the infrastructure of society. The Civil Engineering PhD program includes courses and research in structural analysis and design, geotechnical engineering and foundations, transportation planning and operations, traffic engineering, construction engineering, water resources engineering, and smart cities. The degree will prepare students for roles in consulting firms, civil and construction-related industries, academic institutions, and city, county, state and federal government agencies.

Faculty research interests include subsurface conditions and soil testing, geotechnical materials, soil and structural dynamics, intelligent transportation systems, traffic safety, nonlinear structural analysis, reinforced concrete, structural health monitoring, sensors and data analytics for infrastructure, construction engineering, hydraulic modeling, coastal ocean modeling, stormwater management, and watershed management.

The PhD in Civil Engineering is a research-oriented degree that requires course work combined with intensive research. The program requires a minimum of 72 credit hours beyond the bachelor's degree. Thirty of the 72 credit hours can be met with either a nonthesis or thesis MS in Civil Engineering. This leaves 42 credit hours, of which 18 credit hours must be Dissertation Research and a minimum of 15 credit hours must be formal course work. A maximum of 9 credit hours of Doctoral Research hours can be used in the doctoral program, which could be replaced by additional formal course work.

For students not having an MS degree who directly enter the PhD program (BS to PhD), there will be a minimum of 45 hours formal course work (i.e., 30 credit hours identical to the course work for a nonthesis MS in any of Civil Engineering focus areas plus a minimum of 15 credit hours course work past the MS). In addition, these students can enroll for Doctoral Research credit hours during or after their first semester in the program. The 27 credit hours required in addition to the 45 credit hours course work will be 18 credit hours in Dissertation Research, and a maximum of 9 credit hours in Doctoral Research. Up to 9 credit hours of Doctoral Research can be replaced by additional formal course work subject to the approval of the PhD adviser and the advisory committee.

For both MS to PhD and BS to PhD students, the program of study must be developed with an advisory committee and meet with departmental approval at the beginning of the PhD program, at which time transfer credit will be evaluated on a course-by-course basis.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree 42 Credit Hours Minimum beyond the Master's Degree

Program Prerequisites

Master's or bachelor's degree in Civil Engineering or a closely related discipline.

Calculus 1 to 3 and Differential Equations requirements for application can be waived for interdisciplinary focus areas such as Smart Cities and other programs at the discretion of the recruiting faculty/major professor. However, general applicants who do not have a faculty supporting their application are still required to meet the Calculus 1 to 3 and Differential Equations requirements to apply.

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Online Application
Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Elective Courses (See Program Details Below For Further Info)

54 Total Credits
- Earn at least 54 credits from the following:
  - CEG5405 - Seepage in Soils (3)
  - CEG6065 - Soil Dynamics (3)
  - CEG6115 - Foundation Engineering (3)
  - CEG6317 - Advanced Geotechnical Engineering (3)
  - CEG6515 - Retaining Structures and Slope Stability (3)
  - CEG6610 - Smart Underground Structures: Tunnels and Shafts (3)
Course Not Found
CGN5506 - Advanced Pavement and Civil Engineering Materials (3)
TTE5835 - Pavement Engineering (3)
CES5144 - Matrix Methods for Structural Analysis (3)
CES5325 - Bridge Engineering (3)
CES5325 - Bridge Engineering (3)
CES5606 - Advanced Steel Structures (3)
CES5706 - Advanced Reinforced Concrete (3)
CES5821 - Masonry and Timber Design (3)
CES6010 - Structural Reliability (3)
CES6116 - Finite Element Structural Analysis (3)
CES6209 - Dynamics of Structures (3)
CES6220 - Wind and Earthquake Engineering (3)
CES6230 - Advanced Structural Mechanics (3)
CES6527 - Nonlinear Structural Analysis (3)
CES6715 - Prestressed Concrete Structures (3)
Course Not Found
CGN6655 - Regional Planning, Design, and Development (3)
ESI5219 - Engineering Statistics (3)
STA5206 - Statistical Analysis (3)
TTE5204 - Traffic Engineering (3)
TTE5805 - Geometric Design of Transportation Systems (3)
TTE5835 - Pavement Engineering (3)
TTE6205 - Highway Capacity (3)
TTE6256 - Traffic Operations (3)
TTE6270 - Intelligent Transportation Systems (3)
TTE6275 - Connected and Autonomous Vehicles (3)
TTE6315 - Traffic Safety Analysis (3)
TTE6526 - Planning and Design of Airports (3)
TTE6625 - Mass Transportation Systems (3)
TTE6667 - Discrete Choice Modeling in Transportation (3)
CWR5125 - Groundwater Hydrology (3)
CWR5205 - Hydraulic Engineering (3)
CWR5515 - Numerical Methods in Civil and Environmental Engineering (3)
CWR5545 - Water Resources Engineering (3)
CWR5563 - Water Resources in a Changing Environment (3)
CWR5935 - Water First Seminar Series
CWR5999 - Coastal Systems Analysis (3)
CWR6007 - Ecohydraulics (3)
CWR6102 - Advanced Hydrology (3)
CWR6126 - Groundwater Modeling (3)
CWR6235 - Open Channel Hydraulics (3)
CWR6236 - River Engineering and Sediment Transport (3)
CWR6535 - Modeling Water Resources Systems (3)
CWR6539 - Finite Elements in Surface Water Modeling (3)
CWR6606 - Stochastic River Network Hydro-Geomorphology (3)
CWR6660 - Water Policy, Planning and Governance (3)
CCE5006 - Infrastructure Systems Management (3)
CCE5205 - Decision Support for Infrastructure Projects (3)
CCE5220 - Sustainable Infrastructure Systems (3)
CCE6036 - Advanced Construction Planning and Control (3)
CCE6655 - Cost Analysis of Sustainable Infrastructure Systems (3)
CCE6211 - Design and Monitoring of Construction Processes (3)
CCE6817 - Dynamics of Sustainable Systems (3)
CCE5220 - Sustainable Infrastructure Systems (3)
CCE5220 - Sustainable Infrastructure Systems (3)
CES6876 - Smart City Built Infrastructure (3)
CGN5340 - Internet of Things: Applications in Smart Cities (3)
CGN5341 - Interdisciplinary Introduction to Smart Cities' Applications (3)
CGN5341 - Interdisciplinary Introduction to Smart Cities' Applications (3)
CGN6342 - Modeling Human Behavior with Emerging Data (3)
CGN6342 - Cyber-Physical Systems and Smart Cities (3)
ENV6128 - Smart Air Quality Monitoring and Air Pollution Control (3)
ENV6533 - Smart Water and Wastewater Management (3)
STA5703 - Data Mining Methodology I (3)
TTE5531 - Active Mobility and Technologies: Synergy and Challenges (3)
TTE5532 - Policy Aspects of Smart City Transportation (3)
TTE6275 - Connected and Autonomous Vehicles (3)
TTE6533 - Mobility in Smart Cities: Technologies and Application Areas (3)
TTE6608 - Algorithms and Models for Smart Cities (3)

Dissertation
18 Total Credits
Earn at least 18 credits from the following types of courses:
XXX 7980 (where XXX can be CGN, CCE, CEG, CES, CWR, or TTE; 18 credit hours)

Examinations
0 Total Credits

- The student must pass three examinations.

Qualifying Examination
0 Total Credits

- The first is the PhD Qualifying Examination in one of the departmental disciplines. This written examination must be taken within the first year of admission into the PhD program. It may be attempted no more than twice.

Candidacy Examination
0 Total Credits

- The student must pass a Candidacy Examination, normally taken near the end of the course work. It consists of a written and oral presentation of a research proposal, and may include additional written or oral questioning by the committee. A copy of the written examination will be kept as part of the student's official record.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours. Evidence that items have been completed must be received by the College of Graduate Studies on the Friday before the first day of classes for those who wish to enroll in dissertation hours in that semester: Completion of all but 6 hours or less of course work, except for dissertation hours. Successful completion of the candidacy examination. Successful defense of the written dissertation proposal. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study.

Dissertation Defense Examination
0 Total Credits

- The Dissertation Defense Examination is an oral examination taken as defense of the written dissertation. The College of Engineering and Computer Science requires that all dissertation defense announcements be approved by the student's adviser and posted on the college's website and on the College of Graduate Studies Events Calendar at least two weeks before the defense date.

Grand Total Credits: 72

Program Details

Elective Courses

- To be approved by a faculty adviser and the graduate coordinator.
- At least 27 credit hours of formal course work is required, exclusive of research and independent study. For students entering the program with a completed master's degree, at least 15 of the 27 credit hours (exclusive of independent study and research) must be taken at UCF after the master's program from approved formal courses. For students entering the program without a master's degree in Civil Engineering or a closely related discipline, at least 45 credit hours of formal course work are required.
- Doctoral Research (XXX 7919) - 9 credit hours maximum (more than 9 research credit hours can be taken, but only a maximum of 9 credit hours will be counted toward the program of study).
- Independent Study (XXX 6908) - 3 credit hours maximum
- No more than a total of 12 credit hours of doctoral research plus independent study will be included in a program of study.
- Directed Research (XXX 6918) is not permitted in a PhD program of study.

Students can choose among the following courses with the consent of the academic adviser. Students that have no MS degree should complete the core courses for the MS degree in the respective focus area. These focus areas are: Structural and Geotechnical Engineering, Transportation Systems Engineering, Water Resources Engineering, and Smart Cities. For each one of these areas there is a suggested list of core courses.

Suggested elective courses include:

Geotechnical Engineering

- CEG 5405 - Seepage in Soils 3 Credit Hours
- CEG 6065 - Soil Dynamics 3 Credit Hours
- CEG 6115 - Foundation Engineering 3 Credit Hours
- CEG 6317 - Advanced Geotechnical Engineering 3 Credit Hours
- CEG 6515 - Retaining Structures and Slope Stability 3 Credit Hours
- CEG 6610 - Smart Underground Structures: Tunnels and Shafts 3 Credit Hours
- CES 6170 - Boundary Element Methods in Civil Engineering 3 Credit Hours
- CGN 5506 - Advanced Pavement and Civil Engineering Materials 3 Credit Hours
- TTE 5835 - Pavement Engineering 3 Credit Hours

Structural Engineering
CES 5144 - Matrix Methods for Structural Analysis 3 Credit Hours
CES 5325 - Bridge Engineering 3 Credit Hours
CES 5606 - Advanced Steel Structures 3 Credit Hours
CES 5706 - Advanced Reinforced Concrete 3 Credit Hours
CES 5821 - Masonry and Timber Design 3 Credit Hours
CES 6010 - Structural Reliability 3 Credit Hours
CES 6116 - Finite Element Structural Analysis 3 Credit Hours
CES 6209 - Dynamics of Structures 3 Credit Hours
CES 6220 - Wind and Earthquake Engineering 3 Credit Hours
CES 6230 - Advanced Structural Mechanics 3 Credit Hours
CES 6527 - Nonlinear Structural Analysis 3 Credit Hours
CES 6715 - Prestressed Concrete Structures 3 Credit Hours
CES 6840 - Composite Steel Concrete Structures 3 Credit Hours

Transportation Systems Engineering

- CGN 6655 - Regional Planning, Design, and Development 3 Credit Hours
- ESI 5219 - Engineering Statistics 3 Credit Hours
- STA 5206 - Statistical Analysis 3 Credit Hours or
- TTE 5204 - Traffic Engineering 3 Credit Hours
- TTE 5805 - Geometric Design of Transportation Systems 3 Credit Hours
- TTE 5835 - Pavement Engineering 3 Credit Hours
- TTE 6205 - Highway Capacity 3 Credit Hours
- TTE 6256 - Traffic Operations 3 Credit Hours
- TTE 6270 - Intelligent Transportation Systems 3 Credit Hours
- TTE 6275 - Connected and Autonomous Vehicles 3 Credit Hours
- TTE 6315 - Traffic Safety Analysis 3 Credit Hours
- TTE 6526 - Planning and Design of Airports 3 Credit Hours
- TTE 6625 - Mass Transportation Systems 3 Credit Hours
- TTE 6667 - Discrete Choice Modeling in Transportation 3 Credit Hours

Water Resources Engineering

- CWR 5125 - Groundwater Hydrology 3 Credit Hours
- CWR 5205 - Hydraulic Engineering 3 Credit Hours
- CWR 5515 - Numerical Methods in Civil and Environmental Engineering 3 Credit Hours
- CWR 5545 - Water Resources Engineering 3 Credit Hours
- CWR 5634 - Water Resources in a Changing Environment 3 Credit Hours
- CWR 5935 - Water First Seminar Series 0 Credit Hours
- CWR 5999 - Coastal Systems Analysis 3 Credit Hours
- CWR 6007 - Ecohydraulics 3 Credit Hours
- CWR 6102 - Advanced Hydrology 3 Credit Hours
- CWR 6126 - Groundwater Modeling 3 Credit Hours
- CWR 6235 - Open Channel Hydraulics 3 Credit Hours
- CWR 6236 - River Engineering and Sediment Transport 3 Credit Hours
- CWR 6535 - Modeling Water Resources Systems 3 Credit Hours
- CWR 6539 - Finite Elements in Surface Water Modeling 3 Credit Hours
- CWR 6606 - Stochastic River Network Hydro-Geomorphology 3 Credit Hours
- CWR 6660 - Water Policy, Planning and Governance 3 Credit Hours

Construction Engineering and Management

- CCE 5006 - Infrastructure Systems Management 3 Credit Hours
- CCE 5205 - Decision Support for Infrastructure Projects 3 Credit Hours
- CCE 5220 - Sustainable Infrastructure Systems 3 Credit Hours
- CCE 6036 - Advanced Construction Planning and Control 3 Credit Hours *
- CCE 6045 - Cost Analysis of Sustainable Infrastructure Systems 3 Credit Hours
- CCE 6211 - Design and Monitoring of Construction Processes 3 Credit Hours *
- CCE 6817 - Dynamics of Sustainable Systems 3 Credit Hours

Smart Cities

- CCE 5220 - Sustainable Infrastructure Systems 3 Credit Hours
- CEG 6610 - Smart Underground Structures: Tunnels and Shafts 3 Credit Hours
- CES 6876 - Smart City Built Infrastructure 3 Credit Hours
- CGN 5340 - Internet of Things: Applications in Smart Cities 3 Credit Hours
- CGN 5341 - Interdisciplinary Introduction to Smart Cities' Applications 3 Credit Hours
- CGN 5617 - Infrastructure Systems Optimization and Identification 3 Credit Hours
- CGN 6342 - Modeling Human Behavior with Emerging Data 3 Credit Hours
- CGN 6343 - Cyber-Physical Systems and Smart Cities 3 Credit Hours
- ENV 6128 - Smart Air Quality Monitoring and Air Pollution Control 3 Credit Hours
- ENV 6533 - Smart Water and Wastewater Management 3 Credit Hours

Students are also allowed to take courses from other specialization areas. Students can take courses from Civil Engineering or Environmental Engineering and other departments, including but not limited to Statistics, Mathematics, and Industrial, Mechanical, and/or Electrical Engineering, and Computer Science, with the consent of the academic adviser.

- CCE 5006 - Infrastructure Systems Management 3 Credit Hours
- CCE 5205 - Decision Support for Infrastructure Projects 3 Credit Hours
- CCE 5220 - Sustainable Infrastructure Systems 3 Credit Hours
- CCE 6036 - Advanced Construction Planning and Control 3 Credit Hours *
- CCE 6045 - Cost Analysis of Sustainable Infrastructure Systems 3 Credit Hours
- CCE 6211 - Design and Monitoring of Construction Processes 3 Credit Hours *
- CCE 6817 - Dynamics of Sustainable Systems 3 Credit Hours

Smart Cities

- CCE 5220 - Sustainable Infrastructure Systems 3 Credit Hours
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- ENV 6533 - Smart Water and Wastewater Management 3 Credit Hours

2022-2023 Graduate Catalog
• STA 5703 - Data Mining Methodology I 3 Credit Hours
• TTE 5531 - Active Mobility and Technologies: Synergy and Challenges 3 Credit Hours
• TTE 5532 - Policy Aspects of Smart City Transportation 3 Credit Hours
• TTE 6275 - Connected and Autonomous Vehicles 3 Credit Hours
• TTE 6533 - Mobility in Smart Cities: Technologies and Application Areas 3 Credit Hours
• TTE 6608 - Algorithms and Models for Smart Cities 3 Credit Hours

Equipment Fee
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Independent Learning
The Independent Learning Requirement is met by successful completion of the student's candidacy and dissertation defense examinations.

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Computer Engineering MS cpE

College
College of Engineering and Computer Science

Department
Department of Electrical and Computer Engineering

Program Website
http://www.ece.ucf.edu/

Program Contact Information
Kalpathy Sundaram PhD
Professor
ece-grad@cecs.ucf.edu
Telephone: 407-823-5326
HEC 439B

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Computer-Engineering-MS.pdf.
Program Description

The Computer Engineering MSCpE degree offers programs in a number of technical (research) areas, such as Computer Networks and Computer Security (CNCS), Computer Systems and VLSI Design (CS/VLSI), Intelligent Systems and Machine Learning (ISML), and Software Systems and Algorithms (SSA).

All programs offer a thesis option and a nonthesis option, as well as an Accelerated BS to MS program. Please scroll to the bottom of this page for further details on the Accelerated Track.

Students in the program receive a broad background in the various technical areas while specializing in a research area of their interest. The specific research areas that each one of the EE faculty focuses on can be found at the Department of Electrical Engineering website (www.ece.ucf.edu/).

The master's program offers both thesis and nonthesis options in four technical specialization areas. The thesis option requires 30 credit hours of courses that includes 24 credit hours of formal coursework, exclusive of thesis and research, plus 6 credit hours of thesis. The nonthesis option requires 30 credit hours of coursework with at least 24 credit hours of formal coursework and a possibility of 6 credit hours of Independent Study (XXX 6908) based on the availability of interested faculty.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

A bachelor's degree in computer engineering or a closely related discipline.

Articulation Courses

Undergraduate articulation courses are required for students with bachelor's degrees in fields other than Computer Engineering. In general, all students must have completed the following undergraduate courses (or their equivalents in an accredited BScpE program) before admission to our graduate program. Students who have taken these courses must complete the articulation courses listed below, plus all prerequisites, that they require. Grades of "B" or higher must be obtained in each articulation course. Articulation courses are not eligible for inclusion on a student's Graduate Program of Study.

- EEE 3342C: Digital Systems
- EEL 3801: Computer Organization
- COP 3502: Computer Science I
- COP 3503: Computer Science II
- Plus choose ONE of the following:
  - COP 4331: Processes for Object-Oriented Development
  - EEL 4768C: Computer Architecture
  - EEL 4781: Computer Communications Networks

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Elective Courses
0 Total Credits

- There are no required courses within a specialization area. However, all students (thesis and nonthesis) must choose at least 24 credit hours of formal courses, excluding research-related courses and independent study (XXX 6908), which emphasize their specialization area. Courses from outside specialization areas could also be chosen if the student's adviser approves such a Program of Study. The Program of Study (POS) form must be approved by an adviser in the selected specialization area no later than the end of the second semester after admission. The program of study must meet all the university requirements specified in the graduate catalog and must also receive departmental-level and college-level approval.

Specialization Areas
24 Total Credits

- Complete 1 of the following
  - The Computer Engineering Program supports a number of specialization areas. These specialization areas are (in alphabetical order): Computer Networks and Computer Security (CNCS), Computer Systems and VLSI Design (CS/VLSI), Intelligent Systems and Machine Learning (ISML), and Software Systems and Algorithms (SSA). In each one of these areas there is a suggested list of courses Students are also allowed to take courses from the suggested list of courses in areas other than their specialization area, but the majority of their courses should be chosen from courses in their
specialization area. Computer Networks and Computer Security (CNCS)

- Earn at least 24 credits from the following:
  - CDA5106 - Advanced Computer Architecture (3)
  - CDA5110 - Parallel Architecture and Algorithms (3)
  - CDA6530 - Performance Models of Computers and Networks (3)
  - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
  - CNT5008 - Computer Communication Networks Architecture (3)
  - CNT6418 - Computer Forensics II (3)
  - CNT6519 - Wireless Security and Forensics (3)
  - CNT6707 - Advanced Computer Networks (3)
  - COP5537 - Network Optimization (3)
  - COP5611 - Operating Systems Design Principles (3)
  - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)
  - CAP6135 - Malware and Software Vulnerability Analysis (3)
  - COT5405 - Design and Analysis of Algorithms (3)
  - EEE5542 - Random Processes I (3)
  - EEL5722C - Field-Programmable Gate Array (FPGA) Design (3)
  - EEL6762 - Performance Analysis of Computer and Communication Systems (3)
  - EEL6785 - Computer Network Design (3)
  - EEL6788 - Advanced Topics in Computer Networks (3)
  - EEL6883 - Software Engineering II (3)

Computer Systems and Very Large Scale Integration (CS/VLSI)

- Earn at least 24 credits from the following:
  - CDA5106 - Advanced Computer Architecture (3)
  - CDA5110 - Parallel Architecture and Algorithms (3)
  - CDA6107 - Parallel Computer Architecture (3)
  - CDA6938 - Special Topics (3)
  - COP5537 - Network Optimization (3)
  - EEE5390C - Full-Custom VLSI Design (3)
  - EEL5780 - Wireless Networks (3)
  - EEL6762 - Performance Analysis of Computer and Communication Systems (3)
  - ECM6308 - Current Topics in Parallel Processing (3)

Intelligent Systems and Machine Learning (ISML)

- Earn at least 24 credits from the following:
  - CAP5055 - AI for Game Programming (3)
  - CAP5512 - Evolutionary Computation (3)
  - CAP5610 - Machine Learning (3)
  - CAP5636 - Advanced Artificial Intelligence (3)
  - CAP6545 - Machine Learning Methods for Biomedical Data (3)
  - CAP6616 - Neuroevolution and Generative and Developmental Systems (3)
  - CAP6640 - Computer Understanding of Natural Language (3)
  - CAP6671 - Intelligent Systems: Robots, Agents, and Humans (3)
  - CAP6675 - Autonomous Agents (3)
  - CAP6678 - Modeling and Artificial Intelligence (3)

Software Systems and Algorithms (SSA)

- Earn at least 24 credits from the following:
  - CAP5615 - Algorithms in Computational Biology (3)
  - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
  - CNT6418 - Computer Forensics II (3)
  - CAP5510 - Bioinformatics (3)
  - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)
  - CAP6545 - Machine Learning Methods for Biomedical Data (3)
  - CEN5016 - Software Engineering (3)
  - CEN6075 - Formal Specification of Software Systems (3)
  - COP5021 - Program Analysis (3)
  - COP5711 - Parallel and Distributed Database Systems (3)
  - COP6730 - Transaction Processing (3)
  - COP6731 - Advanced Database Systems (3)
  - COT5405 - Design and Analysis of Algorithms (3)
  - COT6410 - Computational Complexity (3)
  - COT6417 - Algorithms on Strings and Sequences (3)
  - COT6500 - Quantum Computing (3)
  - COT6602 - Introduction to Quantum Information Theory (3)
  - EEL6883 - Software Engineering II (3)
Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following

  Thesis Option
  - Earn at least 6 credits from the following types of courses:
    EEL 6971 Thesis The thesis option requires 24 credit hours of formal coursework in one of the specialization areas and the completion of 6 credit hours of thesis. Additional requirements are as follows: - Courses must be chosen from the suggested list of courses for the student's chosen specialization area - No more than 6 credits of thesis (XXX 6971) will be counted toward the degree requirement - Fifteen credit hours (including EEL 6971 Thesis) must be 6000-level courses - Thesis students who are full time must continue to enroll in three credit hours of thesis coursework each semester until the thesis requirement is satisfied, even if they take more than the required 6 credit hours of thesis. However, only 6 credit hours of thesis will count toward the degree requirement. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.

  Nonthesis Option
  - Earn at least 6 credits from the following types of courses:
    Additional Electives from the list above. The nonthesis option is especially suitable for part-time students. Nonthesis students must complete 6 credit hours of electives in addition to the 24 credit hours of formal coursework described above. If desired by the student and approved by the student's adviser a total of 6 credit hours can be Independent Study (XXX 6908).

Portfolio Requirement
0 Total Credits

- Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of their portfolio of activities by the course Withdrawal Date of the semester prior to their intended graduation. The portfolio requirements are listed on the EECS website at www.eecs.ucf.edu.

Grand Total Credits: 30

Program Details

Transfer Credits
Graduate students with a bachelor's degree in Computer Engineering from UCF may transfer up to 9 credit hours of 5000-level or higher coursework, with grades of "B" or higher, toward the MSCpE degree. Alternatively, a maximum of 9 credit hours may be transferred of graduate work conducted elsewhere from an accredited institution.

Equipment Fee
Students in the Computer Engineering MSCpE program pay a $28 equipment fee each semester that they are enrolled. Part-time students pay $14 per semester.

Independent Learning
The independent learning requirement is met by successful completion of a master's thesis or an approved portfolio of activities for nonthesis students.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/
**Track Website**

http://www.ece.ucf.edu/

**Track Contact Information**

Kalpathy Sundaram PhD  
Professor  
ece-grad@cecs.ucf.edu  
Telephone: 407-823-5326  
HEC 439B

**Online Availability**

No

**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Computer-Engineering-MS.pdf.

**Track Description**

The Computer Engineering MSCpE degree offers programs in a number of technical (research) areas, such as Computer Networks and Computer Security (CNCS), Computer Systems and VLSI Design (CS/VLSI), Intelligent Systems and Machine Learning (ISML), and Software Systems and Algorithms (SSA).

All programs offer a thesis option and a nonthesis option, as well as an Accelerated BS to MS program. Students in the program receive a broad background in the various technical areas, while specializing in a research area of their interest.

The specific research areas that each one of the EE faculty focuses on can be found at the Department of Electrical Engineering website (www.ece.ucf.edu/).

The master's program offers both thesis and nonthesis options in four technical specialization areas. The thesis option requires 30 credit hours of courses that includes 24 credit hours of formal coursework, exclusive of thesis and research, plus 6 credit hours of thesis. The nonthesis option requires 30 credit hours of coursework with at least 24 credit hours of formal coursework and a possibility of 6 credit hours of Independent Study (XXX 6908) based on the availability of interested faculty.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor’s Degree**

**Track Prerequisites**

A bachelor's degree in computer engineering or a closely related discipline. This track is available to University of Central Florida undergraduates.

In general, all students must have completed the following undergraduate courses (or their equivalents in an accredited BSCpE program) before admission to our graduate program. Students who have taken these courses must complete the articulation courses listed below, plus all prerequisites, that they require. Grades of "B" or higher must be obtained in each articulation course. Articulation courses are not eligible for inclusion on a student's Graduate Program of Study.

- EEE 3342C: Digital Systems
- EEL 3801: Computer Organization
- COP 3502: Computer Science I
- COP 3503: Computer Science II

Plus choose ONE of the following:

- COP 4331: Processes for Object-Oriented Development
- EEL 4768C: Computer Architecture
- EEL 4781: Computer Communications Networks
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Elective Courses
24 Total Credits

- There are no required courses within a specialization area. However, all students (thesis and nonthesis) must choose at least 24 credit hours of formal courses, excluding research-related courses and independent study (XXX 6908), which emphasize their specialization area. Courses from outside specialization areas could also be chosen if the student’s adviser approves such a Program of Study. The Program of Study (POS) form must be approved by an adviser in the selected specialization area no later than the end of the second semester after admission. The program of study must meet all the university requirements specified in the graduate catalog and must also receive departmental-level and college-level approval.

Specialization Areas
24 Total Credits

- Complete 1 of the following:
  - The Computer Engineering Program supports a number of specialization areas. These specialization areas are (in alphabetical order): Computer Networks and Computer Security (CNCS), Computer Systems and VLSI Design (CS/VLSI), Intelligent Systems and Machine Learning (ISML), and Software Systems and Algorithms (SSA). In each one of these areas there is a suggested list of courses. Students are also allowed to take courses from the suggested list of courses in areas other than their specialization area, but the majority of their courses should be chosen from courses in their specialization area.
  - Computer Networks and Computer Security (CNCS)
    - Earn at least 24 credits from the following:
      - CDA5106 - Advanced Computer Architecture (3)
      - CDA5110 - Parallel Architecture and Algorithms (3)
      - CDA6530 - Performance Models of Computers and Networks (3)
      - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
      - CNT5008 - Computer Communication Networks Architecture (3)
      - CNT6418 - Computer Forensics II (3)
      - CNT6519 - Wireless Security and Forensics (3)
      - CNT6707 - Advanced Computer Networks (3)
      - COP5537 - Network Optimization (3)
      - COP5611 - Operating Systems Design Principles (3)
      - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)
      - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)
      - EEE5390C - Full-Custom VLSI Design (3)
      - EEL5722C - Field-Programmable Gate Array (FPGA) Design (3)
      - EEL6762 - Performance Analysis of Computer and Communication Systems (3)
  - Computer Systems and Very Large Scale Integration (CS/VLSI)
    - Earn at least 24 credits from the following:
      - CDA5106 - Advanced Computer Architecture (3)
      - CDA5110 - Parallel Architecture and Algorithms (3)
      - CDA6107 - Parallel Computer Architecture (3)
      - CDA6938 - Special Topics (3)
      - COP5537 - Network Optimization (3)
      - EEE5390C - Full-Custom VLSI Design (3)
      - EEL5722C - Field-Programmable Gate Array (FPGA) Design (3)
      - EEL6762 - Performance Analysis of Computer and Communication Systems (3)
- EEE6327 - Design of Video Coding Systems (3)
- ECM6308 - Current Topics in Parallel Processing (3)

**Intelligent Systems and Machine Learning (ISML)**
- Earn at least 24 credits from the following:
  - CAP5055 - AI for Game Programming (3)
  - CAP5512 - Evolutionary Computation (3)
  - CAP5610 - Machine Learning (3)
  - CAP5636 - Advanced Artificial Intelligence (3)
  - CAP6545 - Machine Learning Methods for Biomedical Data (3)
  - CAP6616 - Neuroevolution and Generative and Developmental Systems (3)
  - CAP6640 - Computer Understanding of Natural Language (3)
  - CAP6671 - Intelligent Systems: Robots, Agents, and Humans (3)
  - CAP6675 - Complex Adaptive Systems (3)
  - CAP6676 - Knowledge Representation (3)
  - EEL5825 - Machine Learning and Pattern Recognition (3)
  - EEL5874 - Expert Systems and Knowledge Engineering (3)
  - EEL6812 - Introduction to Neural Networks and Deep Learning (3)
  - EEL6875 - Autonomous Agents (3)
  - EEL6878 - Modeling and Artificial Intelligence (3)

**Software Systems and Algorithms (SSA)**
- Earn at least 24 credits from the following:
  - CAP6515 - Algorithms in Computational Biology (3)
  - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
  - CNT6418 - Computer Forensics II (3)
  - CAP5510 - Bioinformatics (3)
  - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)
  - CAP6545 - Machine Learning Methods for Biomedical Data (3)
  - CEN5016 - Software Engineering (3)
  - CEN6075 - Formal Specification of Software Systems (3)
  - COP5021 - Program Analysis (3)
  - COP5711 - Parallel and Distributed Database Systems (3)
  - COP6730 - Transaction Processing (3)
  - COP6731 - Advanced Database Systems (3)
  - COT5405 - Design and Analysis of Algorithms (3)
  - COT6410 - Computational Complexity (3)
  - COT6417 - Algorithms on Strings and Sequences (3)
  - COT5600 - Quantum Computing (3)
  - COT6602 - Introduction to Quantum Information Theory (3)
  - EEL6883 - Software Engineering II (3)

**Thesis/Nonthesis Option**
6 Total Credits
- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EEL 6971 Thesis: The thesis option requires 24 credit hours of formal coursework in one of the specialization areas and the completion of 6 credit hours of thesis. Additional requirements are as follows: Courses must be chosen from the suggested list of courses for the student's chosen specialization area. No more than 6 credits of thesis (XXX 6971) will be counted toward the degree requirement. Fifteen credit hours (including EEL 6971 Thesis) must be 6000-level courses. Thesis students who are full time must continue to enroll in three credit hours of thesis coursework each semester until the thesis requirement is satisfied, even if they take more than the required 6 credit hours of thesis. However, only 6 credit hours of thesis will count toward the degree requirement. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Additional Electives from the list above. The nonthesis option is especially suitable for part-time students. Nonthesis students must complete 6 credit hours of electives in addition to the 24 credit hours of formal coursework described above. If desired by the student and approved by the student's adviser a total of 6 credit hours can be Independent Study (XXX 6908).

**Portfolio Requirement**
0 Total Credits
- Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of their portfolio of activities by the course Withdrawal Date of the semester prior to their intended graduation. The portfolio requirements are listed on the EECS website at www.eecs.ucf.edu.

Grand Total Credits: **30**
**Track Details**

The master's program offers both thesis and nonthesis options in four technical specialization areas. The thesis option requires 30 credit hours of courses that includes 24 credit hours of formal coursework, exclusive of thesis and research, plus 6 credit hours of thesis. The nonthesis option requires 30 credit hours of coursework with at least 24 credit hours of formal coursework and a possibility of 6 credit hours of Independent Study (XXX 6908) based on the availability of interested faculty.

**Transfer Credits**

Graduate students with a bachelor's degree in Computer Engineering from UCF may transfer up to 9 credit hours of 5000-level or higher coursework, with grades of "B" or higher, toward the MSCpE degree. Alternatively, a maximum of 9 credit hours may be transferred of graduate work conducted elsewhere from an accredited institution.

**Equipment Fee**

Students in the Computer Engineering MSCpE program pay a $28 equipment fee each semester that they are enrolled. Part-time students pay $14 per semester.

**Independent Learning**

The independent learning requirement is met by successful completion of a master's thesis or an approved portfolio of activities for nonthesis students.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Computer Engineering PhD**

**College**

College of Engineering and Computer Science

**Department**

**Program Website**

http://www.ece.ucf.edu/

**Program Handbook Link**

Computer Engineering PhD

**Program Contact Information**

Kalpathy Sundaram PhD  
Professor  
Kalpathy.Sundaram@ucf.edu  
Telephone: 407-823-5326  
HEC 439B

2022-2023 Graduate Catalog
Is this program available 100% online?

No

Program Description

The Computer Engineering PhD prepares students for careers in research or academia with a potential focus in computer systems and VLSI design, software engineering and algorithms, intelligent systems and Machine Learning, computer networks and computer security, as well as simulation systems.

The doctoral program in Computer Engineering is primarily intended for students with a master's degree in Computer Engineering or a closely related discipline wishing to pursue a career in research or academia. Specializations include computer systems and VLSI design, software engineering and algorithms, intelligent systems and Machine Learning, computer networks and computer security and simulation systems.

Research interests of the Computer Engineering faculty include computer architecture, software engineering, artificial intelligence, expert systems, modeling and simulation, computer networking and ubiquitous computing, computer security, and very large-scale integration (VLSI) systems.

The specific research that each one of the EECS faculty conduct can be found at the School of EECS website (www.eecs.ucf.edu).

The Computer Engineering PhD degree requires a minimum of 72 credit hours beyond the bachelor's degree. Of these 72 hours, a minimum of 36 credit hours must be formal coursework, exclusive of independent study coursework. A minimum of 15 credit hours with up to a maximum of 24 credit hours of dissertation hours can be credited toward the degree. No more than 12 credit hours of Independent Study are allowed. The remaining hours can be a combination of formal coursework and/or pre-candidacy doctoral research. Details about this program can be found in the Computer Engineering PhD Handbook, linked in the Program Handbook Section of this page.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Master's or bachelor's degree in Computer Engineering or a closely related discipline.

Articulation Courses

Undergraduate articulation courses are required to be completed prior to admission for students who do not hold a Bachelor of Science degree in Computer Engineering. In particular, the articulation courses specified below, plus all of the prerequisite string which any of them require, must be completed prior to admission. Grades of "B" or higher must be obtained in each articulation course specified below. Articulation courses are not eligible for inclusion on a graduate Program of Study.

- EEE 3342C Digital Systems
- EEL 3801 Computer Organization
- COP 3502 Computer Science I
- COP 3503 Computer Science II

In addition, choose one of the following:

- COP 4331 Processes for Object-Oriented Development
- EEL 4768C Computer Architecture
- EEL 4781 Computer Communications Networks

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
Complete 1 of the following

The Computer Engineering Program supports a number of specialization areas. These specialization areas are (in alphabetical order): Computer Networks and Computer Security (CNCS), Computer Systems and Reconfigurable Hardware (CS/RH), Intelligent Systems and Machine Learning (ISML), and Software Systems and Algorithms (SSA). Please contact your graduate program assistant at 407-823-0378 for a list of faculty within each specialization area. For each one of these areas there is a suggested list of courses stated below. Students are also allowed to take courses from other specialization areas, but the majority of their courses should be chosen from courses in their specialization area.

Computer Networks and Computer Security (CNCS)
- Earn at least 36 credits from the following:
  - CDA5106 - Advanced Computer Architecture (3)
  - CDA5110 - Parallel Architecture and Algorithms (3)
  - CDA6530 - Performance Models of Computers and Networks (3)
  - CDA6938 - Special Topics (3)
  - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
  - CNT5008 - Computer Communication Networks Architecture (3)
  - CNT6418 - Computer Forensics II (3)
  - CNT6519 - Wireless Security and Forensics (3)
  - CNT6707 - Advanced Computer Networks (3)
  - COP5537 - Network Optimization (3)
  - COP5611 - Operating Systems Design Principles (3)
  - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)
  - CAP6135 - Malware and Software Vulnerability Analysis (3)
  - COT5405 - Design and Analysis of Algorithms (3)
  - EEE5542 - Random Processes I (3)
  - EEL5780 - Wireless Networks (3)
  - EEL6762 - Performance Analysis of Computer and Communication Systems (3)
  - EEL6785 - Computer Network Design (3)
  - EEL6788 - Advanced Topics in Computer Networks (3)
  - EEL6883 - Software Engineering II (3)

Computer Systems and Reconfigurable Hardware (CS/RH)
- Earn at least 36 credits from the following:
  - CDA5106 - Advanced Computer Architecture (3)
  - CDA5110 - Parallel Architecture and Algorithms (3)
  - CDA6107 - Parallel Computer Architecture (3)
  - CDA6938 - Special Topics (3)
  - COP5537 - Network Optimization (3)
  - EEE5390C - Full-Custom VLSI Design (3)
  - EEL5722C - Field-Programmable Gate Array (FPGA) Design (3)
  - ECM6308 - Current Topics in Parallel Processing (3)

Intelligent Systems and Machine Learning (ISML)
- Earn at least 36 credits from the following:
  - CAP5055 - AI for Game Programming (3)
  - CAP5512 - Evolutionary Computation (3)
  - CAP5610 - Machine Learning (3)
  - CAP5636 - Advanced Artificial Intelligence (3)
  - CAP6545 - Machine Learning Methods for Biomedical Data (3)
  - CAP6616 - Neuroevolution and Generative and Developmental Systems (3)
  - CAP6640 - Computer Understanding of Natural Language (3)
  - CAP6671 - Intelligent Systems: Robots, Agents, and Humans (3)
  - CAP6675 - Complex Adaptive Systems (3)
  - CAP6676 - Knowledge Representation (3)
  - EEL5825 - Machine Learning and Pattern Recognition (3)
  - EEL5874 - Expert Systems and Knowledge Engineering (3)
  - EEL6812 - Introduction to Neural Networks and Deep Learning (3)
  - EEL6875 - Autonomous Agents (3)
  - EEL6878 - Modeling and Artificial Intelligence (3)

Software Systems and Algorithms (SSA)
- Earn at least 36 credits from the following:
  - CAP6515 - Algorithms in Computational Biology (3)
  - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
  - CNT6418 - Computer Forensics II (3)
  - CAP5510 - Bioinformatics (3)
  - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)
  - CAP6545 - Machine Learning Methods for Biomedical Data (3)
  - CEN5016 - Software Engineering (3)
  - CEN6075 - Formal Specification of Software Systems (3)
  - COP5021 - Program Analysis (3)
Elective Courses
21 Total Credits

- Earn at least 21 credits from the following types of courses:
  - Additional elective courses listed above. - May include formal coursework, directed research hours, doctoral research hours, dissertation research, and no more than 12 credit hours of Independent Study.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - XXX 7980 Dissertation Research (15 credit hours minimum). The program will only allow students to complete up to 24 hours of dissertation coursework in XXX 7980. The College of Engineering and Computer Science requires that all dissertation defense announcements are approved by the student's adviser and posted on the college's website at least two weeks before the defense date.

Qualifying Review
0 Total Credits

- The Qualifying Review relies on annual appraisals of the student's progress conducted by the student's research/academic adviser and advisory committee, once formed. The student's appraisal template that the adviser completes will assess the student's academic performance (course performance) and research performance. On an annual basis, and based on the completed PhD Student Annual Review template, as well as additional student documentation attached with approval of the adviser, the EECS Graduate Committee will rate the student's performance as "Above Expectation," "At Expectation," or "Below Expectation" toward the completion of the PhD degree. Students must pass the Qualifying Review no later than the deadline, which is the semester in which they complete 24 credit hours after admission or within two calendar years after admission, whichever occurs later. If a student has passed the Qualifying Review, then the student is eligible to continue PhD studies. However, a student who does not pass the Qualifying Review by the deadline will be dismissed from the degree program and will be given the opportunity to complete a master's degree (if applicable).

Dissertation Committee
0 Total Credits

- PhD dissertation committees for this degree program must have all of the below characteristics: - consist of at least five committee members including the committee chair - the committee chair must be either a Regular Appointment faculty member in EECS or a Secondary-Joint Appointment faculty member in EECS - at least 50% of committee members (when tabulated including the chair) must be EECS regular faculty - the majority of committee members must vote in favor of passing for the student to Pass - in addition to the above, all college and university requirements (such as one member outside of EECS) must be met. Joint faculty members may serve as committee chairs, but graduate faculty scholars may not serve as committee chairs.

Candidacy Examination
0 Total Credits

- After passing the Qualifying Review, students are required to successfully complete the candidacy examination in order to demonstrate readiness for preliminary research in a chosen field of study. This exam is administered by the student's dissertation advisory committee. Preparedness for taking the candidacy examination requires that the student must demonstrate his/her readiness for the PhD program in Computer Engineering by authoring an accepted journal article or high-quality conference paper. The student must be the first author on this paper and the research advisor must also be an author on this paper to be used for Candidacy. The publication should reflect the work related to the student's PhD research. Candidacy is normally attempted at the completion of required coursework and must be passed before registering for doctoral dissertation hours (EEL 7980). Continuous enrollment in at least 3 hours of doctoral dissertation hours is required once a student starts taking dissertation credits.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours. - Completion of all required formal coursework, except for dissertation hours. - Successful completion of the candidacy examination. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study. Signed and well-formed Doctoral Committee Candidacy Status form and associated paperwork must be submitted to the Electrical and Computer Engineering Graduate Office for processing on or before the last day to defend Dissertation during the semester prior to enrolling in dissertation credits.

Dissertation Proposal Exam
0 Total Credits
After passing the candidacy examination, the student will write a dissertation proposal and present it to the dissertation advisory committee for approval. The proposal must include a description of the research performed to date and the research planned to be completed for the dissertation. The presentation of a written dissertation proposal must be deemed as passing requirements by the majority of the dissertation committee.

Grand Total Credits: 72

Program Details

Formal coursework required is 36 credit hours, exclusive of independent study and research. A minimum of 15 credit hours of dissertation are required. All other credit hours will be determined with a faculty adviser. Students admitted with an earned master's degree may request to have up to 30 of those credit hours counted toward their doctoral program. The student's doctoral adviser in conjunction with the graduate office will determine the precise number of hours to be counted subject to Graduate Studies regulations.

The Program of Study (POS) form must be approved by an adviser in the selected specialization area no later than the end of the second semester after admission. The program of study must meet all the university requirements specified in the graduate catalog.

Equipment Fee

Students in the Computer Engineering PhD program pay a $28 equipment fee each semester that they are enrolled. Part-time students pay $14 per semester.

Independent Learning

The Independent Learning requirement is met by successful completion of the student's candidacy and dissertation defense examinations.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Computer Forensics Graduate Certificate

College

College of Engineering and Computer Science

Department

Department of Computer Science

Program Website

http://gccf.ucf.edu/

Program Contact Information

Cliff Zou PhD
Associate Professor
CZou@cs.ucf.edu
Telephone: 407-823-5015
HEC 243
Is this program available 100% online?
No

Program Description

The Graduate Certificate in Computer Forensics provides a unique graduate training opportunity for those who deal directly or indirectly with digital evidence.

The National Center for Forensic Science (NCFS), the School of Electrical Engineering and Computer Science, and the Department of Chemistry jointly sponsor an interdisciplinary Graduate Certificate in Computer Forensics. This web-assisted certificate program provides a unique opportunity for graduate training to professionals and paraprofessionals who deal directly or indirectly with digital evidence, including law enforcement investigators, forensic laboratory analysts, lawyers and judges, and corporate computer security specialists. In addition, the Interdisciplinary Studies Program offers a Master of Science degree in Interdisciplinary Studies with a concentration in Computer Forensics, and the recently approved Master of Science degree in Digital Forensics provides further graduate work in digital forensics.

This certificate has 1 track: Computer Forensics, Out of State Cohort Track Graduate Certificate. Please scroll to the bottom of this page for further details on this track.

The Computer Forensics certificate requires four graduate courses (12 credit hours) in forensics study.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete at least 4 of the following:
    - CHS5504 - Topics in Forensic Science (3)
    - CHS5518 - The Forensic Collection and Examination of Digital Evidence (3)
    - CHS5596 - The Forensic Expert in the Courtroom (3)
    - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
    - CNT6418 - Computer Forensics II (3)

- A graduate-level digital evidence course approved by the graduate program director may be used to substitute for CGS 5131 or CNT 6418.

Grand Total Credits: 12

Computer Forensics Graduate Certificate - Computer Forensics, Out of State Cohort Track Graduate Certificate

Track Website

http://gccf.ucf.edu/
Track Contact Information

Cliff Zou PhD
Associate Professor
CZou@cs.ucf.edu
Telephone: 407-823-5015
HEC 243

Online Availability
No

Track Description

This program track has been temporarily suspended effective Fall 2016.

The Graduate Certificate in Computer Forensics provides a unique graduate training opportunity for those who deal directly or indirectly with digital evidence.

The National Center for Forensic Science (NCFS), the School of Electrical Engineering and Computer Science, and the Department of Chemistry jointly sponsor an interdisciplinary Graduate Certificate in Computer Forensics. This out-of-state cohort track provides online training to professionals and paraprofessionals who deal directly or indirectly with digital evidence, including law enforcement investigators, forensic laboratory analysts, lawyers and judges, and corporate computer security specialists. Students in the out-of-state cohort program pay less than half of the regular out-of-state tuition.

The Computer Forensics certificate requires four graduate courses (12 credit hours) in forensics study.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
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Graduate Admissions

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete at least 4 of the following:
  - CHS5504 - Topics in Forensic Science (3)
  - CHS5518 - The Forensic Collection and Examination of Digital Evidence (3)
  - CHS5596 - The Forensic Expert in the Courtroom (3)
  - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
  - CNT6418 - Computer Forensics II (3)

Elective Courses
3 Total Credits

- Complete at least 1 of the following:
  - CIS6207 - The Practice of Digital Forensics (3)
  - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)

Grand Total Credits: 15

Track Details

Cost Per Credit Hour

For the Computer Forensics Cohort Certificate, the cost per credit hour is $333.*

*Fee is subject to change.
Computer Science MS

College
College of Engineering and Computer Science

Department
Department of Computer Science

Program Website
http://www.cs.ucf.edu/

Program Handbook Link
Computer Science MS

Program Contact Information
Graduate Coordinator
csgrad@ucf.edu

Is this program available 100% online?
No

Program Description
The Master of Science in Computer Science program produces graduates with a high level of competency in understanding, applying, and enunciating the modern concepts, principles, methods, and theories necessary for the design and implementation of computing systems.

The Master of Science in Computer Science program provides students with an in-depth education geared toward meeting the needs of business and industry in Florida and throughout the United States. The program's goal is to produce graduates with a high level of competency in understanding, applying, and enunciating the modern concepts, principles, methods, and theories necessary for the design and implementation of computing systems.

Students in the program receive a broad background in the areas of programming systems and languages, computer architecture, and computer science theory while specializing in a research area. Research interests of the computer science faculty include affective computing, applied perception, bioinformatics, computational biology, computational geometry, computer and network security, computer architecture, computer forensics, computer graphics, computer networks, image processing, computer vision, cryptography, data compression, database management systems, data mining, design and analysis of algorithms, evolutionary computation, genetic algorithms, graph theory, hardware/software co-design, machine learning, mixed and virtual reality, mobile computing, modeling and simulation, multimedia systems, natural language processing, neural networks, parallel and distributed processing, performance evaluation, programming languages, quantum computing, semantic web, software agents, software engineering, and VLSI systems. The program has a long and respected history, having conferred MS degrees since 1968.

Students successfully completing this program will have exhibited breadth as well as depth of capability involving both theoretical aspects of computer science and practical considerations of computing.

This degree has 1 track: Accelerated BS to MS Track. Please scroll to the bottom of this page for further details on this Tracks.

The Computer Science MS program offers both a thesis and nonthesis option with each option requiring a minimum of 30 credit hours beyond the bachelor's degree. At least half of these hours must be at the 6000-level. Both options require 12 credit hours of required core courses and thesis students must take 12 credit hours of electives and a minimum of 6 credit hours of thesis. Nonthesis students must take 18 credit hours of electives and complete a culminating experience as determined by the program's graduate committee.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites
An undergraduate degree in Computer Science is desirable but not required. Applicants without a strong undergraduate background in Computer Science must demonstrate an understanding of the material covered in the following upper-division undergraduate courses:

- EEL 4768C Computer Architecture
- COP 4020 Programming Languages I
- COP 4600 Operating Systems
- COT 4210 Discrete Computational Structures

2022-2023 Graduate Catalog
Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - CDA5106 - Advanced Computer Architecture (3)
    - COT5405 - Design and Analysis of Algorithms (3)
  - Both CDA 5106 and COT 5405 must be completed with a B or better. Students earning a B- or below will have to repeat the course(s) until they earn a B or better.

Research Pair
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - Any approved pair of Computer Science courses from a single research area that includes at least one 6000-level course (See Program Details below for Examples of Approved Pairs)

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  - All students, both thesis and nonthesis, are required to complete 12 credit hours of electives that are selected after consultation with the student's adviser.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - XXX 6971 Thesis (prefix determined by disciplinary area of your thesis adviser, e.g., CAP, CDA, CEN, COP or COT 6971)
      - Six credits of thesis are required with the professor who directs the student's thesis. The thesis experience is expected to span two semesters. Thesis students who are full-time must continue to enroll in 3 credit hours of thesis course work until the thesis requirement is satisfied, even if it goes beyond the minimum of 6 credit hours of thesis. Students are required to prepare and defend a formal thesis in accordance with university requirements.
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Additional Elective Coursework. The nonthesis option requires at least 6 additional credit hours of electives beyond the 12 credit hours of electives described above. In addition, nonthesis students are required to engage in a culminating experience as determined by the program's graduate committee. Students in the nonthesis option may not take more than 6 credit hours of independent study (6908) and/or directed research (XXX 6918).

Additional Requirements
0 Total Credits

- At least half of the credit hours of both thesis and nonthesis students must be at the 6000 level. Furthermore, at least two 6000-level Computer Science formal courses (6 credit hours) must be taught by EECS faculty, exclusive of independent study and directed research and a total of 24 credit hours of formal courses must be earned exclusive of thesis. Approval may be granted for no more than 6 credit hours of electives to be taken outside of Computer Science, and such approval must occur prior to taking these outside courses.

Grand Total Credits: 30
Program Details

Examples of approved pairs include (but not limited to):

Operating Systems (OS) area (COP 5611 and COP 6614)
Computer Graphics area (CAP 5725 and CAP 6721)
Machine Learning area (CAP 5610 or CAP 5512 and CAP 6616 or CAP 6545)
Artificial Intelligence (AI) area (CAP 5636 and CAP 6640 or CAP 6676)
Computer Vision area (CAP 5415 and CAP 6411 or CAP 6412 or CAP 6419 or CAP 6835)
Computer Architecture area (CDA 5110 and/or CDA 5106 and CDA 6107)
Networking area (CNT 5008 and CNT 6707)
Software Engineering area (CEN 5016 and CEN 6081)
Database area (COP 5711 and COP 6731), etc.
Mixed Reality Engineering area (CAP 5115 and CAP 6110)
Theory area (COT 5405 and COT 6410)
Computer Security area (CAP 5150 and 1 or more 6000-level classes from Cyber Security and Privacy program)
Quantum Computing area (COT 5600 and COT 6602)
Bioinformatics area (CAP 5510 and CAP 6517)

The above list is only meant to provide some examples and is not comprehensive.

Equipment Fee

Students in the Computer Science MS program pay a $34 equipment fee each semester that they are enrolled. Part-time students pay $17 per semester.

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis or an approved set of research-based classes for nonthesis students.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Computer Science MS - Computer Science MS, Accelerated BS to MS Track

Track Website

http://www.cs.ucf.edu/
Track Handbook

Computer Science MS

Track Contact Information

Sumanta Pattanaik, Ph.D.
Associate Professor, Graduate Coordinator
Sumanta.Pattanaik@ucf.edu
HEC 218

Online Availability

No

Track Description

The Accelerated BS to MS program in Computer Science allows highly qualified UCF undergraduate majors in Computer Science to take graduate-level courses that will count toward their MS degree while completing their BS degree program.

Up to 12 credit hours of 5000- and 6000-level courses with a grade of "B" (3.0) or better may be counted toward the accelerated BS to MS program. Two additional requirements for the students in this program are:

- Students must earn at least a "B" (3.0) in each undergraduate- or graduate-level course counted for the program.
- Students must opt for this program no later than the beginning of their junior year.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

This track is available to University of Central Florida undergraduate majors in Computer Science only.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Undergraduate Requirements**

0 Total Credits

- See the current version of the Undergraduate Catalog and the College of Engineering and Computer Science website for additional requirements for accelerated programs.

**Required Courses**

12 Total Credits

- Complete all of the following
  - Complete the following:
    - CDA5106 - Advanced Computer Architecture (3)
    - COT5405 - Design and Analysis of Algorithms (3)
  - Both CDA 5106 and COT 5405 must be completed with a B or better. Students earning a B- or below will have to repeat the course(s) until they earn a B or better.

**Research Pair**

6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - Any approved pair of Computer Science courses from a single research area that includes at least one 6000-level course (See Program Details below for Examples of Approved Pairs)

**Elective Courses**

12 Total Credits

- Earn at least 12 credits from the following types of courses:
  - All students, both thesis and nonthesis, are required to complete 12 credit hours of electives that are selected after consultation with the student's adviser.

**Thesis/Nonthesis Option**

6 Total Credits

- Complete 1 of the following
  - **Thesis Option**
    - Earn at least 6 credits from the following types of courses:
      - XXX 6971 Thesis (prefix determined by disciplinary area of your thesis adviser, e.g., CAP, CDA, CEN, COP or COT 6971)
      - Six credits of thesis are required with the professor who directs the student's thesis. The thesis experience is expected to span two semesters. Thesis students who are full-time must continue to enroll in 3 credit hours of thesis course work until the thesis requirement is satisfied, even if it goes beyond the minimum of 6 credit hours of thesis. Students are required to prepare and defend a formal thesis in accordance with university requirements.
  - **Nonthesis Option**
    - Earn at least 6 credits from the following types of courses:
      - Additional Elective Coursework. The nonthesis option requires at least 6 additional credit hours of electives beyond the 12 credit hours of electives described above. In addition, nonthesis students are required to engage in a culminating experience as determined by the program's graduate committee. Students in the nonthesis option may not take more than 6 credit hours of independent study (6908) and/or directed research (XXX 6918).

**Additional Requirements**

0 Total Credits

- At least half of the credit hours of both thesis and nonthesis students must be at the 6000 level. Furthermore, at least two 6000-level Computer Science formal courses (6 credit hours) must be taught by EECS faculty, exclusive of independent study and directed research and a total of 24 credit hours of formal courses must be earned exclusive of thesis. Approval may be granted for no more than 6 credit hours of electives to be taken outside of Computer Science, and such approval must occur prior to taking these outside courses.

Grand Total Credits: **30**
**Track Details**

Examples of approved pairs include (but not limited to):

- Operating Systems (OS) area (COP 5611 and COP 6614)
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- Artificial Intelligence (AI) area (CAP 5636 and CAP 6640 or CAP 6676)
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- Quantum Computing area (COT 5600 and COT 6602)
- Bioinformatics area (CAP 5510 and CAP 6517)

The above list is only meant to provide some examples and is not comprehensive.

**Plan of Study**

The Plan of Study is an agreement between the student, the program and the University that lists the coursework taken to satisfy the requirements for completing the degree. The Plan of Study for student is flexible and unique to each student. However, it must meet university, college and department requirements.

All graduate students must have a Plan of Study on file, approved by the adviser and graduate coordinator, by the completion of 9 credit hours after entering the program. The College of Graduate Studies automatically places a “hold” on future registration for noncompliance. The default adviser for nonthesis MS students is the Graduate Coordinator.

**Equipment Fee**

Students in the Computer Science MS program pay a $34 equipment fee each semester that they are enrolled. Part-time students pay $17 per semester.

**Independent Learning**

The Independent Learning Requirement is met by successful completion of a master's thesis or an approved set of research-based classes for nonthesis students.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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**Grad Fellowships**

Telephone: 407-823-0127
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https://funding.graduate.ucf.edu
Computer Science PhD

College
College of Engineering and Computer Science

Department
Department of Computer Science

Program Website
http://www.cs.ucf.edu/

Program Handbook Link
Computer Science PhD

Program Contact Information
Graduate Coordinator
csgrad@ucf.edu

Is this program available 100% online?
No

Program Description
The Computer Science PhD program prepares students in the highest level of theory and practice of Computer Science, aiding with the development of research and instruction skills for positions in academia, industry and government sectors.

The Computer Science PhD program produces professionals trained at the highest possible academic level in the theory and practice of Computer Science in order to meet current and projected market demands for Computer Science experts. Students graduate with proven abilities in research and instruction and have expertise suitable for positions in industry, academia and government.

Students in the program receive a broad background in the areas of programming systems and languages, computer architecture and computer science theory while specializing in a research area. Research interests of the computer science faculty include affective computing, applied perception, bioinformatics, computational biology, computational geometry, computer and network security, computer architecture, computer forensics, computer graphics, computer networks, computer vision, cryptography, data compression, database management systems, data mining, design and analysis of algorithms, evolutionary computation, genetic algorithms, graph theory, hardware/software co-design, image processing, machine learning, mixed and virtual reality, mobile computing, modeling and simulation, multimedia systems, natural language processing, neural networks, parallel and distributed processing, performance evaluation, programming languages, quantum computing, semantic web, software agents, software engineering and VLSI systems.

The Computer Science PhD program prepares students in the highest level of theory and practice of Computer Science, aiding with the development of research and instruction skills for positions in academia, industry and government sectors.

The Computer Science PhD program produces professionals trained at the highest possible academic level in the theory and practice of Computer Science in order to meet current and projected market demands for Computer Science experts. Students graduate with proven abilities in research and instruction and have expertise suitable for positions in industry, academia and government.

Students in the program receive a broad background in the areas of programming systems and languages, computer architecture and computer science theory while specializing in a research area. Research interests of the computer science faculty include affective computing, applied perception, bioinformatics, computational biology, computational geometry, computer and network security, computer architecture, computer forensics, computer graphics, computer networks, computer vision, cryptography, data compression, database management systems, data mining, design and analysis of algorithms, evolutionary computation, genetic algorithms, graph theory, hardware/software co-design, image processing, machine learning, mixed and virtual reality, mobile computing, modeling and simulation, multimedia systems, natural language processing, neural networks, parallel and distributed processing, performance evaluation, programming languages, quantum computing, semantic web, software agents, software engineering and VLSI systems.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites
An undergraduate degree in Computer Science is desirable but not required. Applicants without a strong undergraduate background in Computer Science must demonstrate an understanding of the material covered in the following upper-division undergraduate courses:

- EEL 4768C Computer Architecture 3 Credit Hours
- COP 4020 Programming Languages I 3 Credit Hours
- COP 4600 Operating System 3 Credit Hours
- COT 4210 Discrete Computational Structures 3 Credit Hours
College of Graduate Studies Contact Information

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Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete all of the following
  - Complete the following:
    - CDA5106 - Advanced Computer Architecture (3)
    - COT5405 - Design and Analysis of Algorithms (3)
    - COT6410 - Computational Complexity (3)
  - Students must earn a B or better in CDA 5106, COT 5405, and COT 6410. Students earning a B- or below in this course work, will have to repeat the course work until they earn a B or better.

Elective Courses
48 Total Credits

- Earn at least 48 credits from the following types of courses:
  - Elective Coursework - Grades must be a "C" (2.0) or better with at most 6 credit hours having grades below "B" (3.0) and an overall grade point average of 3.0 or better. - No courses below the 5000-level, with no 5000-level CGS prefix course work. - No more than 12 credit hours of independent study (6908). - Five 6000- or 7000-level courses (15 credits) with grades of "B" (3.0) or better taught by EECS faculty. None of these may be independent study or dissertation for which letter grades (not S/U) are assigned. At least 36 hours must be formal course work, exclusive of independent study or doctoral research.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - XXX 7980 - Dissertation

Qualifying Review
0 Total Credits

- The Qualifying Review (QR) will be offered twice a year the in Fall and the Spring semester. A student enrolled in the PhD program is required to take the QR in the third semester (excluding the Summer semesters). The Graduate Committee will meet twice a year to evaluate the results. To pass QR a student should have at least one publication with the adviser and should have passed two core classes, or passed one and be enrolled in a second one. A second QR attempt should be not later than the fifth semester; at that time the student should have passed the three core courses.

Dissertation Committee
0 Total Credits

- The Dean, through the Chairs and Directors, is responsible for committee formation, additions and deletions. The doctoral committee must consist of a minimum of four members; three must be graduate faculty members from within EECS and one must be at large from outside the EECS faculty. Joint faculty members may serve as school-faculty committee members. The Computer Science Graduate Committee may specify additional membership. The College of Graduate Studies reserves the right to review appointments to advisory committees, place a representative on any advisory committee, or appoint a co-adviser. Joint faculty members may serve as committee chairs, but graduate faculty scholars may not, although they may serve as co-chairs. All members vote on acceptance or rejection of the dissertation proposal and the final dissertation. The dissertation proposal and final dissertation must be approved by a majority of the advisory committee.

Candidacy Examination
0 Total Credits

- After passing qualifiers, students are required to successfully complete the candidacy examination to demonstrate readiness for preliminary research in a chosen field of study. This exam requires the acceptance of a professional paper by a peer-reviewed conference or journal that is deemed acceptable to the student’s advisory committee as a major contribution to
student's area of research. Candidacy is normally taken near the completion of required course work and must be passed before registering for doctoral dissertation hours (XXX 7980). Continuous enrollment in at least 3 hours of doctoral dissertation hours is required once a student starts taking 7980 credits. The candidacy status change form and any associated paperwork (advisory committee form, program of study, etc.) must be submitted for processing by the last day of classes of the semester prior to enrolling in dissertation credits. In order to start taking dissertation hours you must be within 57 credit hours.

Admission to Candidacy
0 Total Credits
- The following are required to be admitted to candidacy and enroll in dissertation hours. Evidence of successful completion of these requirements must be received in the College of Graduate Studies by the day before the first day of classes in which the student wishes to enroll in dissertation hours: - Completion of all course work, except for dissertation hours. - Successful completion of the candidacy examination. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study.

Time Limitation
0 Total Credits
- Students have seven years from the beginning of regular graduate status in the PhD program to complete all requirements for the degree, although most students finish within 4 to 5 years.

Dissertation Proposal
0 Total Credits
- After passing the candidacy examination, the student will write a dissertation proposal and present it orally to the dissertation advisory committee for approval. The proposal must include a description of the research performed to date and research plans.

Dissertation and Oral Defense
0 Total Credits
- Students must write a dissertation on their research that describes a significant original contribution to the field of computer science. The oral defense of the dissertation is reviewed by the research committee. The College of Engineering and Computer Science requires that all dissertation defense announcements are approved by the student's adviser and posted on the college's website and the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date. The dissertation must be approved by the dissertation adviser and committee, the school director or designee and the dean of the college or designee. Format approval from the Thesis and Dissertation Editor and final approval of satisfaction of degree requirements by the College of Graduate Studies is required.

Grand Total Credits: 72

Program Details
A plan of study for each student must be filed within the first two weeks of the student's second semester in the program. Details about this program can be found in the Computer Science PhD Handbook.

This plan must satisfy the following:
- A minimum of 72 credit hours (including CDA 5106, COT 5405, and COT 6410 - all with a grade of "B" (3.0) or better). At most 30 credit hours can be waived from a completed MS program, exclusive of thesis, independent study, dissertation, and research. Otherwise, at most 9 external credits can be transferred.
- A 3.0 or better grade point average is required. At most 6 credit hours with "C" (2.0) are allowed.
- No courses below the 5000-level, with no 5000-level CGS prefix coursework.
- No more than 12 credit hours of independent study (6908).
- Five 6000- or 7000-level courses (15 credits) with grades of "B" (3.0) or better taught by EECS faculty. None of these may be independent study or dissertation for which letter grades (not S/U) are assigned.
- Six additional computer science graduate credits to make the total of all non-independent study (e.g., formal coursework exclusive of independent study) of at least 36 credits.
- A minimum of 15 credit hours and a maximum of 24 credit hours of PhD dissertation (CAP, CDA, CEN, CIS, CNT, COP or COT 7980).

Equipment Fee
Students in the Computer Science PhD program pay a $34 equipment fee each semester that they are enrolled. Part-time students pay $17 per semester.

Independent Learning
The Independent Learning requirement is met by successful completion of the student's candidacy and dissertation defense examinations.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Computer Vision MS

College
College of Engineering and Computer Science

Department
Department of Computer Science

Program Website
https://www.crcv.ucf.edu/

Program Contact Information
Niels da Vitoria Lobo PhD
Associate Professor
niels@cs.ucf.edu
Telephone: 407-823-2873
HEC 252

Is this program available 100% online?
No

Program Description
The Master of Computer Vision Program (MSCV) aims to provide technical skills and domain knowledge to the future professionals in acquiring, processing, analyzing, and understanding images, videos, 3D data, and other types of high-dimensional data of the real world. The fast-growing interests and investments in Artificial Intelligence (AI) have to be powered by a well-prepared workforce. This program meets the need created by the United States' shortage of AI personnel.

The curriculum for this degree program includes 6 required classes (18 credit hours) which form the backbone of graduate study for the field.

The remaining 12 credit hours can be selected from the list of elective courses. Electives outside of the provided list require approval from the student's adviser and program coordinator.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Program Prerequisites

An undergraduate degree in Computer Science is desirable but not required. Applicants without a strong undergraduate background in Computer Science must demonstrate an understanding of the material covered in the following upper-division undergraduate courses:

- EEL 4768C Computer Architecture
- COP 4020 Programming Languages I
- COP 4600 Operating Systems
- COT 4210 Discrete Computational Structures

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
18 Total Credits

- Complete the following:
  - CAP5415 - Computer Vision (3)
  - CAP6411 - Computer Vision Systems (3)
  - CAP6412 - Advanced Computer Vision (3)
  - CAP6419 - 3D Computer Vision (3)
  - CAP5516 - Medical Image Computing (3)
  - CAP5610 - Machine Learning (3)

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  All students are required to complete 12 credit hours of electives that are selected after consultation with the student's adviser. At least half of the credit hours of students must be at the 6000 level. Approval may be granted for no more than 6 credit hours of electives to be taken outside of Computer Science, and such approval must occur prior to taking any classes outside of the four listed below. CAP 5908 Independent Study CAP 6908 Independent Study COT 6505 - Computational Methods/Analysis STA 6106 - Statistical Computing

Grand Total Credits: 30

Program Details

Equipment Fee

Students in the Computer Vision MS program pay a $34 equipment fee each semester that they are enrolled. Part-time students pay $17 per semester.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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http://finaid.ucf.edu
Fellowship Information
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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Cyber Security and Privacy MS

College
College of Engineering and Computer Science

Department
Department of Computer Science

Program Website
https://mscyber.cs.ucf.edu/

Program Contact Information
Cliff C. Zou PhD
Associate Professor
Department of Computer Science
czou@cs.ucf.edu
Telephone: 407-823-5015
HEC 243

Jeanine Clements
Graduate Student Services Coordinator
Jeanine.Clements@ucf.edu
Telephone: 407-882-2313
HEC 437B

Is this program available 100% online?
No
Program Description

The Master of Science in Cyber Security and Privacy program will provide high-quality cybersecurity graduate education, advance cybersecurity and privacy research, and address the issues of state, national and international cybersecurity.

The Master of Science in Cyber Security and Privacy program provides students with an in-depth education geared toward meeting the needs of business and industry in Florida and throughout the United States.

Students successfully completing this program will have exhibited breadth as well as depth of capability involving both theoretical aspects and practical considerations and applications of cyber security issues in software, hardware, operating system, and various networked devices.

This proposed program will be offered jointly by College of Engineering and Computer Science (CECS) (Department of Computer Science), College of Business Institute of Simulation and Training (IST), College of Sciences (Department of Psychology), College of Community Innovation and Education (Department of Criminal Justice). The degree will be housed in CECS due to its requirement for students with primarily STEM backgrounds.

The MS in Cybersecurity and Privacy program will have two tracks: TRACK 1: Technical Track and TRACK 2: Interdisciplinary Track.

Track 1 is designed for students aiming to become advanced cybersecurity and privacy professionals, who will master advanced knowledge on cybersecurity and privacy topics such as secure execution environment and malware analysis, and master knowledge on electives on networking, database, operating system, computer architecture, algorithms, machine learning and artificial intelligence (AI) and software engineering.

Track 2 is designed for students aiming to become managers or administrative personnel of cybersecurity and privacy operations. They will be required to take fundamental and core courses on cybersecurity and privacy, and can choose electives from fields including management and business, human factors, psychology and criminal justice.

The MS in Cybersecurity and Privacy program offers both a thesis and nonthesis option with each option requiring a minimum of 30 credit hours beyond the bachelor's degree. Both options require 9 credit hours of required core courses and 7 electives (21 credits). For Track 1, electives include minimum 1 course from cybersecurity/privacy topics, minimum 1 course from networking, and minimum 1 from database. The three fields from which students have to choose one course are necessary and fundamental to master advanced knowledge on cybersecurity and privacy. Students can also choose electives from operating system, computer architecture, algorithms, machine learning and artificial intelligence (AI) and software engineering to expand their horizon. For Track 2, students can freely choose electives from management and business, human factors, psychology and criminal justice, depending on their interest and professional domains. For both tracks, there is a thesis option, which is equivalent to 6 credit course hours of electives.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

An undergraduate degree in Computer Science, Computer Engineering, Information Technology, or equivalent is desirable but not required. Applicants without a strong undergraduate background in Computer must demonstrate an understanding of the material covered in the following undergraduate courses:

- COP 3502C - Computer Science I
- COP 3503C - Computer Science II
- CIS 3360 - Security in Computing

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits
- Complete the following:
  - CAPS150 - Foundations of Computer Security and Privacy (3)
  - CDA5209 - Foundations of Secure Execution Environment (3)
Elective Courses
15 Total Credits

Complete 1 of the following

- All students, both thesis and nonthesis, are required to complete 15 credit hours of electives that are selected after consultation with the student's adviser. For Track 1: Technical Track, electives include minimum 1 course from cybersecurity/privacy topics, minimum 1 course from networking, and minimum 1 from database. The three fields from which students have to choose one course are necessary and fundamental to master advanced knowledge on cybersecurity and privacy. Students can also choose electives from operating system, computer architecture, algorithms, machine learning and artificial intelligence (AI) and software engineering to expand their horizon. For Track 2: Interdisciplinary Track, students can freely choose electives from management and business, human factors, psychology and criminal justice, depending on their interest and professional domains.

- Complete all of the following
  - Cybersecurity/Privacy
    - Complete at least 1 of the following:
      - CAP5151 - Internet of Things Security and Privacy (3)
      - CAP6135 - Malware and Software Vulnerability Analysis (3)
      - CDA6221 - Advanced Topics in Secure Execution Environment (3)
      - CIS6395 - Incident Response Technologies (3)
      - CNT5410L - Cyber Operations Lab (3)
      - CIS5730 - Blockchains and Smart Distributed Contracts (3)
  - Networking
    - Complete at least 1 of the following:
      - CNT5008 - Computer Communication Networks Architecture (3)
      - CNT5805 - Network Science (3)
      - CNT6707 - Advanced Computer Networks (3)
  - Database
    - Complete at least 1 of the following:
      - COP5711 - Parallel and Distributed Database Systems (3)
      - COP6731 - Advanced Database Systems (3)
  - Other Electives
    - Complete at least 2 of the following:
      - CDA5106 - Advanced Computer Architecture (3)
      - COP5611 - Operating Systems Design Principles (3)
      - COT5405 - Design and Analysis of Algorithms (3)
      - COT6410 - Computational Complexity (3)
      - CAP5610 - Machine Learning (3)
      - CAP5636 - Advanced Artificial Intelligence (3)
      - CAP6640 - Computer Understanding of Natural Language (3)
      - CEN5016 - Software Engineering (3)

- Track 2: Interdisciplinary Track
  - Complete at least 5 of the following:
    - ISM6327 - Foundations of Cybersecurity and Privacy (3)
    - ISM6328 - Cyber Risk Assessment (3)
    - ISM6375 - Cyber Management and Leadership (3)
    - IDC5602 - Cybersecurity: A Multidisciplinary Approach (3)
    - IDC6600 - Emerging Cyber Issues (3)
    - IDC6601 - Behavioral Aspects of Cybersecurity (3)
    - EXP5256 - Human Factors I (3)
    - EXP6257 - Human Factors II (3)
    - INP6072 - Survey Research Methods and Program Evaluation in Indust. and Org. Psychology (3)
    - SOP5059 - Advanced Social Psychology (3)
    - CCJ6073 - Data Management Systems for Crime Analysis (3)
    - CCJ6074 - Investigative and Intelligence Analysis: Theory and Methods (3)
    - CCJ6717 - CJ Theories of Crime Analysis and Prevention (3)

Thesis/Nonthesis Option
6 Total Credits

Complete 1 of the following

- Thesis Option
  - Earn at least 6 credits from the following types of courses:
    - XXX 6971 Thesis (prefix determined by disciplinary area of your thesis adviser, e.g., CAP, CDA, CEN, COP or COT 6971)
    - Six credits of thesis are required with the professor who directs the student's thesis. The thesis experience is expected to span two semesters. Thesis students who are full-time must continue to enroll in 3 credit hours of thesis course work until the thesis requirement is satisfied, even if it goes beyond the minimum of 6 credit hours of thesis. Students are required to prepare and defend a formal thesis in accordance with university requirements.

- Nonthesis Option
Earn at least 6 credits from the following types of courses:
Additional elective coursework. The nonthesis option requires 6 additional credit hours of any electives in both tracks beyond the 15 credit hours of electives in the intended program track described above.

Grand Total Credits: **30**

**Program Details**

**Independent Learning**

The Independent Learning Requirement is met by successful completion of a master's thesis or an approved set of research-based classes for nonthesis students.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Data Analytics Graduate Certificate**

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Program Website**
http://www.ce.ucf.edu/credit/data/

**Program Contact Information**
Ivan Garibay PhD
igaribay@ucf.edu
Telephone: 407-882-1163
ENG2

**Is this program available 100% online?**
Yes
Please note: Data Analytics Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit [http://global.ucf.edu/](http://global.ucf.edu/). If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Data Analytics, which is part of the Master of Science in Data Analytics program, aims to provide students with the new ability to develop algorithms and computer programs for discovery of information from large amounts of data. This includes the architecture of programs, as well as technical details of algorithm development. Students are expected to be able to write and maintain novel computer programs that make efficient use of cutting-edge computer technology.

Students in this certificate option will receive a broad background in the areas of parallel database programming, machine learning, data mining, and network science while specializing in particular areas of data analytics practice. Students successfully completing this certificate program will have exhibited an advanced ability to lead in the discovery of actionable knowledge from "big data."

The Graduate Certificate in Data Analytics requires 15 credit hours. Students must receive a grade of "B" or higher in all courses.

Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

An undergraduate degree in computer science, statistics, computer engineering or information technology is desirable but not required. Applicants without a strong undergraduate background in computer science or statistics must demonstrate an understanding of the field. This can occur through a display of training in various programming languages, other computer science certificates, through an interview with program faculty in the application process, and/or having taken these or similar courses in the following upper division undergraduate courses:

- COP 3330 Object-Oriented Programming
- COP 3503C Computer Science II
- COP 4710 Database Systems
- STA 2023 Statistical Methods I
- Programming experience or STA 4164 Statistical Methods III

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses

15 Total Credits

- Complete the following:
  - CAP5610 - Machine Learning (3)
  - CNT5805 - Network Science (3)
  - COP5711 - Parallel and Distributed Database Systems (3)
  - STA5206 - Statistical Analysis (3)
  - STA5703 - Data Mining Methodology I (3)

Grand Total Credits: 15
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Data Analytics MS

College

College of Engineering and Computer Science

Department

Department of Computer Science

Program Website

http://www.ce.ucf.edu/credit/data/

Program Contact Information

Dan Eilen, PhD
eilen.daniel@ucf.edu
Telephone: 407-823-5738
UTWR

Is this program available 100% online?

No

Program Description

The Master of Science in Data Analytics program provides students with the ability to develop algorithms and computer programs for discovery of information from large amounts of data. This includes the architecture of programs, as well as technical details of algorithm development. Students are expected to be able to write and maintain novel computer programs that make efficient use of cutting-edge computer technology.

Students in this nonthesis program receive a broad background in the areas of parallel programming, machine learning, data mining, and network science while specializing in particular areas of data analytics practice. Students successfully completing this program will have exhibited breadth as well as depth of capability involving discovery of knowledge from "big data."

The MS in Data Analytics requires 30 credit hours and includes a project, which is a culminating experience. Students must receive a grade of "B" or higher in all courses.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Program Prerequisites

An undergraduate degree in computer science, statistics, computer engineering or information technology is desirable but not required. Applicants without a strong undergraduate background in computer science or statistics must demonstrate an understanding of the material covered in the following upper division undergraduate courses:

- COP 3330 Object-Oriented Programming
- COP 3503C Computer Science II
- COP 4710 Database Systems
- STA 2023 Statistical Methods I
- Programming experience or STA 4164 Statistical Methods III

College of Graduate Studies Contact Information

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Online Application
Graduate Admissions

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Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
24 Total Credits

- Complete the following:
  - CAP5610 - Machine Learning (3)
  - CNT5805 - Network Science (3)
  - COP5711 - Parallel and Distributed Database Systems (3)
  - COP6526 - Parallel and Cloud Computation (3)
  - STA5206 - Statistical Analysis (3)
  - STA5703 - Data Mining Methodology I (3)
  - STA6704 - Data Mining Methodology II (3)
  - CAP6942 - Project in Data Analytics (3)

Restricted Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - CAP6307 - Text Mining I (3)
  - CAP6315 - Social Media and Network Analysis (3)
  - CAP6318 - Computational Analysis of Social Complexity (3)
  - CAP6545 - Machine Learning Methods for Biomedical Data (3)
  - CAP6737 - Interactive Data Visualization (3)
  - STA6714 - Data Preparation (3)

Grand Total Credits: 30

Program Details

Independent Learning

The Independent Learning Requirement is met by successful completion of a capstone project in CAP 6942 - Project in Data Analytics.
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Design for Usability Graduate Certificate

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Program Prerequisites
Admission is open to those with a bachelor's degree in industrial engineering or a closely related discipline from an accredited institution recognized by UCF.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Digital Forensics MS

College
College of Engineering and Computer Science

Department
Department of Computer Science
Program Website

http://msdf.ucf.edu/

Program Handbook Link

Digital Forensics MS

Program Contact Information

Cliff Zou PhD
Associate Professor
CZou@cs.ucf.edu
Telephone: 407-823-5015
HEC 243

Is this program available 100% online?

Yes

UCF Online

Please note: Digital Forensics (MS) may be completed fully online. Most courses are either online courses or have both in-campus and online course sessions. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. It could be difficult to satisfy these requirements since many courses in this program only have online format. Please contact Program Coordinator to discuss possible admission issue.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Digital Forensics master’s degree is a collaborative effort between various UCF academic departments (Computer Science, Forensic Science of Chemistry, Criminal Justice, and Legal Studies) and the National Center for Forensic Science (NCFS), which is based in the UCF College of Sciences as a forensic science research center and is housed in Orlando’s Research Park, adjacent to UCF.

The mission of the MSDF degree program is to provide a quality graduate education in science and practices of digital forensics, to prepare the students for digital forensics jobs, and to prepare the students for a lifetime of learning. The objectives of the program include the following:

- To give MSDF graduates the knowledge and skills necessary to participate as an effective team member or team leader in digital evidence investigations
- To prepare MSDF graduates for professional careers in digital forensics examination, forensic tool development, tool verification and validation, security and forensics administration
- To prepare MSDF graduates with the knowledge and skills to pursue advanced studies and research in computer technology or computer crime-related disciplines
- To equip MSDF graduates with the communication skills, both oral and written, to become an effective problem solver as well as an effective communicator as an expert forensic examiner and expert witness

The Digital Forensics MS degree is comprised of 30 hours of study beyond the bachelor’s degree with required, intensive specialization in topics related to digital forensics. The degree program prepares students, including working professionals, who will pursue the degree on a part-time basis to gain the knowledge and skills required to work as an examiner in the field. The program may also be taken by those who have an interest in scientific applications and research in the field, and who would like to continue to a doctoral degree program or law school after completion.

The program offers both a thesis option (6 credit hours) or an opportunity to complete two additional courses (6 credit hours) selected from the Restricted Electives. At least one-half of the credit hours must be at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

Undergraduate articulation courses may be required for students with BS and/or MS degrees in fields other than a computer-related field. If you are not in STEM related BS program, you need to show either you have taken some basic CS/IT courses, or have working experience in CS or IT or digital forensics field. If you want to take some prerequisite courses, you can take two to three of the following courses in UCF or equivalent courses in other places:

- Basic CS knowledge: COP 3502: Computer Science I
- Basic networking knowledge: CNT 3004 Computer Network Concepts, or CNT 4703C Design and Implementation of Computer Communication Networks, or CNT 4704 Analysis of Computer Communication Networks
- Basic Computer architecture: CDA 3103: Computer Logic and Organization
- Programming course, such as: COP 3223C Introduction to Programming with C, or COP 3330 Intro to OO Programming with Java

Courses taken to correct deficiencies cannot be used to satisfy minimum degree requirements.

2022-2023 Graduate Catalog
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems (3)
  - CHS5504 - Topics in Forensic Science (3)
  - CIS6207 - The Practice of Digital Forensics (3)
  - CNT6418 - Computer Forensics II (3)

Restricted Elective Courses
12 Total Credits

- Complete all of the following
  - Computing and Technology
    - Complete at least 2 of the following:
      - CAP6133 - Advanced Topics in Computer Security and Computer Forensics (3)
      - CNT5410L - Cyber Operations Lab (3)
      - CAP6135 - Malware and Software Vulnerability Analysis (3)
      - CIS6386 - Operating Systems and File System Forensics (3)
      - CIS6395 - Incident Response Technologies (3)
      - IDC5602 - Cybersecurity: A Multidisciplinary Approach (3)
      - IDC6600 - Emerging Cyber Issues (3)
      - IDC6601 - Behavioral Aspects of Cybersecurity (3)
  - Criminal Justice
    - Complete at least 1 of the following:
      - CCJ5015 - The Nature of Crime (3)
      - CCJ5456 - The Administration of Justice (3)
      - CCJ6074 - Investigative and Intelligence Analysis: Theory and Methods (3)
      - CCJ6704 - Research Methods in Criminal Justice (3)
      - CCJ6706 - Data Analysis in Criminal Justice I (3)
      - CJE6688 - Cyber Crime and Criminal Justice (3)
      - CJL6568 - Law and Social Control (3)
  - Legal Studies and Electronic Discovery
    - Complete at least 1 of the following:
      - CHS5596 - The Forensic Expert in the Courtroom (3)
      - CHS5518 - The Forensic Collection and Examination of Digital Evidence (3)
      - PLA5587 - Current Issues in Cyberlaw (3)
      - CIS6206 - Electronic Discovery for Digital Forensics Professionals (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - CAP 6971: Thesis The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Students not interested in a thesis can instead take one elective course and the "CDA 6946: Internship" course, or take two electives. The electives can be any courses from the list of Restricted Electives above, or the following electives.

Grand Total Credits: 30

Program Details

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis or completing the capstone course CIS 6207.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
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Telephone: 407-823-2827
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http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Electrical Engineering MSEE

College

College of Engineering and Computer Science

Department

Program Website
http://www.ece.ucf.edu/

Program Handbook Link
Electrical Engineering MSEE

Program Contact Information

Kalpathy Sundaram PhD
Professor
ece-grad@cecs.ucf.edu
Telephone: 407-823-5326
HEC 439B

Is this program available 100% online?
No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Electrical-Engineering-MS.pdf.
Program Description

The Master of Science in Electrical Engineering students receive a broad background in areas such as electromagnetics and optics, signal processing and systems, and micro-systems and nano-systems.

The Department of Electrical Engineering (Electrical Engineering Program) supports a number of technical (research) areas in which a Master of Science student may specialize. These technical areas are: Electromagnetics and Optics (EO), Signal Processing and Systems (SPS), and Micro-Systems and Nano-Systems (MNS). The Micro-Systems and Nano-Systems area covers the typical Electrical Engineering topic areas of Electronics, Power Electronics, and Micro-Electronics, while the Signal Processing and Systems area covers the typical electrical topic areas of communications, controls, and signal processing. All MSEE programs offer a thesis and a nonthesis option, as well as an Accelerated BS to MSEE program. Students in the program receive a broad background in the various technical areas while specializing in a research area of their interest.

The specific research area that each one of the EE faculty conduct can be found at the Department of EE website (www.ece.ucf.edu/).

This degree has 2 tracks: Accelerated BS to MSEE Track and Guidance Control and Dynamics Track. Please scroll to the bottom of this page for further details on these Tracks.

Program Prerequisites

Undergraduate articulation courses are required to be completed prior to admission for students who do not hold a Bachelor of Science degree in Electrical Engineering. In particular, the articulation courses specified below, plus all of the prerequisite string which any of them require, must be completed prior to admission. Grades of "B" or higher must be obtained in each articulation course specified below. Articulation courses are not eligible for inclusion on a graduate Program of Study.

- EEL 3123C - Network and Systems
- EEE 3307C - Electronics I
- EEL 3470 - Electromagnetic Fields
- EEL 3552 - Signal Analysis and Communications
- EEE 3350 - Semiconductor Devices I

In addition, choose one of the following:

- EEL 3657 - Linear Control Systems
- EEE 4309C - Electronics II
- EEL 4750 - Digital Signal Processing Fundamentals

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Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Elective Courses
24 Total Credits

- There are no required courses within a specialization area, however, all students (thesis and nonthesis) must choose at least 24 credit hours of formal courses, excluding research-related courses and Independent Study (XXX 6908) that emphasize their specialization area. Courses from outside specialization areas could also be chosen if they are approved by the student's adviser and incorporated into the Program of Study for the student. The Program of Study (POS) form must be approved by an adviser in the selected specialization area no later than the end of the second semester after admission. The program of study must meet all the university requirements specified in the graduate catalog and must also receive departmental-level and college-level approval.

Specialization Areas
24 Total Credits

- Complete 1 of the following
  - The Electrical Engineering Program supports a number of specialization areas. These technical areas are: Electromagnetics and Optics (EO), Signal Processing and Systems (SPS), and Micro-Systems and Nano-Systems (MNS). The Micro-Systems and Nano-Systems area covers the typical Electrical Engineering topic areas of Electronics, Power
Electronics and Micro-Electronics, while the Signal Processing and Systems area covers the typical electrical topic areas of communications, controls, and signal processing. For each one of these areas there is a suggested list of courses stated below. Students are also allowed to take courses from other specialization areas, but the majority of their courses should be chosen from courses in their specialization area.

**Electromagnetics and Optics (EO)**
- Earn at least 24 credits from the following:
  - EEE5542 - Random Processes I (3)
  - EEE5557 - Introduction to Radar Systems (3)
  - EEL5437C - Microwave Engineering (4)
  - EEL5439C - RF and Microwave Active Circuits (4)
  - EEL5462 - Antenna Analysis and Design (3)
  - EEL5432 - Satellite Remote Sensing (3)
  - EEL6425C - RF and Microwave Measurement Techniques (4)
  - EEL6481 - Numerical Techniques in Electromagnetics (3)
  - EEL6482 - Electromagnetic Theory I (3)
  - EEL6489 - Advanced Topics in Electromagnetics and Microwaves (3)
  - EEL6504 - Communications Systems Design (3)
  - EEL6530 - Communication Theory (3)
  - MAP5426 - Special Functions (3)
  - MAP5435 - Advanced Mathematics for Engineers (3)
  - MAP6424 - Transform Methods (3)
  - OSE5041 - Introduction to Wave Optics (3)
  - OSE5414 - Fundamentals of Optoelectronic Devices (3)
  - OSE6111 - Optical Wave Propagation (3)
  - OSE6143 - Fiber Optics Communication System (3)
  - OSE6211 - Imaging and Optical Systems (3)
  - OSE6421 - Integrated Photonics (3)
  - OSE6445 - Fundamentals of Ultrafast Optics (3)
  - OSE6455C - Photonics Laboratory (3)
  - OSE6525 - Laser Engineering (3)
  - OSE6615L - Optoelectronic Device Fabrication Laboratory (3)

**Micro-Systems and Nano-Systems (MNS)**
- Earn at least 24 credits from the following:
  - BME5572 - Biomedical Nanotechnology (3)
  - EEL5245 - Power Electronics (3)
  - EEE5332C - Thin Film Technology (3)
  - EEE5352 - Semiconductor Material and Device Characterization (3)
  - EEE5353 - Semiconductor Device Modeling and Simulation (3)
  - EEE5356C - Fabrication of Solid-State Devices (4)
  - EEE5370 - Operational Amplifiers (3)
  - EEE5378 - CMOS Analog and Digital Circuit Design (3)
  - EEE5390C - MEMS Fabrication Laboratory (3)
  - EEE5555 - Surface Acoustic Wave Devices and Systems (3)
  - EEE6317 - Power Semiconductor Devices and Integrated Circuits (3)
  - EEE6358 - Advanced Semiconductor Device I (3)
  - EEE6246 - Power Electronics II (3)
  - EEE6326C - MEMS Fabrication Laboratory (3)
  - EEE6338 - Advanced Topics in Microelectronics (3)

**Signal Processing and Systems (SPS)**
- Earn at least 24 credits from the following:
  - EEE5513 - Digital Signal Processing Applications (3)
  - EEE5542 - Random Processes I (3)
  - EEE5557 - Introduction to Radar Systems (3)
  - EEE6504 - Adaptive Digital Signal Processing (3)
  - EEL5820 - Image Processing (3)
  - EEL5825 - Machine Learning and Pattern Recognition (3)
  - EEL5630 - Digital Control Systems (3)
  - EEL5173 - Linear Systems Theory (3)
  - EEL6504 - Communications Systems Design (3)
  - EEL6530 - Communication Theory (3)
  - EEL6590 - Advanced Topics in Communications (3)
  - EEL6812 - Introduction to Neural Networks and Deep Learning (3)
  - EEL6619 - Nonlinear Robust Control and Applications (3)
  - EEL6621 - Nonlinear Control Systems (3)
  - EEL6662 - Advanced Robotics (3)
  - EEL6667 - Mobile Robotic Systems (3)
  - EEL6671 - Modern and Optimal Control Systems (3)
  - EEL6674 - Optimal Estimation for Control (3)
  - EEL6616 - Adaptive Control (3)
  - EEL6683 - Cooperative Control of Networked Autonomous Systems (3)
  - EEL6669 - Introduction to Robotics and Autonomous Vehicles (3)
  - EEL6026 - Optimization of Engineering Systems (3)
Thesis/Nonthesis Option

**6 Total Credits**

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EEL 6971 - Thesis The thesis option requires 6 credit hours of thesis work (EEL 6971) in addition to the 24 credit hours of formal elective courses. Please note the following requirements for this option: - 24 credit hours of courses must be taken in the student's chosen specialization area. - No more than 6 credits of thesis (EEL 6971) will be counted toward the degree requirement. - At least half of the coursework, including Thesis XXX 6971, must be at the 6000-level (typically at least 15 credit hours). - Thesis students who are full time must continue to enroll in three credit hours of thesis coursework each semester until the thesis requirement is satisfied, beyond the minimum of 6 credit hours of thesis, but only 6 hours total will count toward the degree requirement. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - Additional Elective Coursework. The nonthesis option is especially suited for part-time students. Nonthesis students must complete 6 credit hours of electives in addition to the 24 credit hours of formal coursework described above. If approved by the student's adviser, the student may include a total of 6 credit hours as an Independent Study (XXX 6908). At least half of the coursework must be at the 6000-level (typically at least 15 credit hours).
      - Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of their portfolio of activities by the course withdrawal date of the semester prior to their intended graduation. Portfolio requirements are listed on the EECS website at http://www.eecs.ucf.edu/.

Grand Total Credits: **30**

**Program Details**

**Transfer Credits**

Graduate students with a bachelor's degree in Electrical Engineering from UCF may transfer up to 9 credit hours of 5000-level or higher coursework, with grades of B or higher, toward the MSEE degree. Alternatively, a maximum of 9 credit hours may be transferred of graduate work conducted elsewhere from an accredited institution.

**Equipment Fee**

Students in the Electrical Engineering MSEE program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

**Independent Learning**

The independent learning requirement is met by successful completion of a master's thesis or an approved portfolio of activities for nonthesis students.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Electrical Engineering MSEE - Electrical Engineering MSEE, Accelerated BS to MSEE Track

Track Website
http://www.ece.ucf.edu/

Track Handbook
Electrical Engineering MSEE

Track Contact Information
Kalpathy Sundaram PhD
Professor
ece-grad@cecs.ucf.edu
Telephone: 407-823-5326
HEC 439B

Online Availability
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Electrical-Engineering-MS.pdf.

Track Description
The accelerated undergraduate/graduate program in Electrical Engineering allows highly qualified undergraduate majors in Electrical Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

Students in the Electrical Engineering degree programs receive a broad background in areas such as communications, controls/robotics, digital signal processing, electromagnetics, power electronics and electronics, electro-optics/photonics, solid state and microelectronics while specializing in a research area of their interest.

Research interests of the Electrical Engineering faculty include antennas, microwave and millimeter circuits and devices, communication systems, digital signal/image processing, power electronics, electronic circuits, IFF devices, electromagnetic theory, radar and microwave remote sensing, speech processing, VLSI design, spread spectrum systems, SAW and ACT devices, spectral estimation, solid state device modeling and computer-aided design (CAD) techniques, communication networks, integrated services digital networks, neural networks, systems and controls, robotics, robust control, computer control, microelectronics, semiconductors, thin films, power system stability, bipolar device modeling, solid state lasers, optical propagation, fiber optics, optical signal processing, laser-induced damage, optical testing, diffractive optics, phase conjunction, infrared detectors, Fourier optics, lens design, and nonlinear optics.

Up to 12 credit hours of approved 5000- and 6000-level courses of grades "B" (3.0) or better may be counted toward the BS and MS degrees.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites
This track is available to University of Central Florida undergraduate majors in Electrical Engineering only.
Degree Requirements

Undergraduate Requirements
0 Total Credits

- Application must be made no earlier than the semester after completing 60 credit hours toward the bachelor's degree yet before completing 90 credit hours. A minimum GPA of 3.5 is required prior to admission.

Elective Courses
24 Total Credits

- There are no required courses within a specialization area, however, all students (thesis and nonthesis) must choose at least 24 credit hours of formal courses, excluding research-related courses and Independent Study (XXX 6908) that emphasize their specialization area. Courses from outside specialization areas could also be chosen if they are approved by the student's adviser and incorporated into the Program of Study for the student. The Program of Study (POS) form must be approved by an adviser in the selected specialization area no later than the end of the second semester after admission. The program of study must meet all the university requirements specified in the graduate catalog and must also receive departmental-level and college-level approval.

Specialization Areas
24 Total Credits

- Complete 1 of the following
  - The Electrical Engineering Program supports a number of specialization areas. These technical areas are: Electromagnetics and Optics (EO), Signal Processing and Systems (SPS), and Micro-Systems and Nano-Systems (MNS). The Micro-Systems and Nano-Systems area covers the typical Electrical Engineering topic areas of Electronics, Power Electronics and Micro-Electronics, while the Signal Processing and Systems area covers the typical electrical topic areas of communications, controls, and signal processing. For each one of these areas there is a suggested list of courses stated below. Students are also allowed to take courses from other specialization areas, but the majority of their courses should be chosen from courses in their specialization area.
    - Electromagnetics and Optics (EO)
      - Earn at least 24 credits from the following:
        - EEE5542 - Random Processes I (3)
        - EEE5557 - Introduction to Radar Systems (3)
        - EEL5437C - Microwave Engineering (4)
        - EEL5437C - Microwave Engineering (4)
        - EEL5462 - Antenna Analysis and Design (3)
        - EEL5432 - Satellite Remote Sensing (3)
        - EEL6425C - RF and Microwave Measurement Techniques (4)
        - EEL6481 - Numerical Techniques in Electromagnetics (3)
        - EEL6482 - Electromagnetic Theory I (3)
        - EEL6489 - Advanced Topics in Electromagnetics and Microwaves (3)
        - EEL6504 - Communications Systems Design (3)
        - EEL6530 - Communication Theory (3)
        - MAP5426 - Special Functions (3)
        - MAP5435 - Advanced Mathematics for Engineers (3)
        - MAP6424 - Transform Methods (3)
        - OSE5041 - Introduction to Wave Optics (3)
        - OSE5414 - Fundamentals of Optoelectronic Devices (3)
        - OSE6111 - Optical Wave Propagation (3)
        - OSE6143 - Fiber Optics Communication System (3)
        - OSE6211 - Imaging and Optical Systems (3)
        - OSE6421 - Integrated Photonics (3)
        - Course Not Found
        - OSE6445 - Fundamentals of Ultrafast Optics (3)
Micro-Systems and Nano-Systems (MNS)
- Earn at least 24 credits from the following:
  - BME5572 - Biomedical Nanotechnology (3)
  - EEL5245 - Power Electronics (3)
  - EEE5332C - Thin Film Technology (3)
  - EEE5352 - Semiconductor Material and Device Characterization (3)
  - EEE5353 - Semiconductor Device Modeling and Simulation (3)
  - EEE5356C - Fabrication of Solid-State Devices (4)
  - EEE5570 - Operational Amplifiers (3)
  - EEE578 - CMOS Analog and Digital Circuit Design (3)
  - EEE590C - Full-Custom VLSI Design (3)
  - EEE5555 - Surface Acoustic Wave Devices and Systems (3)
  - EEE6317 - Power Semiconductor Devices and Integrated Circuits (3)
  - EEE6358 - Advanced Semiconductor Device I (3)
  - EEL6246 - Power Electronics II (3)
  - EEEE326C - MEMS Fabrication Laboratory (3)
  - EEEE338 - Advanced Topics in Microelectronics (3)

Signal Processing and Systems (SPS)
- Earn at least 24 credits from the following:
  - EEE5513 - Digital Signal Processing Applications (3)
  - EEE5542 - Random Processes I (3)
  - EEE5555 - Introduction to Radar Systems (3)
  - EEE6504 - Adaptive Digital Signal Processing (3)
  - EEL5820 - Image Processing (3)
  - EEL5825 - Machine Learning and Pattern Recognition (3)
  - EEL6530 - Digital Control Systems (3)
  - EEL5173 - Linear Systems Theory (3)
  - EEL6504 - Communications Systems Design (3)
  - EEL6530 - Communication Theory (3)
  - EEL6590 - Advanced Topics in Communications (3)
  - EEL6812 - Introduction to Neural Networks and Deep Learning (3)
  - EEE6619 - Nonlinear Robust Control and Applications (3)
  - EEE6621 - Nonlinear Control Systems (3)
  - EEE6662 - Advanced Robotics (3)
  - EEE6667 - Mobile Robotic Systems (3)
  - EEE6671 - Modern and Optimal Control Systems (3)
  - EEE6674 - Optimal Estimation for Control (3)
  - EEE6616 - Adaptive Control (3)
  - EEE6683 - Cooperative Control of Networked Autonomous Systems (3)
  - EEE6699 - Introduction to Robotics and Autonomous Vehicles (3)
  - EEL6026 - Optimization of Engineering Systems (3)
  - CAP5415 - Computer Vision (3)
  - CAP6411 - Computer Vision Systems (3)
  - CAP6412 - Advanced Computer Vision (3)
  - CAP6419 - 3D Computer Vision (3)

Thesis/Nonthesis Option
6 Total Credits
- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EEL 6971 - Thesis
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Additional Elective Coursework. The nonthesis option is especially suited for part-time students. Nonthesis students must complete 6 credit hours of electives in addition to the 24 credit hours of formal coursework described above. If approved by the student's adviser, the student may include a total of 6 credit hours as an
Independent Study (XXX 6908). At least half of the coursework must be at the 6000-level (typically at least 15 credit hours).

- Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of their portfolio of activities by the course withdrawal date of the semester prior to their intended graduation. Portfolio requirements are listed on the EECS website at http://www.eecs.ucf.edu/.

Grand Total Credits: 30

Track Details

Graduate Requirements

A complete application to the master's degree program must be received before admission deadlines of the semester in which the master's enrollment will commence. Students satisfy all requirements for master's admission in order to continue in the program once the bachelor's degree is awarded. At time of application for master's admission, students must specify BSMS-Accelerated as the master's degree track at time of graduate admission application to the MSEE program.

Equipment Fee

Students in the Electrical Engineering MSEE program pay a $63 equipment fee each semester that they are enrolled. Part-time students pay $31 per semester.

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis or an approved portfolio of activities for nonthesis students.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Electrical Engineering MSEE - Electrical Engineering MSEE, Guidance Control and Dynamics Track

Track Website

http://www.ece.ucf.edu/

Track Handbook

Electrical Engineering MSEE

Track Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-2155
ENGR1 - 307

Online Availability

Yes
Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Electrical-Engineering-MS.pdf.

Track Description
The Master of Science in Guidance, Control and Dynamics (MSEE) is designed to prepare students for careers as engineers in the Missile and Aerospace industries. The curriculum is developed with strong emphasis in courses related to guidance control and dynamics with applications in Electrical engineering.

The MSEE is awarded upon completion of a minimum of 30 credit hours, including 9 credit hours of required courses, 15 credit hours of elective courses selected from an approved list of courses, and an additional 6 credit hours in either a thesis or nonthesis option.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites
Bachelor's degree in Electrical Engineering or closely related discipline.

A student with an undergraduate degree outside of the selected departmental discipline may also be required to satisfy an articulation program. Substitutions to the program of study must meet with the approval of the adviser and the department.

Prerequisites
- MAP 2302- Differential Equations
- EEL 3123C- Linear Circuits II
- EEL 3657- Linear Control Systems

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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
9 Total Credits

- Complete all of the following
  - Complete the following:
    - EML5271 - Intermediate Dynamics (3)
    - EEL6360 - Digital Control Systems (3)
  - Complete at least 1 of the following:
    - EEL5173 - Linear Systems Theory (3)
    - EML5311 - System Control (3)

**Elective Courses**
15 Total Credits

- Complete at least 5 of the following:
  - EAS6403C - Attitude Determination and Control (3)
  - EAS6415 - Guidance, Navigation and Control (3)
  - EAS6808 - Space Environment and Payload Instrumentation (3)
  - EEE6542 - Random Processes I (3)
  - EEL5432 - Satellite Remote Sensing (3)
  - EEL5669 - Introduction to Robotics and Autonomous Vehicles (3)
  - EEL6616 - Adaptive Control (3)
  - EEL6619 - Nonlinear Robust Control and Applications (3)
  - EEL6621 - Nonlinear Control Systems (3)
  - EEL6674 - Optimal Estimation for Control (3)
  - EEL6683 - Cooperative Control of Networked Autonomous Systems (3)
  - EML5152 - Intermediate Heat Transfer (3)
  - EML5237 - Intermediate Mechanics of Materials (3)
  - EML5713 - Intermediate Fluid Mechanics (3)
  - EML6155 - Convection Heat Transfer (3)
  - EML6157 - Radiation Heat Transfer (3)
  - EML6211 - Continuum Mechanics (3)
  - EML6223 - Advanced Vibrational Systems (3)

**Thesis/Nonthesis Option**
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EEL 6971 - Thesis The thesis option requires 30 credit hours, at least half of which must be at the 6000 level and will include 6 credit hours of thesis credit. A student pursuing the thesis program may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic. Students must register for the course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements
  - Nonthesis Option
    - Earn at least 6 credits from the following types of courses:
      - Additional hours of elective coursework. The nonthesis option is primarily designed to meet the needs of part-time students and requires 30 credit hours of course work, at least one-half of which must be at the 6000 level. *For students who are not on campus and upon prior approval from the graduate coordinator, XXX 6908 Independent Study (3 credit hours) may be substituted as the student's learning experience. If the substitution of XXX 6908 is approved, a letter must be provided by the member of the faculty supervising the independent study.

Grand Total Credits: **30**

**Track Details**

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must be approved by the department and therefore students should consult with the ECE Graduate Director for assistance in filling out their program of study.

A student with an undergraduate degree outside of the selected departmental discipline may also be required to satisfy an articulation program. Substitutions to the program of study must meet with the approval of the adviser and the department.

**Equipment Fee**

Students in the MSEE program pay a $90 equipment fee each semester that they are enrolled.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Electrical Engineering PhD

College
College of Engineering and Computer Science

Department
Department of Electrical and Computer Engineering

Program Website
http://www.ece.ucf.edu/

Program Handbook Link
Electrical Engineering PhD

Program Contact Information

Kalpathy Sundaram PhD
Professor
ece-grad@cecs.ucf.edu
Telephone: 407-823-5326
HEC 439B

Is this program available 100% online?
No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Engineering-Management-PhD.pdf.
Program Description

The Electrical Engineering PhD (one of the three PhD programs offered by the School of EECS) prepares students for careers in research or academia with specializations including Communications, Digital Signal Processing/Image Processing, Controls and Robotics, Electromagnetics, Electro-Optics, Photonics, Power Electronics and Electronics, Solid-State/Microelectronics, and VLSI Design.

The specific research that each one of the EECS faculty conduct can be found at the School of EECS website (www.eecs.ucf.edu).

The Doctor of Philosophy in Electrical Engineering is primarily intended for students with a master's degree in Electrical Engineering or a closely related discipline who wish to pursue a career in research or academia. Specializations include Communications, Digital Signal Processing/Image Processing, Controls and Robotics, Electromagnetics, Electro-Optics, Photonics, Power Electronics and Electronics, and Solid-State/Microelectronics.

Research interests of the Electrical Engineering faculty include antennas, microwave and millimeter circuits/devices, communication systems, digital signal/image processing, power electronics, electronic circuits, IFF devices, electromagnetic theory, radar and microwave remote sensing, speech processing, VLSI design, spread spectrum systems, SAW and ACT devices, spectral estimation, solid state device modeling and computer-aided design (CAD) techniques, communication networks, integrated services digital networks, neural networks, systems and controls, robotics, robust control, computer control, microelectronics, semiconductors, thin films, power system stability, bipolar device modeling, solid state lasers, optical propagation, fiber optics, optical signal processing, laser-induced damage, optical testing, diffractive optics, phase conjunction, infrared detectors, Fourier optics, lens design, and nonlinear optics.

The Electrical Engineering PhD degree requires a minimum of 72 credit hours beyond the bachelor's degree. Of these 72 hours, a minimum of 36 credit hours must be formal coursework, exclusive of independent study coursework. A minimum of 15 credit hours with up to a maximum of 24 credit hours of dissertation hours can be credited toward the degree. No more than 12 credit hours of Independent Study are allowed. The remaining hours can be a combination of formal coursework and/or pre-candidacy doctoral research.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Bachelor's or Master's degree in Electrical Engineering or a closely related discipline.

Undergraduate articulation courses are required to be completed prior to admission for students who do not hold a Bachelor of Science degree in Electrical Engineering. In particular, the articulation courses specified below, plus all of the prerequisite string which any of them require, must be completed prior to admission. Grades of "B" or higher must be obtained in each articulation course specified below. Articulation courses are not eligible for inclusion on a graduate Program of Study.

- EEL 3123C Network and Systems
- EEE 3307C Electronics I
- EEL 3470 Electromagnetic Fields
- EEL 3552 Signal Analysis and Communications
- EEE 3350 Semiconductor Devices I

In addition, choose one of the following:

- EEL 3657 Linear Control Systems
- EEE 4309C Electronics II
- EEL 4750 Digital Signal Processing Fundamentals

College of Graduate Studies Contact Information

gradmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

- GRE: 5233
- GMAT: RZT-HT-58
- TOEFL: 5233
- ETS PPI: 5233

Degree Requirements

Required Courses
36 Total Credits

- Complete 1 of the following
The Electrical Engineering Program supports a number of specialization areas. These technical areas are (in alphabetical order): Electromagnetics and Optics (EO), Signal Processing and Systems (SPS), and Micro-Systems and Nano-Systems (MNS). The Micro-Systems and Nano-Systems area covers the typical Electrical Engineering topic areas of Electronics, Power Electronics and Micro-Electronics, while the Signal Processing and Systems area covers the typical electrical topic areas of communications, controls, and signal processing. Please contact your graduate program assistant Nicole Mitchell at nicole@eecs.ucf.edu or 407-823-0378 for a list of faculty within each specialization area. For each one of these areas there is a suggested list of courses stated below. Students are also allowed to take courses from other specialization areas, but the majority of their courses should be chosen from courses in their specialization area.

Electromagnetics and Optics (EO) - Suggested Courses

- EEE5542 - Random Processes I (3)
- EEE5557 - Introduction to Radar Systems (3)
- EEL5437C - Microwave Engineering (4)
- EEL5439C - RF and Microwave Active Circuits (4)
- EEL5462 - Antenna Analysis and Design (3)
- EEL5462 - Antenna Analysis and Design (3)
- EEL6425C - RF and Microwave Measurement Techniques (4)
- EEL6482 - Electromagnetic Theory I (3)
- EEL6481 - Numerical Techniques in Electromagnetics (3)
- EEL6489 - Advanced Topics in Electromagnetics and Microwaves (3)
- EEL6504 - Communications Systems Design (3)
- EEL6530 - Communication Theory (3)
- MAP5426 - Special Functions (3)
- MAP5435 - Advanced Mathematics for Engineers (3)
- MAP6424 - Transform Methods (3)
- OSE5041 - Introduction to Wave Optics (3)
- OSE5414 - Fundamentals of Optoelectronic Devices (3)
- OSE6111 - Optical Wave Propagation (3)
- OSE5115 - Interference and Diffraction (3)
- OSE6143 - Fiber Optics Communication System (3)
- OSE6211 - Imaging and Optical Systems (3)
- OSE6445 - Fundamentals of Ultrafast Optics (3)
- OSE6455C - Photonics Laboratory (3)
- OSE6615L - Optoelectronic Device Fabrication Laboratory (3)
- OSE5525 - Laser Engineering (3)

Micro-Systems and Nano-Systems (MNS) - Suggested Courses

- BME5572 - Biomedical Nanotechnology (3)
- EEL5245 - Power Electronics (3)
- EEE532C - Thin Film Technology (3)
- EEE5352 - Semiconductor Material and Device Characterization (3)
- EEE5353 - Semiconductor Device Modeling and Simulation (3)
- EEE5356C - Fabrication of Solid-State Devices (4)
- EEE5370 - Operational Amplifiers (3)
- EEE5378 - CMOS Analog and Digital Circuit Design (3)
- EEE5390C - Full-Custom VLSI Design (3)
- EEE5555 - Surface Acoustic Wave Devices and Systems (3)
- EEE6317 - Power Semiconductor Devices and Integrated Circuits (3)
- EEE6358 - Advanced Semiconductor Device I (3)
- EEL6246 - Power Electronics II (3)
- EEE6326C - MEMS Fabrication Laboratory (3)
- EEE6338 - Advanced Topics in Microelectronics (3)

Signal Processing and Systems (SPS)- Suggested Courses

- EEE5513 - Digital Signal Processing Applications (3)
- EEE5542 - Random Processes I (3)
- EEE5557 - Introduction to Radar Systems (3)
- EEE6504 - Adaptive Digital Signal Processing (3)
- EEL5173 - Linear Systems Theory (3)
- EEL5630 - Digital Control Systems (3)
- EEL5669 - Introduction to Robotics and Autonomous Vehicles (3)
- EEL5820 - Image Processing (3)
- EEL5820 - Image Processing (3)
- EEL6026 - Optimization of Engineering Systems (3)
- EEL6504 - Communications Systems Design (3)
- EEL6530 - Communication Theory (3)
- EEL6590 - Advanced Topics in Communications (3)
- EEL6619 - Nonlinear Robust Control and Applications (3)
- EEL6621 - Nonlinear Control Systems (3)
- EEL6662 - Advanced Robotics (3)
- EEL6667 - Mobile Robotic Systems (3)
PhD Dissertation Committees for this degree program must have all of the below characteristics: - consist of at least five committee members including the committee chair - the committee chair must be either a Regular Appointment faculty member in EECS or a Secondary-Joint Appointment faculty member in EECS - at least 50% of committee members (when tabulated including the chair) must be EECS regular faculty - the majority of committee members must vote in favor of passing for the student to Pass - in addition to the above, all college and university requirements (such as one member outside of EECS) must be met. Joint faculty members may serve as committee chairs, but graduate faculty scholars may not serve as committee chairs.

After passing the Qualifying Review, students are required to successfully complete the candidacy examination in order to demonstrate readiness for preliminary research in a chosen field of study. This exam is administered by the student's dissertation advisory committee. Preparedness for taking the candidacy examination requires that the student must demonstrate his/her readiness for the PhD program in Electrical Engineering by authoring an accepted journal article or high-quality conference paper. The student must be the first author on this paper and the research advisor must also be an author on this paper to be used for Candidacy. The publication should reflect the work related to the student's PhD research. Candidacy is normally attempted at the completion of required coursework and must be passed before registering for doctoral dissertation hours (EEL 7980). Continuous enrollment in at least 3 hours of doctoral dissertation hours is required once a student starts taking dissertation credits.

The following are required to be admitted to candidacy and enroll in dissertation hours: - Completion of all required formal coursework, except for dissertation hours. - Successful completion of the candidacy examination. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submission of an approved program of study. Signed and well-formed Doctoral Committee Candidacy Status form and associated paperwork (dissertation advisory committee and program of study, etc.) must be submitted to the Electrical and Computer Engineering Graduate Office for processing on or before the last day to defend Dissertation during the semester prior to enrolling in dissertation credits.
After passing the candidacy examination, the student will write a dissertation proposal and present it to the dissertation advisory committee for approval. The proposal must include a description of the research performed to date and the research planned to be completed for the dissertation. The presentation of a written dissertation proposal must be deemed as passing requirements by the majority of the dissertation committee.

Grand Total Credits: 72

**Program Details**

Formal coursework required is 36 credit hours, exclusive of independent study and research. A minimum of 15 credit hours of dissertation hours are required. All other credit hours will be determined with a faculty adviser. Students admitted with an earned master's degree may request to have up to 30 of those credit hours counted toward their doctoral program. The student’s doctoral adviser in conjunction with the graduate office will determine the precise number of hours to be counted subject to Graduate Studies regulations.

The Program of Study (POS) form must be approved by an adviser in the selected specialization area no later than the end of the second semester after admission. The program of study must meet all the university requirements specified in the graduate catalog. Details about this program are located in the Electrical Engineering PhD Handbook.

**Equipment Fee**

Students in the Electrical Engineering PhD program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

**Independent Learning**

The Independent Learning Requirement is met by successful completion of the student's candidacy and dissertation defense examinations.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

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gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Engineering Management MSEM**

**College**

College of Engineering and Computer Science

**Department**

Department of Industrial Engineering and Management Systems

**Program Website**

http://www.iems.ucf.edu/

**Program Handbook Link**

Engineering Management MSEM
Is this program available 100% online?

Yes

UCF Online

Please note: Engineering Management (MS) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Engineering-Management-MS.pdf.

Program Description

The Master of Science in Engineering Management degree in Industrial Engineering focuses on effective decision-making in engineering and technological organizations.

The degree is offered on campus and can be taken entirely through the Florida Engineering Educational Delivery System (FEEDS), which provides video-streamed versions of classes over the internet.

The Professional Engineering Management (PEM) track is designated as a Professional Science Master's (PSM) degree. Please scroll to the bottom of this page for further details on this Track.

This program can be taken entirely through the Florida Engineering Educational Delivery System (FEEDS), which provides video-streamed versions of classes over the Internet.

The Engineering Management MSEM degree requires an undergraduate degree in Engineering or a closely related discipline. Students with undergraduate degrees outside of industrial engineering may be required to take additional prerequisites. An approved program of study must be developed in consultation with the graduate program director. The total number of hours is 30 credit hours.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Prerequisites

- Mathematics through Calculus II (MAP 2312)

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
9 Total Credits

- Complete the following:
  - EIN5140 - Project Engineering (3)
  - ESI6551 - Systems Engineering (3)
  - EIN6357 - Advanced Engineering Economic Analysis (3)

**Concentration Courses**
9 Total Credits

- Complete the following:
  - EIN5108 - The Environment of Technical Organizations (3)
  - EIN6370 - Innovation in Engineering Design (3)
  - EIN6182 - Engineering Management (3)

**Thesis/Nonthesis Option**
12 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 12 credits from the following types of courses:
      - EIN 6971 - Thesis - 6 Credit Hours
      - Additional Elective Coursework - 6 Credit Hours
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 9 credits from the following types of courses:
        - Additional Elective Coursework - 9 Credit Hours
      - Complete the following:
        - EIN6950 - Industrial and Systems Engineering Capstone (3)
      - The nonthesis option requires a capstone course. The capstone course should be completed toward the end of the student's graduate plan of study. As part of the requirements of this course, the student will complete an independent capstone project on a topic relevant to the industrial and systems engineering field and approved by the instructor. Students are expected to use and leverage knowledge obtained in the program to complete the project. This course serves as the culminating experience for students and shows their engagement in independent learning.

**Grand Total Credits:** 30

**Program Details**

**Equipment Fee**

Students in the Engineering Management MSEM program pay a $90 equipment fee each semester that they are enrolled. For part-time students, the equipment fee is $45 per semester.

**Independent Learning**

A research project serves as the independent learning experience for thesis students. Nonthesis students are required to complete the department's capstone course toward the end of their program.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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2022-2023 Graduate Catalog
Fellowship Information

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Engineering Management MSEM - Engineering Management MSEM, Professional Project and Systems Engineering Track

Track Website
http://www.iems.ucf.edu/graduate/programs

Track Contact Information

Mansooreh Mollaghasemi PhD
Associate Professor
mollagha@ucf.edu
Engineering 2, Room 312

Online Availability

No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Engineering-Management-MS.pdf.

Track Description

The Professional Project & Systems Engineering (PP&SE) Track is a cohort-based program that offers a customized and personalized approach to learning engineering management with a curriculum developed based upon the needs of industry. The PP&SE Track is designed to be a lock-step, cohort-based program that can be completed in 18 to 24 months. For information about the start of the next cohort, please contact the PP&SE Program Director Dr. Timothy Kotnour (timothy.kotnour@ucf.edu).

The PP&SE track in the Master of Science in Engineering Management (MSEM) program focuses on effective decision-making and successful project delivery of innovative solutions in engineering and technological organizations. The program is tailored to the needs of the experienced, working early and mid-career professionals.

The MSEM program requires an undergraduate degree in engineering or a closely related discipline. Students with undergraduate degrees outside of industrial engineering may be required to take additional prerequisite courses.

Research studies are required in one or more courses. The research study and report will focus on reviewing and analyzing contemporary research in the profession in order to help students acquire knowledge and skills pertaining to research-based best practices.

Courses may be substituted or added to provide domain depth based upon the student or customer's needs.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

A bachelor's degree in Engineering or a closely related discipline.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Master Core Courses
9 Total Credits

- Complete the following:
  - EIN5140 - Project Engineering (3)
  - ESI6551 - Systems Engineering (3)
  - EIN6357 - Advanced Engineering Economic Analysis (3)

Elective Courses
27 Total Credits

- Complete the following:
  - EIN5108 - The Environment of Technical Organizations (3)
  - EIN5117 - Management Information Systems I (3)
  - EIN6182 - Engineering Management (3)
  - EIN6326 - Technology Strategy (3)
  - EIN6370 - Innovation in Engineering Design (3)
  - ESI5219 - Engineering Statistics (3)
  - ESI6358 - Decision Analysis (3)
  - ESI6511 - Systems Integration and Testing (3)
  - ESI6552 - Systems Architecture (3)

Comprehensive Examination
0 Total Credits

- Students must successfully pass an oral comprehensive examination as part of a capstone exercise (usually in the form of EIN 6182 - Engineering Management) to satisfy all degree requirements. In some instances, industry might require students to participate in a capstone course to integrate the material in a specific project related to the industry sponsor’s needs. Typically, this additional class is in the form of EIN 6950 - Industrial and Systems Engineering Capstone which is a 3-credit hour course. Please see the program director for cohort-specific details.

Grand Total Credits: 36

Track Details

Equipment Fee

Students in the Engineering Management MSEM program pay a $90 equipment fee each semester that they are enrolled. For part-time students, the equipment fee is $45 per semester.

Independent Learning

The Independent Learning Requirement is met by successful completion of the research studies required in individual courses.EIN 6182 - Engineering Management, and the capstone project, which requires that students integrate material from all the courses in their program.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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https://funding.graduate.ucf.edu

Environmental Engineering MS

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Program Website
http://www.cece.ucf.edu/graduate/

Program Handbook Link
Environmental Engineering MS

Program Contact Information
Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Is this program available 100% online?
Yes

UCF Online

Please Note: Environmental Engineering MS may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Environmental-Engineering-MS.pdf.

**Program Description**

The Master of Science in Environmental Engineering program is for students with science, math, or a similar background, and usually requires a number of undergraduate engineering courses as articulation to become fully prepared for graduate work in environmental engineering.

Applicants to the program are expected to be knowledgeable in topics including chemistry, process design, water resources, and air pollution. The program focuses on pollution control, pollution prevention, and the correction of pollution effects on natural and man-made environments.

The program is noted for its strong faculty research interests, and areas of study include drinking water treatment, wastewater treatment, solid and hazardous waste management, atmospheric pollution control and modeling, community noise abatement, and stormwater management. The program's overall mission is to prepare students for careers in environmental engineering with consulting firms; within industry; within federal, state, and local governments; and/or in higher education.

The program's overall mission is to prepare students for Environmental Engineering careers in federal, state, and local governments; higher education; consulting; and industry.

Other key objectives include:

- Producing graduates who have technical knowledge in critical areas of environmental engineering
- Providing a professional engineering education that challenges our graduates to think critically
- Forming and maintaining partnerships with industry, government agencies, and professional organizations
- Developing awareness of the changing environmental needs of society and the global environment.

This degree has 2 tracks: Accelerated BS to MS Track and Environmental Engineering Sciences Track. Please scroll to the bottom of this page for further details on these Tracks.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
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**Mailing Address**

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PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
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**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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2022-2023 Graduate Catalog
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Environmental Engineering MS - Environmental Engineering MS, Accelerated BS to MS Track

Track Website
http://www.cece.ucf.edu/graduate/

Track Handbook
Environmental Engineering MS

Track Contact Information

Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Only works with undergraduate students to gain admission to the accelerated program:

Anna Canlon, MEd
Academic Advisor III
Anna.Canlon@ucf.edu
Telephone: 407-823-2455

Online Availability
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Environmental-Engineering-MS.pdf.
**Track Description**

The Environmental Engineering MS, Accelerated BS to MS Track is for students with science, math, or a similar background, and usually requires a number of undergraduate engineering courses as articulation to become fully prepared for graduate work in environmental engineering. See undergraduate engineering major requirements in the Undergraduate Catalog.

The program allows highly qualified undergraduate majors in Civil Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

Applicants to the program are expected to be knowledgeable in topics including chemistry, process design, water resources, and air pollution. The program focuses on pollution control, pollution prevention, and the correction of pollution effects on natural and man-made environments.

The program is noted for its strong faculty research interests, and areas of study include drinking water treatment, wastewater treatment, solid and hazardous waste management, atmospheric pollution control and modeling, environmental water resources, and stormwater management. The program's overall mission is to prepare students for careers in environmental engineering with consulting firms, industry, and governments; in higher education; consulting; and industry.

**Track Prerequisites**

A Bachelor of Science degree in civil engineering or another closely related engineering degree from UCF.

**Prerequisites (Articulation)**

The completion of prerequisite courses may be required before students can begin the program's graduate coursework. The following mathematics prerequisite requirement is for all students.

**Calculus and Differential Equations must be passed prior to applying to our Graduate Programs**

1. MAC 2311 Calculus with Analytical Geometry 1
2. MAC 2312 Calculus with Analytical Geometry 2
3. MAC 2313 Calculus with Analytical Geometry 3
4. MAP 2302 Ordinary Differential Equations 1

The following prerequisites (or equivalent courses) may be required for students with appropriate science or math undergraduate degrees.

- ENV 4531 Environmental Engineering Operations and Processes (3 hrs) Taught all 3 semesters
- ENV 4561 Advanced Environmental Engineering Operations and Processes (3 hrs) Taught in Summer and Spring
- ENV 4120 Air Pollution and Hazardous Waste Control (3 hrs) Taught in Fall only
- CWR 4202C Hydraulics (3 hrs) Taught all 3 semesters
- CWR 4120 Hydrology (3 hrs) Taught in Fall and Spring

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

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2022-2023 Graduate Catalog
Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ENV6016 - Biological Treatment Systems in Environmental Engineering (3)
    - ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering (3)
  - Complete at least 1 of the following:
    - ENV6519 - Aquatic Chemical Processes (3)
    - ENV6616 - Ecological Engineering and Receiving Water Impacts (3)
    - ENV5410 - Water Treatment (3)
    - EES5318 - Industrial Ecology (3)
    - ENV6558 - Industrial Waste Treatment (3)
  - Earn at least 3 credits from the following types of courses:
    - Any CWR course at the 5000 or 6000 level 3 Credit Hours. See "Courses" on the left-hand menu.

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  - All students, both thesis and nonthesis, must take 12 credit hours of elective courses. The electives should be chosen from courses with ENV or CWR prefixes although other appropriate graduate-level courses (5000 or 6000) may be allowed. All electives must be chosen with the consent of the student's adviser.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - XXX 6971 - Thesis The thesis option requires that students conduct an approved research study, write and successfully defend a thesis. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - The nonthesis option requires 6 more credit hours of electives in addition to the 12 credit hours of electives described above.
        - Nonthesis students are required to take at least one course that provides an independent learning experience for students, consisting of a research or design project. This requirement is fulfilled in the required course ENV 6016 above and is also fulfilled by the elective course ENV 6126 Design of Air Pollution Controls (3 credit hours) and the elective course ENV 6106 Theory and Practice of Atmospheric Dispersion Modeling (3 credit hours). Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website. Make sure and contact your program's coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30
**Track Details**

At least 24 credit hours of the course work must be exclusive of thesis and research, and Directed Research (XXX 6918) is not permitted in MS program of study.

The thesis option is primarily for students who can devote a full-time effort to their research and is required for all students supported on contracts and grants, as well as any student receiving department financial support. The nonthesis option is strongly recommended for part-time students and requires an end-of-program portfolio as a requirement for graduation.

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student's particular specialization within the profession. They are intended to help students acquire knowledge and skills pertaining to best practices in that specialization area.

**Equipment Fee**

Students in the Environmental Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

**Independent Learning**

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses marked with an asterisk (*), denoting an independent learning experience, and an end-of-program portfolio.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Environmental Engineering MS - Environmental Engineering MS, Environmental Engineering Sciences Track**

**Track Website**

http://www.cece.ucf.edu/graduate/

**Track Handbook**

Environmental Engineering MS

**Track Contact Information**

**Andrew Randall, P.hD., P.E.**

Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

**TBD**

Graduate Student Services Coordinator
Engineering II, 211-K
Online Availability
Yes

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Environmental-Engineering-MS.pdf.

Track Description
The Environmental Engineering Sciences track in the Environmental Engineering MS program is for students with science, math, or a similar background, and usually requires a number of undergraduate engineering courses as articulation to become fully prepared for graduate work in environmental engineering.

Applicants to the program are expected to be knowledgeable in topics including chemistry, process design, water resources, and air pollution. The program focuses on pollution control, pollution prevention, and the correction of pollution effects on natural and man-made environments.

The program is noted for its strong faculty research interests, and areas of study include drinking water treatment, wastewater treatment, solid and hazardous waste management, atmospheric pollution control and modeling, environmental water resources, and stormwater management. The program's overall mission is to prepare students for careers in environmental engineering with consulting firms; with industry; within federal, state, and local governments; and/or in higher education.

Other key objectives include:

- Producing graduates who have technical knowledge in critical areas of environmental engineering
- Providing a professional engineering education that challenges our graduates to think critically
- Forming and maintaining partnerships with industry, government agencies, and professional organizations
- Developing awareness of the changing environmental needs of society and the global environment.

The Environmental Engineering Sciences track offers both thesis and nonthesis options with each requiring 30 credit hours of courses beyond the baccalaureate degree. Students choosing the thesis option must take 12 credit hours of required courses, 12 credit hours of electives, and 6 thesis credit hours. Students choosing the nonthesis option must take 12 credit hours of required courses, 18 credit hours of electives, and submit an end-of-program portfolio. Students develop an individualized program of study with a faculty adviser.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites
Those applying to the programs without a directly related undergraduate degree should closely check the prerequisites. For students with nontechnical undergraduate degrees, it is recommended that a second undergraduate degree in Environmental Engineering be completed before applying to graduate school.

Articulation requirements will be determined by the department as part of the admission process and may be modified after discussion with the student and the advisor.

Prerequisites (Articulation)
The completion of prerequisite courses may be required before students can begin the program's graduate coursework.

The following mathematics prerequisite requirement is for all students.

Calculus and Differential Equations must be passed prior to applying to our Graduate Programs

1. MAC 2311 Calculus with Analytical Geometry 1
2. MAC 2312 Calculus with Analytical Geometry 2
3. MAC 2313 Calculus with Analytical Geometry 3
4. MAP 2302 Ordinary Differential Equations 1

The following prerequisites (or equivalent courses) may be required for students with appropriate science or math undergraduate degrees.

- ENV 4531 Environmental Engineering Operations and Processes (3 hrs) Taught all 3 semesters
- ENV 4561 Advanced Environmental Engineering Operations and Processes (3 hrs) Taught in Summer and Spring
- ENV 4120 Air Pollution and Hazardous Waste Control (3 hrs) Taught in Fall only
- CWR 4202C Hydraulics (3 hrs) Taught all 3 semesters
- CWR 4120 Hydrology (3 hrs) Taught in Fall and Spring
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-5692
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ENV6016 - Biological Treatment Systems in Environmental Engineering (3)
    - ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering (3)
  - Complete at least 1 of the following:
    - ENV6519 - Aquatic Chemical Processes (3)
    - ENV6616 - Ecological Engineering and Receiving Water Impacts (3)
    - ENV5410 - Water Treatment (3)
    - EES5318 - Industrial Ecology (3)
    - ENV6558 - Industrial Waste Treatment (3)
  - Earn at least 3 credits from the following types of courses:
    Any CWR course at the 5000 or 6000 level 3 Credit Hours. See "Courses" on the left-hand menu.

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  All students, both thesis and nontesis, must take 12 credit hours of elective courses. The electives should be chosen from courses with ENV or CWR prefixes although other appropriate graduate-level courses (5000 or 6000) may be allowed. All electives must be chosen with the consent of the student's adviser.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      XXX 6971 - Thesis The thesis option requires that students conduct an approved research study, write and successfully defend a thesis. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        The nonthesis option requires 6 more credit hours of electives in addition to the 12 credit hours of electives described above.
        - Nonthesis students are required to take at least one course that provides an independent learning experience for students, consisting of a research or design project. This requirement is fulfilled in the required course ENV 6016 above and is also fulfilled by the elective course ENV 6126 Design of Air Pollution Controls (3 credit hours) and the elective course ENV 6106 Theory and Practice of Atmospheric Dispersion Modeling (3 credit hours). Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website. Make sure and contact your program’s coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30
**Track Details**

At least 24 credit hours of the course work must be exclusive of thesis and research, and Directed Research (XXX 6918) is not permitted in MS program of study.

The thesis option is primarily for students who can devote a full-time effort to their research and is required for all students supported on contracts and grants, as well as any student receiving department financial support. The nonthesis option is strongly recommended for part-time students and requires an end-of-program portfolio as a requirement for graduation.

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student’s particular specialization within the profession. They are intended to help students acquire knowledge and skills pertaining to best practices in that specialization area.

**Equipment Fee**

Students in the Environmental Engineering MS program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

**Independent Learning**

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses marked with an asterisk (*), denoting an independent learning experience, and an end-of-program portfolio.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

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http://finaid.ucf.edu

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**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Environmental Engineering MSEnvE**

**College**

College of Engineering and Computer Science

**Department**

Department of Civil, Environmental, and Construction Engineering

**Program Website**

http://www.cece.ucf.edu/graduate/

**Program Handbook Link**

Environmental Engineering MSEnvE
Is this program available 100% online?

Yes

UCF Online

Please Note: Environmental Engineering MSEnvE may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.  

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Environmental-Engineering-MSVE.pdf.

Program Description

The Master of Science in Environmental Engineering program was created for students who have an undergraduate degree in environmental engineering or any other closely related degree in engineering. Applicants are expected to be knowledgeable in topics including chemistry, process design, water resources, and air pollution. The program focuses on pollution control, pollution prevention, and the correction of pollution effects on natural and man-made environments.

The program is noted for its strong faculty research interests, and areas of study include drinking water treatment, wastewater treatment, solid and hazardous waste management, atmospheric pollution control and modeling, environmental water resources, and stormwater management. The program's overall mission is to prepare students for careers in environmental engineering with consulting firms; with industry; within federal, state, and local governments; and/or in higher education.

The program's overall mission is to prepare students for Environmental Engineering careers in federal, state, and local governments; higher education; consulting; and industry. Other key objectives include:

- Producing graduates who have technical knowledge in critical areas of environmental engineering
- Providing a professional engineering education that challenges our graduates to think critically
- Forming and maintaining partnerships with industry, government agencies, and professional organizations
- Developing awareness of the changing environmental needs of society and the global environment.

The Environmental Engineering MSEnvE program offers both thesis and nonthesis options with each requiring 30 credit hours of courses beyond the bachelor's degree. Prerequisites are required depending upon the discipline of a student's bachelor's degree. The thesis option is primarily for those who can devote a full-time effort to their research project and is required for all students supported by contracts and grants, as well as any student receiving department financial support. The nonthesis option is recommended strongly for part-time students and requires submission of an end-of-program portfolio as a requirement for graduation.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
**Program Prerequisites**

Those applying to the programs without a directly related undergraduate degree should closely check the prerequisites. Students with nontechnical undergraduate degrees are recommended to complete a second undergraduate degree in Environmental Engineering before applying to graduate school.

Final articulation requirements will be determined by the department after students have been admitted and after discussions with their advisers.

**Prerequisites (Articulation)**

The completion of prerequisite courses may be required before students can begin program course work. Please contact the program director to review your background and determine the prerequisites that you may need to take.

The following mathematics prerequisite requirement is for all students.

Calculus and Differential Equations must be passed *prior to applying* to our Graduate Programs

1. MAC 2311 Calculus with Analytical Geometry 1
2. MAC 2312 Calculus with Analytical Geometry 2
3. MAC 2313 Calculus with Analytical Geometry 3
4. MAP 2302 Ordinary Differential Equations 1

The following prerequisites may be required for students with undergraduate degrees in Civil, Mechanical, or Chemical Engineering. Equivalent courses may be acceptable.

- ENV 4531 Environmental Engineering Operations and Processes (3 hrs) Taught all 3 semesters
- ENV 4561 Advanced Environmental Engineering Operations and Processes (3 hrs) Taught in Summer and Spring
- ENV 4120 Air Pollution and Hazardous Waste Control (3 hrs) Taught in Fall only
- CWR 4202C Hydraulics (3 hrs) Taught all 3 semesters
- CWR 4120 Hydrology (3 hrs) Taught in Fall and Spring

**College of Graduate Studies Contact Information**

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Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

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PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

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2022-2023 Graduate Catalog
Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering (3)
    - ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering (3)
  - Complete at least 1 of the following:
    - ENV6558 - Industrial Waste Treatment (3)
    - ENV5410 - Water Treatment (3)
    - EES5318 - Industrial Ecology (3)
  - Earn at least 3 credits from the following types of courses:
    Any CWR course at the 5000 or 6000 level

Non Thesiss Students - Required Course Selection
0 Total Credits

- Nonthesis students are required to take at least one course that provides an independent learning experience for students, consisting of a research or design project. This requirement is fulfilled in the required course ENV 6016 above and is also fulfilled by the elective course ENV 6126 Design of Air Pollution Controls (3 credit hours) and the elective course ENV 6106 Theory and Practice of Atmospheric Dispersion Modeling (3 credit hours).

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  All students, both thesis and nonthesis, are required to take 12 credit hours of elective courses. Courses that comprise the elective part of the program are selected in accordance with the general requirements of the College of Engineering and Computer Science and often include courses taken from the following two sub-discipline areas: Environmental Specialization—Any of the appropriate ENV graduate-level courses (5000 or 6000) with the consent of the student's adviser Water Resources Specialization—Any of the appropriate CWR graduate-level courses (5000 or 6000) with the consent of the student's adviser

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      XXX 6971 - Thesis Thesis students are expected to complete an independent research project and then write and successfully defend their thesis. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website and on the Events Calendar and on the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        Nonthesis students must take 6 more credit hours of electives in addition to the 12 credit hours of electives described above.
      - Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website. Make sure and contact your programs coordinator early in your graduating semester to find out when the portfolios are to be turned in for evaluation. The Graduate Student Services Coordinator should be able to tell you who the coordinator is for your degree program if you do not already know.

Grand Total Credits: 30
Program Details

Students choosing the thesis option must take 12 credit hours of required credit hours of electives, and 6 thesis credit hours. Students choosing the nonthesis option must take 12 credit hours of required courses, 18 credit hours of electives, and submit a portfolio (which includes a comprehensive final examination) before graduating.

Students develop an individualized program of study with a faculty adviser. At least 24 credit hours in the program of study must be earned exclusive of thesis and research courses and Directed Research (XXX 6918) is not permitted in the MSEnvE program of study.

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to best practices in that specialization area.

Equipment Fee

Students in the Environmental Engineering MSEnvE program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

Independent Learning

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses marked with an asterisk (*), denoting an independent learning experience, and submit an end-of-program portfolio.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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https://funding.graduate.ucf.edu

Environmental Engineering MSEnvE - Environmental Engineering MSEnvE, Accelerated BS to MSEnvE

Track Website

http://www.cece.ucf.edu/graduate/

Track Handbook

Environmental Engineering MSEnvE
Track Contact Information

Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Only works with undergraduate students to gain admission to the accelerated program:

Anna Canlon, MEd
Academic Advisor III
Anna.Canlon@ucf.edu
Telephone: 407-823-2455

Online Availability

No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Environmental-Engineering-MSVE.pdf.

Track Description

The Master of Science in Environmental Engineering, Accelerated BS to MSEnvE track was created for students who have an undergraduate degree in environmental engineering or any other closely related degree in engineering. Applicants are expected to be knowledgeable in topics including chemistry, process design, water resources, and air pollution. The program focuses on pollution control, pollution prevention, and the correction of pollution effects on natural and man-made environments.

The program allows highly qualified undergraduate majors in Civil Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program.

The program is noted for its strong faculty research interests, and areas of study include drinking water treatment, wastewater treatment, solid and hazardous waste management, atmospheric pollution control and modeling, environmental water resources, and stormwater management. The program's overall mission is to prepare students for careers in environmental engineering with consulting firms; with industry; within federal, state, and local governments; and/or in higher education.

The program’s overall mission is to prepare students for Environmental Engineering careers in federal, state, and local governments; higher education; consulting; and industry. Other key objectives include:

- Producing graduates who have technical knowledge in critical areas of environmental engineering
- Providing a professional engineering education that challenges our graduates to think critically
- Forming and maintaining partnerships with industry, government agencies, and professional organizations
- Developing awareness of the changing environmental needs of society and the global environment.

The Environmental Engineering MSEnvE, Accelerated BS to MSEnvE track offers both thesis and nonthesis options with each requiring 30 credit hours of courses beyond the bachelor's degree. Prerequisites are required depending upon the discipline of a student's bachelor's degree. See undergraduate engineering major requirements in the Undergraduate Catalog.

The thesis option is primarily for those who can devote a full-time effort to their research project and is required for all students supported by contracts and grants, as well as any student receiving department financial support. The nonthesis option is recommended strongly for part-time students and requires submission of an end-of-program portfolio as a requirement for graduation.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

A Bachelor of Science degree in civil engineering or another closely related engineering degree from UCF.

Prerequisites (Articulation)

The following mathematics prerequisite requirement is for all students.

- Calculus through Differential Equations
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-5692  
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Online Application  
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**Institution Codes**  
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

**Required Courses**

12 Total Credits  
- Complete all of the following  
  - Complete the following:  
    - ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering (3)  
    - ENV6016 - Biological Treatment Systems in Environmental Engineering (3)  
  - Complete at least 1 of the following:  
    - ENV6558 - Industrial Waste Treatment (3)  
    - ENV5410 - Water Treatment (3)  
    - EES5318 - Industrial Ecology (3)  
  - Earn at least 3 credits from the following types of courses:  
    - Any CWR course at the 5000 or 6000 level

**Non Thesis Students - Required Course Selection**

0 Total Credits  
- Nonthesis students are required to take at least one course that provides an independent learning experience for students, consisting of a research or design project. This requirement is fulfilled in the required course ENV 6016 above and is also fulfilled by the elective course ENV 6126 Design of Air Pollution Controls (3 credit hours) and the elective course ENV 6106 Theory and Practice of Atmospheric Dispersion Modeling (3 credit hours).

**Elective Courses**

12 Total Credits  
- Earn at least 12 credits from the following types of courses:  
  - All students, both thesis and nonthesis, are required to take 12 credit hours of elective courses. Courses that comprise the elective part of the program are selected in accordance with the general requirements of the College of Engineering and Computer Science and often include courses taken from the following two sub-discipline areas: Environmental Specialization—Any of the appropriate ENV graduate-level courses (5000 or 6000) with the consent of the student's adviser Water Resources Specialization—Any of the appropriate CWR graduate-level courses (5000 or 6000) with the consent of the student's adviser

**Thesis/Nonthesis Option**

6 Total Credits  
- Complete 1 of the following  
  - Thesis Option  
    - Earn at least 6 credits from the following types of courses:  
      - XXX 6971 - Thesis Thesis students are expected to complete an independent research project and then write and successfully defend their thesis. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website and on the Events Calendar and on the College of Graduate Studies website at least two weeks before the defense date.  
  - Nonthesis Option  
    - Complete all of the following  
      - Earn at least 6 credits from the following types of courses:  
        - Nonthesis students must take 6 more credit hours of electives in addition to the 12 credit hours of electives described above.  
        - Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website.

Grand Total Credits: 30
Track Details

Students choosing the thesis option must take 12 credit hours of required credit hours of electives, and 6 thesis credit hours. Students choosing the nonthesis option must take 12 credit hours of required courses, 18 credit hours of electives, and submit a portfolio (which includes a comprehensive final examination) before graduating.

Students develop an individualized program of study with a faculty adviser. At least 24 credit hours in the program of study must be earned exclusive of thesis and research courses and Directed Research (XXX 6918) is not permitted in the MSEnvE program of study.

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to best practices in that specialization area.

Equipment Fee

Students in the Environmental Engineering MSEnvE program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

Independent Learning

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses marked with an asterisk (*), denoting an independent learning experience, and submit an end-of-program portfolio.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Environmental Engineering MSEnvE, Accelerated BS to MSEnvE

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

Program Website

http://www.cece.ucf.edu/graduate/

Program Handbook Link

Environmental Engineering MSEnvE
Is this program available 100% online?
Yes

UCF Online

Please Note: Environmental Engineering MSEnvE, Accelerated BS to MSEnvE may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Environmental-Engineering-MSVE.pdf.

Program Description

The Master of Science in Environmental Engineering, Accelerated BS to MSEnvE track was created for students who have an undergraduate degree in environmental engineering or any other closely related degree in engineering. Applicants are expected to be knowledgeable in topics including chemistry, process design, water resources, and air pollution. The program focuses on pollution control, pollution prevention, and the correction of pollution effects on natural and man-made environments.

The program allows highly qualified undergraduate majors in Civil Engineering to begin taking graduate-level courses that will count toward their master’s degree while completing their baccalaureate degree program.

The program is noted for its strong faculty research interests, and areas of study include drinking water treatment, wastewater treatment, solid and hazardous waste management, atmospheric pollution control and modeling, environmental water resources, and stormwater management. The program’s overall mission is to prepare students for careers in environmental engineering with consulting firms; with industry; within federal, state, and local governments; and/or in higher education.

The program’s overall mission is to prepare students for Environmental Engineering careers in federal, state, and local governments; higher education; consulting; and industry. Other key objectives include:

- Producing graduates who have technical knowledge in critical areas of environmental engineering
- Providing a professional engineering education that challenges our graduates to think critically
- Forming and maintaining partnerships with industry, government agencies, and professional organizations
- Developing awareness of the changing environmental needs of society and the global environment.

The Environmental Engineering MSEnvE, Accelerated BS to MSEnvE track offers both thesis and nonthesis options with each requiring 30 credit hours of courses beyond the bachelor's degree. Prerequisites are required depending upon the discipline of a student's bachelor's degree. See undergraduate engineering major requirements in the Undergraduate Catalog.

The thesis option is primarily for those who can devote a full-time effort to their research project and is required for all students supported by contracts and grants, as well as any student receiving department financial support. The nonthesis option is recommended strongly for part-time students and requires submission of an end-of-program portfolio as a requirement for graduation.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
**Program Prerequisites**

A Bachelor of Science degree in civil engineering or another closely related engineering degree from UCF.

**Prerequisites (Articulation)**

The following mathematics prerequisite requirement is for all students.

- Calculus through Differential Equations

**College of Graduate Studies Contact Information**

Jaylin Hudgen  
gradadmissions@ucf.edu  
Telephone: 407-823-5692  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

12 Total Credits

- Complete all of the following
  - Complete the following:
    - ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering (3)
    - ENV6016 - Biological Treatment Systems in Environmental Engineering (3)
  - Complete at least 1 of the following:
    - ENV6558 - Industrial Waste Treatment (3)
    - ENV5410 - Water Treatment (3)
    - EES5318 - Industrial Ecology (3)
  - Earn at least 3 credits from the following types of courses:
    - Any CWR course at the 5000 or 6000 level

**Non Thesis Students - Required Course Selection**

0 Total Credits

- Nonthesis students are required to take at least one course that provides an independent learning experience for students, consisting of a research or design project. This requirement is fulfilled in the required course ENV 6016 above and is also fulfilled by the elective course ENV 6126 Design of Air Pollution Controls* (3 credit hours) and the elective course ENV 6106 Theory and Practice of Atmospheric Dispersion Modeling (3 credit hours).

**Elective Courses**

12 Total Credits

- Earn at least 12 credits from the following types of courses:
  - All students, both thesis and nonthesis, are required to take 12 credit hours of elective courses. Courses that comprise the elective part of the program are selected in accordance with the general requirements of the College of Engineering and Computer Science and often include courses taken from the following two sub-discipline areas: Environmental Specialization—Any of the appropriate ENV graduate-level courses (5000 or 6000) with the consent of the student's adviser. Water Resources Specialization—Any of the appropriate CWR graduate-level courses (5000 or 6000) with the consent of the student's adviser.

**Thesis/Nonthesis Option**

6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - XXX 6971 - Thesis
      - Thesis students are expected to complete an independent research project and then write and successfully defend their thesis. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website and on the Events Calendar and on the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - Nonthesis students must take 6 more credit hours of electives in addition to the 12 credit hours of electives described above.
        - Students are required to complete a culminating experience. The culminating experience for nonthesis MS students is submission of an end-of-program portfolio. The portfolio requirements are listed on the CECE website.

**Grand Total Credits**: 30
Program Details

Students choosing the thesis option must take 12 credit hours of required credit hours of electives, and 6 thesis credit hours. Students choosing the nonthesis option must take 12 credit hours of required courses, 18 credit hours of electives, and submit a portfolio (which includes a comprehensive final examination) before graduating.

Students develop an individualized program of study with a faculty adviser. At least 24 credit hours in the program of study must be earned exclusive of thesis and research courses and Directed Research (XXX 6918) is not permitted in the MSEnvE program of study.

Research studies or projects are required in one or more courses. The research study or project will focus on reviewing and analyzing contemporary research or engineering issues in a student's particular specialization within the profession in order to help students acquire knowledge and skills pertaining to best practices in that specialization area.

Equipment Fee

Students in the Environmental Engineering MSEnvE program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

Independent Learning

A research or design project serves as the independent learning experience for thesis students. Nonthesis students are required to take at least one of the courses marked with an asterisk (*), denoting an independent learning experience, and submit an end-of-program portfolio.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Environmental Engineering PhD

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Program Website
http://www.cece.ucf.edu/graduate/

Program Handbook Link
Environmental Engineering PhD

2022-2023 Graduate Catalog
Program Contact Information

Andrew Randall Ph.D., P.E.
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Environmental-Engineering-PhD.pdf.

Program Description
The Environmental Engineering PhD program focuses on pollution control, pollution prevention, and the correction of pollution effects on natural and man-made environments preparing students for careers in environmental engineering with consulting firms; with industry; within federal, state, and local governments; and/or in higher education.

Areas of study include drinking water treatment, astute treatment, solid and hazardous waste management, atmospheric pollution control and modeling, environmental water resources, and stormwater management. The program’s mission is to prepare students for careers in environmental engineering with consulting firms; with industry; within federal, state, and local governments; and/or in higher education.

The program offers an intensive, individually tailored research program suitable for the development of an academic or similar research-oriented career. Graduates of the program will have technical knowledge in critical areas of environmental engineering, critical thinking skills, formed and maintained partnerships with industry, government agencies, and professional organizations, and have developed an awareness of the changing environmental needs of society and the global environment.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree 42 Credit Hours Minimum beyond the Master's Degree

Program Prerequisites
A bachelor's and/or master's degree in Environmental Engineering or a closely related discipline.

Calculus and Differential Equations must be passed prior to applying to our Graduate Programs. However, recruiting faculty can request that this requirement be waived.

MAC 2311 Calculus with Analytical Geometry 1
MAC 2312 Calculus with Analytical Geometry 2
MAC 2313 Calculus with Analytical Geometry 3
MAP 2302 Ordinary Differential Equations 1

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gradadmissions@ucf.edu
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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
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TOEFL: 5233
ETS PPI: 5233

Degree Requirements
At least 27 credit hours of formal course work is required, exclusive of research and independent study. For students entering the program with a completed master's degree, at least 15 of the 27 credit hours (exclusive of independent study and research) must be taken at UCF after the master's program, from approved formal courses. For students entering the program without a master's degree in Environmental Engineering or a closely related discipline, at least 45 credit hours of formal course work are required.

Required Courses

Required Courses

Complete 4 of the following

- All students completing the PhD program must take one course each from 4 of the 5 technical areas listed below for a total of 12 credit hours.
  - Water Process Engineering
  - Complete the following:
    - ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering (3)
  - Wastewater Process Engineering
  - Complete the following:
    - ENV6016 - Biological Treatment Systems in Environmental Engineering (3)
  - Waste Treatment/Water Treatment/Industrial Treatment
  - Complete at least 1 of the following:
    - Course Not Found
    - ENV6558 - Industrial Waste Treatment (3)
    - ENV5410 - Water Treatment (3)
    - EES5318 - Industrial Ecology (3)
  - Air Quality Modeling/Air Pollution Control
  - Complete at least 1 of the following:
    - ENV6106 - Theory and Practice of Atmospheric Dispersion Modeling (3)
    - ENV6126 - Design of Air Pollution Controls (3)
  - Water Resources
  - Complete all of the following
    - Complete at least 1 of the following:
      - ENV5636 - Environmental and Water Resources Systems Analysis (3)
      - ENV6047 - Environmental Informatics and Remote Sensing (3)
      - Any CWR course at the 5000 or 6000 level may be used as well.

Elective Courses

Elective Courses

Complete all of the following

- To be approved by a faculty adviser and the graduate coordinator Doctoral Research (XXX 7919) - 9 credit hours maximum (more than 9 research credit hours can be taken, but only a maximum of 9 credit hours will be counted toward the program of study). Independent Study (XXX 6908) - 3 credit hours maximum. No more than a total of 12 credit hours of doctoral research plus independent study will be included in a program of study. Directed Research (XXX 6918) is not permitted in a PhD program of Study. Students can choose among the following courses with the consent of the academic adviser. Students that have no MS degree should complete the core courses for the MS degree in Environmental Engineering or Environmental Engineering Sciences. In addition, all elective courses will be 5000 or 6000 level courses. In addition, elective courses can be chosen from any of the following disciplines: Environmental Engineering (ENV courses), Water Resources Engineering (CWR courses), Civil Engineering, Construction Engineering, and Industrial Engineering. Non-Engineering: Statistics, Molecular Biology, Microbiology, Biochemistry, Organic Chemistry, General or Inorganic Chemistry, Biology, Math, and Physics. Suggested Elective Courses are included below
- Earn at least 42 credits from the following:
  - EES5318 - Industrial Ecology (3)
  - ENV5410 - Water Treatment (3)
  - ENV5505 - Sludge Management Operations in Environmental Engineering (3)
  - ENV5517 - Engineering Chemical and Biological Processes (3)
  - ENV5636 - Environmental and Water Resources Systems Analysis (3)
  - ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering (3)
  - ENV6016 - Biological Treatment Systems in Environmental Engineering (3)
  - ENV6046 - Membrane Mass Transfer (3)
  - ENV6030 - Environmental Biotechnology (3)
  - ENV6047 - Environmental Informatics and Remote Sensing (3)
  - ENV6106 - Theory and Practice of Atmospheric Dispersion Modeling (3)
  - ENV6126 - Design of Air Pollution Controls (3)
  - ENV6519 - Aquatic Chemical Processes (3)
  - ENV6558 - Industrial Waste Treatment (3)
Dissertation
18 Total Credits
- Earn at least 18 credits from the following types of courses:
  ENV 7980

Examinations
0 Total Credits
- Students must pass three examinations. The first is the PhD qualifying examination. This examination must be taken near the end of the first year of admission into the PhD program (i.e., after a minimum of 6 courses are completed or under-way), it may be attempted no more than twice. In addition to the qualifying examination, students must pass the candidacy examination and the dissertation defense examination. The candidacy examination is normally taken near the end of the course work and consists of a written and oral presentation of a research proposal, and may include additional written or oral questioning by the committee. A copy of the written examination will be kept as part of the student's official record. The dissertation defense examination is an oral examination taken as defense of the written dissertation. The College of Engineering and Computer Science requires that all dissertation defense announcements be approved by the student's adviser and posted on the college's website and on the College of Graduate Studies Events Calendar at least two weeks before the defense date.

Admission to Candidacy
0 Total Credits
- The following are required to be admitted to candidacy and enroll in dissertation hours. Evidence of meeting these requirements must be received by the College of Graduate Studies by the day before the first day of classes for the semester in which a student wishes to enroll in dissertation hours. Completion of all but 6 hours, or less, of course work, except for dissertation hours. Successful completion of the candidacy examination. Successful defense of the written dissertation proposal. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study.

Grand Total Credits: 72

Program Details
The Environmental Engineering PhD program is research oriented and requires a minimum of 72 credit hours beyond the bachelor's degree. Thirty of the 72 credit hours can be met with either a nonthesis or thesis MS in Environmental Engineering. This leaves 42 credit hours of which 18 credit hours must be Dissertation and a minimum of 15 credit hours must be formal course work. A maximum of 9 credit hours of Doctoral Research can be used in the doctoral program, which could be replaced by additional formal coursework.

For students not having an MS degree who directly enter the PhD program (BS to PhD), there will be a minimum of 45 credit hours formal coursework (i.e., 30 credit hours identical to the coursework for a nonthesis MS in Environmental Engineering plus a minimum of 15 credit hours course work past the MS). However, unlike MS students, BS to PhD students will be required to take only 4 of the 5 required courses from the nonthesis MS in Environmental Engineering requirements. In addition, these students can enroll for Doctoral Research credit hours during or after their first semester in the program. The 27 credit hours required in addition to the 45 credit hours coursework will be 18 credit hours in Dissertation Research, and a maximum of 9 credit hours in Doctoral Research. Up to 9 credit hours of Doctoral Research can be replaced by additional formal coursework subject to the approval of the PhD adviser and the advisory committee.

For both MS to PhD and BS to PhD students, the program of study must be developed with an advisory committee and meet with departmental approval at the beginning of the PhD program, at which time transfer credit will be evaluated on a course-by-course basis.

Masters Along the Way
Students not having an MS degree can get an MS degree “along-the-way”. The MS degree can be thesis or non-thesis, and can be for any of the Environmental MS programs (i.e., MS Environmental Engineering, or the MS Environmental, MS Environmental Sciences Track). For this to take place the student must take all the required courses (core courses) in the MS Track that is chosen. Electives can be substituted (e.g. electives inside or outside of the department or outside engineering) with the approval of the academic advisor. For thesis degrees 6 hours of thesis research are required. The student must then successfully pass both a written and oral thesis defense, as other thesis students do. For a non-thesis degree completion of 10 courses is required, at least one of which provides an independent learning experience, and a portfolio/exam. The course independent learning requirement is fulfilled in the MS required course ENV 6016 and can be fulfilled by the elective course ENV 6126 Design of Air Pollution Controls (3 credit hours) and the elective course ENV 6106 Theory and Practice of Atmospheric Dispersion Modeling (3 credit hours).

Equipment Fee
Full-time students in the Environmental Engineering PhD program pay $16 per semester for equipment used in the laboratories. Part-time students pay $8 per semester.

Independent Learning
The Independent Learning Requirement is met by successful completion of the student's candidacy and dissertation defense examinations.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Guidance Control and Dynamics Graduate Certificate

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Program Website
http://www.mae.ucf.edu/

Program Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-2155
ENGR1 - 307

GCD Track
Tarek A. Elgohary
Assistant Professor
Elgohary@ucf.edu
ENGR1 - 216

Is this program available 100% online?
Yes

UCF Online

Please Note: Guidance Control and Dynamics Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

This joint graduate certificate will provide higher-level courses in the areas of guidance, navigation, control and dynamics. Students joining the program will be introduced to concepts of nonlinear dynamics, optimal control, estimation, linear and nonlinear control with the higher-level understanding. Students will learn to synthesize theory and application at the graduate level in order to produce the knowledge base necessary to make an immediate impact in the aerospace, mechanical and electrical engineering industries.

The graduate certificate in guidance control and dynamics is awarded upon completion of a minimum of 12 credit hours, including 6 credit hours of required courses, and 6 credit hours of electives.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Bachelor's degree in Electrical Engineering or closely related discipline. A student with an undergraduate degree outside of the selected departmental discipline may also be required to satisfy an articulation program.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-5692
Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
6 Total Credits

- Complete all of the following
  - Complete the following:
    - EML5271 - Intermediate Dynamics (3)
  - Complete at least 1 of the following:
    - EEL5173 - Linear Systems Theory (3)
    - EML5311 - System Control (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - EAS6405 - Advanced Flight Dynamics (3)
  - EAS6415 - Guidance, Navigation and Control (3)
  - EEL6671 - Modern and Optimal Control Systems (3)
  - EEL6674 - Optimal Estimation for Control (3)

Grand Total Credits: 12

Program Details

Substitutions to the program of study must meet with the approval of the adviser and the department.

Healthcare Systems Engineering Graduate Certificate

College
College of Engineering and Computer Science
**Department**

Department of Industrial Engineering and Management Systems

**Program Website**

https://www.ucf.edu/online/degree/healthcare-systems-engineering/

**Program Contact Information**

Vernet Lasrado PhD
Director, HSE MS Track
vernet.lasrado@ucf.edu
Telephone: 404-769-5264
Engineering II, Room 312

**Is this program available 100% online?**

Yes

**UCF Online**

Please Note: The Healthcare Systems Engineering Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

**Program Description**

The Healthcare Systems Engineering Graduate Certificate is a fully online degree program designed to be completed within one year. This 15-credit-hour program trains students to implement, manage and introduce systematic changes to improve patient care and enhance utilization of organizational resources. This unique program is offered in response to the growing needs of the healthcare industry.

Students will receive a Certificate, offered by the Department of Industrial Engineering and Management Sciences at the College of Engineering and Computer Science, in the Healthcare Systems Engineering Track.

This degree can help students realize their leadership potential, fuel their passion for healthcare innovation, and provide the necessary tools needed to make this systemic change a reality. Through the ideology and principles of systems engineering taught in this degree, individuals learn the specialized skills needed to foster operational change within healthcare organizations.

By completion, students will be able to help healthcare organizations to:

- Conduct analyses of large-scale social and ecological systems across the healthcare sector
- Assess and mitigate risks throughout organizational processes and relationships
- Analyze risks to individual and public health impacted by issues in the healthcare system
- Bring evidence-based thinking and analysis to process and system change
- Develop and manage a quality management system across an organizational setting
- Adapt information systems to improve management planning and control

**Sampling of career opportunities include:**

- Healthcare Management Engineer
- Operational Excellence Project Manager
- Systems Redesign Consultant
- Lean Specialist
- Process Improvement Consultant
- Continuous Improvement Specialist
- Healthcare Analyst

The Healthcare Systems Engineering Graduate Certificate requires 15 credit hours of courses beyond the bachelor's degree.

**Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree**

**Program Prerequisites**

An undergraduate course in probability and statistics
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete the following:
  - EIN5115 - Engineering MIS Control Systems in Healthcare (3)
  - ESI6551 - Systems Engineering (3)
  - HSC6636 - Issues and Trends in the Health Professions (3)

Elective Courses
6 Total Credits

- Complete all of the following
  - Complete at least 1 of the following:
    - ESI6609 - Industrial Engineering Analytics for Healthcare (3)
    - EIN6358 - Engineering Economic Analysis in Health Systems (3)
  - Complete at least 1 of the following:
    - ESI6251C - Engineering Quality in Health Systems (3)
    - ESI6252C - Managing Engineering Risk in Health Systems (3)

Grand Total Credits: 15

Program Details

Cost Per Credit Hour
For both in-state and out-of-state students, the cost is $1,239.16 per credit hour which includes tuition and fees.

*Fee subject to change.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Industrial Engineering MS

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Program Website
http://www.iems.ucf.edu/

Program Handbook Link
Industrial Engineering MS

Program Contact Information
Mansooreh Mollaghasemi, PhD
Associate Professor
mollagha@ucf.edu
Engineering 2, Room 312

Is this program available 100% online?
Yes

UCF Online

Please note: Industrial Engineering (MS) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Industrial-Engineering-MS.pdf.

Program Description

The Master of Science programs in Industrial Engineering are designed to produce highly skilled graduates who are prepared to be industrial engineers, engineering managers or technical professionals, or leaders for the global economy, as well as preparing them for further graduate work or independent research.

Industrial Engineering, in its broad nature, focuses on the design and improvement of systems, products, and processes. A total systems approach is used to optimize the various aspects of operations in both manufacturing and service industries. Industrial engineers use many analytical approaches to improve productivity, safety, and quality of working life while reducing operating costs.

The Industrial Engineering programs are structured to support the emergence of Central Florida as a national center of high technology as well as supporting the diverse service industries in the region and throughout the nation.

In the Industrial Engineering MS programs, students are able to individually craft their programs of study and select their courses to focus on one or more of the following research areas.

Human Systems Engineering/Ergonomics
As technology has become more sophisticated, the need to design for the human user has become more difficult, yet even more important. Human engineering and ergonomics assist in ensuring that as technology advances, the abilities, limitations, and needs of humans are considered in the system design. This not only supports the needs of the user, it also optimizes the efficiency and usability of the system designed. Traditionally, ergonomics has been associated with biomechanical issues and work measurement and performance issues in physical system design, as well as occupational and industrial safety. The broader focus of human engineering encompasses those issues as well as incorporating the reaction and effectiveness of human interaction with systems, both physical systems and virtual systems such as computer-based models.

Research in the Human Systems Engineering and Ergonomics area provides students with the necessary knowledge in human engineering and ergonomics to effectively design tasks, industrial systems, and work environments that maximize human performance, safety, and overall productivity.

**Interactive Simulation and Training Systems**

The Interactive Simulation and Training Systems research within the Industrial Engineering MS program focuses on providing a fundamental understanding of significant topics relative to simulation systems and the requirements, design, development, and use of such systems for knowledge transfer in the technical environment. Courses in this area address the evolving and multiple discipline application of interactive simulation by providing a wealth of electives to support the development of individual student interests and talents. In conjunction with UCF’s Institute for Simulation and Training, industrial organizations involved in simulation in the Central Florida region, military organizations, and other governmental organizations, ISTS research in the MS program provides exposure to both military and commercial interactive simulation and training systems.

The emphasis is on the application and development of interactive simulation and training systems to meet various requirements including, but not limited to: simulators, skill trainers, organizational learning systems, computer and web-based interactive simulation systems and other novel interactive simulation efforts. Courses in the interactive simulation and training systems area prepare individuals with an undergraduate degree in engineering, science, education, psychology, mathematics or other related disciplines for careers in simulation, focusing particularly on the interactive simulation and training systems industries.

**Operations Research**

The Operations Research courses in the Industrial Engineering MS program uses mathematics and computer-based systems to model operational processes and decisions in order to develop and evaluate alternatives that will lead to gains in efficiency and effectiveness. Drawing on probability, statistics, simulation, optimization, and stochastic processes, Operations Research provides many of the analytic tools used by industrial engineers as well as by other analysts to improve processes, decision-making, and management by individuals and organizations. Research in this area is ideal for students who have an undergraduate degree in engineering, mathematics, or science. The knowledge in these courses builds on an undergraduate Engineering, Mathematics, or Science degree to develop a strong modeling and analytical capability to improve processes and decision-making.

**Quality Systems Engineering**

The Quality Systems Engineering research in the Industrial Engineering MS program focuses on providing the knowledge for improving product and process quality in manufacturing and service industries. Quality Systems Engineering provides both the quantitative tools for measuring quality and the managerial focus and organizational insight required to implement effective continuous improvement programs and incorporate the voice of the customer. The Quality Systems Engineering courses build on an undergraduate degree in industrial engineering or a closely related discipline to provide the necessary knowledge to plan, control, and improve the product assurance function in government, military, service, or manufacturing organizations.

**Simulation Modeling and Analysis**

The Simulation Modeling and Analysis research and studies in the Industrial Engineering MS program focus on providing a fundamental understanding of the functional and technical design requirements for simulation in manufacturing and service industries. Research in this area is based on a systems modeling paradigm and provides coding and development capability in the context of a broader systems framework. Significant exposure to design and analysis aspects is a core element of the track. The Simulation Modeling and Analysis research and coursework prepare individuals with an undergraduate degree in Engineering, Science, Mathematics, or a closely related discipline for careers in simulation, focusing particularly on using simulation as an analysis and design tool for the manufacturing and service industries.

**Systems Engineering**

Intelligence is being infused into everyday systems, processes and infrastructure that enable physical goods to be developed, manufactured, bought and sold. These same systems also facilitate the movement and delivery of global products and services that support worldwide markets such as finance, energy resources, and healthcare systems.

With these technological advancements, comes a new level of complexity as organizations struggle to integrate systems, processes and data feeds. As a result, the demand for systems engineering and related skills is expected to grow significantly.

Systems engineers design and implement computer systems, software, and networks, including defining complex system requirements, and determining system specifications, processes and working parameters.

The Systems Engineering studies and research in the Industrial Engineering MS program are intended for individuals of all engineering disciplines. Research and coursework focus on a systems view of engineering problems related to the management of complex industrial, military, government, and social systems.

This degree has 2 tracks: Accelerated BS to MS Track and Healthcare Systems Engineering Track. Please scroll to the bottom of this page for further details on these Tracks.

**This program can be taken entirely through the Center for Online and Virtual Education (COVE), which provides video-**
streamed versions of classes over the Internet. More information about this program can be found at http://www.cecs.ucf.edu/COVE/ or (407) 823-3814.

The Industrial Engineering MS program offers both thesis and nonthesis options with each requiring 30 credit hours of courses. The program is flexible to enable students to model their plan of study to suit their needs and future work or career goals. All students must develop a plan of study with the graduate program director that meets with departmental approval. At least one-half of the courses (including thesis hours) required in the master's program of study must be at the 6000 level or higher. A cumulative grade-point average of B (3.0) must be maintained in the entire program of study.

Students on assistantships must take 9 credit hours per semester (Fall, Spring) to satisfy the university's requirement for full-time status. Most students working full time take 6 credit hours per semester. At that rate, the program can be completed in 6 semesters or less. However, students with more time available and with an early start on a thesis, if applicable, can finish the program in 3 semesters.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Program Prerequisites**

The Industrial Engineering MS program requires an undergraduate degree in engineering, mathematics, computer science, statistics, physics, quantitative management or similar field.

Outstanding students with degrees in other disciplines such as business, economics or computer/information sciences may also be considered on a case-by-case basis, provided they have significant work experience and/or very high academic standing.

Regardless of the undergraduate degree, all applicants must have completed the following prerequisites:

- Mathematics through Calculus II (MAC 2312 or equivalent)
- An undergraduate course in engineering probability and statistics.
- In addition, they are expected to be familiar with at least one programming language (such as C, FORTRAN, Java, Visual BASIC, C++, etc.) and common computer skills and tools such as word processors and spreadsheets.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

**Required Courses**

12 Total Credits

- Complete the following:
  - ESI5219 - Engineering Statistics (3)
  - EIN5140 - Project Engineering (3)
  - EIN6357 - Advanced Engineering Economic Analysis (3)
  - ESI6551 - Systems Engineering (3)

**IEMS Electives**

12 Total Credits

- All students, both thesis and nonthesis, must take 12 credit hours of electives after consultation with their adviser. The program requirements are flexible enough to allow the students to tailor the coursework according to their desired educational and career goals. With the approval of their adviser and/or the graduate program director, students may select from the following groups of courses to satisfy the needs of their research goals or career objectives. To assist the students in achieving these goals and objectives, courses are grouped below to suggest focus areas, only as a guide to assist in advising and course selection. They are not intended to restrict elective choices among specialization areas as the intent of the program is to help graduate students maintain an integrated approach to their studies. The listing of these courses does not guarantee that they will be offered by the department in a particular year or semester. In addition to the courses listed below, students may be allowed to take courses from the following disciplines at UCF, with the approval of the graduate program director, as an elective in their graduate program of study: Other Engineering programs Computer Science Mathematics Statistics Business Administration or Management
Focus Areas
12 Total Credits

- Complete 1 of the following
  
  **Human Systems Engineering/Ergonomics**
  - Earn at least 12 credits from the following:
    - EIN5248 - Ergonomics (3)
    - EIN5251 - Usability Engineering (3)
    - EIN6258 - Human Computer Interaction (3)
    - EIN6271 - Human Reliability (3)

  **Quality and Production Systems**
  - Earn at least 12 credits from the following:
    - ESI6225 - Quality Design and Control (3)
    - ESI6224 - Quality Management (3)
    - EIN6336 - Production and Inventory Control (3)
    - EIN6356 - Cost Engineering (3)
    - ESI5227 - Total Quality Improvement (3)
    - ESI6247 - Experimental Design and Taguchi Methods (3)

  **Management Systems**
  - Earn at least 12 credits from the following:
    - EIN6182 - Engineering Management (3)
    - EIN5117 - Management Information Systems I (3)
    - EIN6370 - Innovation in Engineering Design (3)
    - EIN6339 - Operations Engineering (3)
    - EIN5108 - The Environment of Technical Organizations (3)

  **Simulation, Optimization and Modeling**
  - Earn at least 12 credits from the following:
    - ESI6336 - Queueing Systems (3)
    - ESI5306 - Operations Research (3)
    - ESI6418 - Linear Programming and Extensions (3)
    - ESI6532 - Object-Oriented Simulation (3)
    - ESI5531 - Discrete Systems Simulation (3)
    - EIN5255C - Interactive Simulation (3)
    - EIN6528 - Simulation Based Life Cycle Engineering (3)
    - EIN6936 - Seminar in Advanced Industrial Engineering (3)
    - ESI6217 - Statistical Aspects of Digital Simulation (3)

  **Systems Engineering**
  - Earn at least 12 credits from the following:
    - ESI6358 - Decision Analysis (3)
    - ESI5359 - Risk Assessment and Management (3)
    - EIN6215 - System Safety Engineering and Management (3)
    - EIN5346 - Engineering Logistics (3)
    - ESI6891 - IEMS Research Methods (3)
    - ESI5236 - Reliability Engineering (3)

  **Thesis/Nonthesis Option**
  6 Total Credits
  
  - Complete 1 of the following
    
    **Thesis**
    - Earn at least 6 credits from the following types of courses:
      - EIN 6971 Thesis
      - The thesis option requires 6 credit hours of thesis. Thesis students must complete an independent research study and write and successfully defend a thesis according to program guidelines. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website (http://www.cecs.ucf.edu/graddefense/) and on the College of Graduate Studies Events Calendar at least two weeks before the defense date.

    **Nonthesis Option**
    - Complete all of the following
      - Complete the following:
        - EIN6950 - Industrial and Systems Engineering Capstone (3)
      - Earn at least 3 credits from the following types of courses:
        - Additional Elective Course. The nonthesis option requires a capstone course and an additional unrestricted elective course that supports the student's area of research and study interests. The capstone course should be completed toward the end of the student's graduate plan of study. As part of the requirements of this courses, students will complete an independent capstone project on a topic relevant to the industrial and systems engineering field and approved by the instructor. Students are expected to use and leverage knowledge obtained in the program to complete the project. This course serves as the culminating experience for students and shows their engagement in independent learning.

Grand Total Credits: 30
Program Details

Equipment Fee

Full-time students in the Industrial Engineering MSIE program pay a $58 equipment fee each semester that they are enrolled. Part-time students pay $29 each semester that they are enrolled.

Independent Learning

The Independent Learning requirement is met by successful completion of a thesis or the capstone course.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Industrial Engineering MS - Industrial Engineering MS, Healthcare Systems Engineering Track

Track Website

https://www.ucf.edu/online/healthcare-systems-engineering/

Track Contact Information

Vernet Lasrado PhD
Vernet.Lasrado@ucf.edu
Telephone: 404-769-5264
Engineering II, 419

Mansooreh Mollaghasemi PhD
Associate Professor
mollagha@ucf.edu
Engineering 2, Room 312

Online Availability

Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Industrial-Engineering-MS.pdf.
Track Description

The Healthcare Systems Engineering track is a fully online degree program designed to be completed within two years. This 30-credit-hour program trains students to implement, manage and introduce systematic changes to improve patient care and enhance utilization of organizational resources. This unique program is offered in response to the growing needs of the healthcare industry.

Students will receive a Master of Science, offered by the Department of Industrial Engineering and Management Sciences at the College of Engineering and Computer Science, in the Healthcare Systems Engineering Track.

The future of healthcare will need leaders who are passionate about implementing, managing and refining healthcare systems to improve patient care and reduce overall cost. This degree can help students realize their leadership potential, fuel their passion for healthcare innovation, and provide the necessary tools needed to make this systemic change a reality. Through the ideology and principles of systems engineering taught in this degree, individuals learn the specialized skills needed to foster operational change within healthcare organizations.

By graduation, students will be able to help healthcare organizations to:

- Conduct analyses of large-scale social and ecological systems across the healthcare sector
- Assess and mitigate risks throughout organizational processes and relationships
- Analyze risks to individual and public health impacted by issues in the healthcare system
- Bring evidence-based thinking and analysis to process and system change
- Develop and manage a quality management system across an organizational setting
- Plan and conduct change initiatives that directly impact quality and costs
- Design and build detailed computer simulations of healthcare organizations and health technology assessments
- Adapt information systems to improve management planning and control

A sampling of career opportunities include:

Healthcare Management Engineer, Operational Excellence Project Manager, Systems Redesign Consultant, Lean Specialist, Process Improvement Consultant, Continuous Improvement Specialist and Healthcare Analyst.

The Healthcare Systems Engineering (HCSE) track requires 30 credit hours of courses beyond the bachelor's degree. This program offers only the nonthesis option.

For information about the program, please contact the HSE Director Dr. Vernet Lasrado (vernet.lasrado@ucf.edu).

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

An undergraduate course in probability and statistics

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Millican Hall 230
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Institution Codes

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TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
30 Total Credits

- Complete the following:
  - HSC6636 - Issues and Trends in the Health Professions (3)
  - ESI5219 - Engineering Statistics (3)
  - ESI6551 - Systems Engineering (3)
  - EIN6357 - Advanced Engineering Economic Analysis (3)
  - ESI5531 - Discrete Systems Simulation (3)
  - ESI5359 - Risk Assessment and Management (3)
  - EIN5117 - Management Information Systems I (3)
  - ESI6224 - Quality Management (3)
  - ESI6609 - Industrial Engineering Analytics for Healthcare (3)
  - EIN5140 - Project Engineering (3)

Grand Total Credits: 30

Track Details

Cost Per Credit Hour

This Master of Science, both for in-state and out-of-state, costs $1,239.16 per credit hour totaling $37,174.80* for the program which includes tuition and fees.

*Fee subject to change.

Independent Learning

The Independent Learning requirement is met by successful completion of the research studies required in individual courses and EIN 5140 - Project Engineering (Capstone). These research studies require that students integrate material from all the courses in their program.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Industrial Engineering MSIE

College

College of Engineering and Computer Science

Department

Department of Industrial Engineering and Management Systems
Program Website

http://www.iems.ucf.edu/

Program Handbook Link

Industrial Engineering MSIE

Program Contact Information

Mansoorreh Mollaghasemi, PhD
Associate Professor
mollagha@ucf.edu
Engineering 2, Room 312

Is this program available 100% online?

Yes

UCF Online

Please note: Industrial Engineering (MSIE) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Industrial-Engineering-MSIE.pdf.

Program Description

The Department of Industrial Engineering and Management Systems offers a Master of Science in Industrial Engineering (MSIE) degree focusing on the design and improvement of systems, products, and processes. This degree is available to those applicants with a bachelor of science degree in Industrial Engineering (BSIE) or other Engineering degrees ONLY.

A total systems approach is used to optimize the various aspects of operations in both manufacturing and service industries. Industrial engineers use many analytical approaches to improve productivity, safety, and quality of working life while reducing operating costs. The MSIE curriculum builds on an undergraduate engineering degree to develop a stronger systems focus and analytical capability.

The industrial engineering graduate programs are structured to support the emergence of Central Florida as a national center of high technology as well as supporting the diverse service industries in the region and throughout the nation.

Many of the graduate courses offered by the department or required in the MSIE program are offered through the Florida Engineering Educational Delivery System (FEEDS), which provides video-streamed versions of classes over the Internet.

This program can be taken entirely through the Center for Online and Virtual Education (COVE), which provides video-streamed versions of classes over the Internet. More information about this program can be found at http://www.cecs.ucf.edu/COVE/ or (407) 823-3814.

The Industrial Engineering MSIE degree requires an undergraduate degree in Industrial Engineering or any other Engineering degree. Students with undergraduate degrees outside of industrial engineering may be required to take additional prerequisites. The program offers both thesis and nonthesis options with each requiring 30 credit hours of courses. At least half of the regular coursework must be at the 6000 level. A cumulative grade-point average of B must be maintained in the entire program of study.

Thesis Option: The thesis option requires 12 credit hours of required courses, 12 credit hours of electives and 6 thesis credit hours. Students must also write and successfully defend a thesis.

Nonthesis Option: The nonthesis option requires 12 credit hours of required courses and 18 credit hours of electives. Research studies are required in one or more courses. The research study and report will focus on reviewing and analyzing contemporary research in the profession in order to help students acquire knowledge and skills pertaining to research-based best practices. In addition, students may engage in directed independent studies, directed research or a research report during their studies. A program of study must be developed with the graduate program director and meet with departmental approval. At least one-half of the credit hours (including thesis hours) required in a master's program of study must be at the 6000 level or higher. Students on assistantships must take 9 credit hours per semester to satisfy the university’s requirement for full-time status. Most students working full time take 6 credit hours per semester. At that rate, the program can be completed in 6 semesters or less. However, students with more time available and with an early start on a thesis, if applicable, can finish the program in 3 semesters.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
Program Prerequisites

Students with undergraduate degrees in industrial engineering or other engineering degrees are encouraged to apply for admission. Graduates from non-engineering curricula may apply to obtain the MS degree.

All applicants are expected to have completed the following prerequisites during their undergraduate engineering education:

- Mathematics through Calculus II (MAC 2312 or equivalent)
- Undergraduate probability and statistics for engineers (STA 3032 or equivalent)

College of Graduate Studies Contact Information

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Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ESI6551 - Systems Engineering (3)
    - ESI6224 - Quality Management (3)
    - ESI6247 - Experimental Design and Taguchi Methods (3)
  - Complete at least 1 of the following:
    - ESI5306 - Operations Research (3)
    - ESI6418 - Linear Programming and Extensions (3)

Elective Courses
12 Total Credits

- All students, both thesis and nonthesis, must take 12 credit hours of electives after consultation with their adviser. The program requirements are flexible enough to allow the students to tailor the coursework according to their desired educational and career goals. With the approval of their adviser and/or the graduate program director, students may select from the following groups of courses to satisfy the needs of their research goals or career objectives. To assist the students in achieving these goals and objectives, courses are grouped below to suggest focus areas, only as a guide to assist in advising and course selection. They are not intended to restrict elective choices among specialization areas as the intent of the program is to help graduate students maintain an integrated approach to their studies. The listing of these courses does not guarantee that they will be offered by the department in a particular year or semester. In addition to the courses listed below, students may be allowed to take courses from the following disciplines at UCF, with the approval of the graduate program director, as an elective in their graduate program of study: Other Engineering programs Computer Science Mathematics Statistics Business Administration or Management

Focus Areas
12 Total Credits

- Complete 1 of the following
  - Human System Engineering/Ergonomics
  - Earn at least 12 credits from the following:
    - EINS248 - Ergonomics (3)
    - EINS251 - Usability Engineering (3)
    - EIN6258 - Human Computer Interaction (3)
    - EIN6271 - Human Reliability (3)
  - Quality and Production Systems
  - Earn at least 12 credits from the following:
    - ESI6225 - Quality Design and Control (3)
    - EIN6336 - Production and Inventory Control (3)
- EIN5356 - Cost Engineering (3)
- ESI5227 - Total Quality Improvement (3)

Management Systems
- Earn at least 12 credits from the following:
  - EIN6182 - Engineering Management (3)
  - EIN5117 - Management Information Systems I (3)
  - EIN6370 - Innovation in Engineering Design (3)
  - EIN6339 - Operations Engineering (3)
  - EIN5108 - The Environment of Technical Organizations (3)

Simulation, Optimization and Modeling
- Earn at least 12 credits from the following:
  - ESI6336 - Queueing Systems (3)
  - ESI6532 - Object-Oriented Simulation (3)
  - ESI5531 - Discrete Systems Simulation (3)
  - EIN5255C - Interactive Simulation (3)
  - EIN6528 - Simulation Based Life Cycle Engineering (3)
  - EIN6936 - Seminar in Advanced Industrial Engineering (3)
  - ESI6217 - Statistical Aspects of Digital Simulation (3)

Systems Engineering
- Earn at least 12 credits from the following:
  - ESI6358 - Decision Analysis (3)
  - ESI5359 - Risk Assessment and Management (3)
  - EIN6215 - System Safety Engineering and Management (3)
  - ESI5236 - Reliability Engineering (3)
  - EIN5346 - Engineering Logistics (3)
  - ESI6891 - IEMS Research Methods (3)

Thesis/Nonthesis Option
6 Total Credits
- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      EIN 6971 Thesis The thesis option requires an additional 6 credit hours of thesis. Thesis students must complete an independent research project and write and successfully defend a thesis describing the project. Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's adviser and posted on the college's website (http://www.cecs.ucf.edu/graddefense/) and on the College of Graduate Studies Events Calendar at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - EIN6950 - Industrial and Systems Engineering Capstone (3)
      - Earn at least 3 credits from the following types of courses:
        - Additional Elective Course. The nonthesis option requires a capstone course and an additional unrestricted elective course that supports the student's area of research and study interests. The capstone course should be completed toward the end of the student's graduate plan of study. As part of the requirements of this courses, students will complete an independent capstone project on a topic relevant to the industrial and systems engineering field and approved by the instructor. Students are expected to use and leverage knowledge obtained in the program to complete the project. This course serves as the culminating experience for students and shows their engagement in independent learning.

Grand Total Credits: 30

Program Details

Equipment Fee
Full-time students in the Industrial Engineering MSIE program pay a $58 equipment fee each semester that they are enrolled. Part-time students pay $29 each semester that they are enrolled.

Independent Learning
A research project serves as the independent learning experience for thesis students. Nonthesis students are required to complete the department's capstone course toward the end of their program.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Industrial Engineering MSIE - Industrial Engineering MS, Accelerated BS to MSIE Track

Track Website
http://www.iems.ucf.edu/

Track Handbook
Industrial Engineering MSIE

Track Contact Information

Christin Saro, MA
Academic Advisor
Christin.Saro@ucf.edu
Engineering 2, Room 312

Online Availability
No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Industrial-Engineering-MSIE.pdf.

Track Description

The accelerated undergraduate/graduate program in Industrial Engineering allows highly qualified undergraduate majors in Industrial Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate program. Participation will enable completion of the Bachelor of Science and Master of Science degrees in Industrial Engineering in five instead of six years for students enrolled in full-time course work.

Industrial Engineering focuses on the design and improvement of systems, products, and processes. A total systems approach is used to optimize the various aspects of operations in both manufacturing and service industries. Industrial engineers use many analytical approaches to improve productivity, safety, and quality of working life while reducing operating costs.

The Industrial Engineering graduate programs are structured to support the emergence of Central Florida as a national center of high technology as well as supporting the diverse service industries in the region and throughout the nation.

Additional information can be found at www.iems.ucf.edu.

Track Prerequisites

A bachelor's degree in Industrial Engineering from UCF.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Complete the following:
    - ESI6551 - Systems Engineering (3)
    - ESI6224 - Quality Management (3)
    - ESI6247 - Experimental Design and Taguchi Methods (3)
  - Complete at least 1 of the following:
    - ESI5306 - Operations Research (3)
    - ESI6418 - Linear Programming and Extensions (3)

Elective Courses
12 Total Credits

- All students, both thesis and nonthesis, must take 12 credit hours of electives after consultation with their advisor. The program requirements are flexible enough to allow the students to tailor the coursework according to their desired educational and career goals. With the approval of their advisor and/or the graduate program director, students may select from the following groups of courses to satisfy the needs of their research goals or career objectives. To assist the students in achieving these goals and objectives, courses are grouped below to suggest focus areas, only as a guide to assist in advising and course selection. They are not intended to restrict elective choices among specialization areas, as the intent of the program is to help graduate students maintain an integrated approach to their studies. The listing of these courses does not guarantee that they will be offered by the department in a particular year or semester. In addition to the courses listed below, students may be allowed to take courses from the following disciplines at UCF, with the approval of the graduate program director, as an elective in their graduate program of study: Other Engineering programs Computer Science Mathematics Statistics Business Administration or Management

Focus Areas
12 Total Credits

- Complete 1 of the following
  - Human System Engineering/Ergonomics
    - Earn at least 12 credits from the following:
      - EINS248 - Ergonomics (3)
      - EINS251 - Usability Engineering (3)
      - EINS258 - Human Computer Interaction (3)
      - EINS271 - Human Reliability (3)
  - Quality and Production Systems
    - Earn at least 12 credits from the following:
      - EINS225 - Quality Design and Control (3)
      - EINS336 - Production and Inventory Control (3)
      - EINS356 - Cost Engineering (3)
      - EINS5227 - Total Quality Improvement (3)
  - Management Systems
    - Earn at least 12 credits from the following:
      - EINS6182 - Engineering Management (3)
      - EINS5117 - Management Information Systems I (3)
      - EINS6370 - Innovation in Engineering Design (3)
      - EINS6339 - Operations Engineering (3)
      - EINS108 - The Environment of Technical Organizations (3)
Simulation, Optimization and Modeling

- Earn at least 12 credits from the following:
  - ESI6336 - Queueing Systems (3)
  - ESI6532 - Object-Oriented Simulation (3)
  - ESI5531 - Discrete Systems Simulation (3)
  - EIN5255C - Interactive Simulation (3)
  - EIN6528 - Simulation Based Life Cycle Engineering (3)
  - EIN6936 - Seminar in Advanced Industrial Engineering (3)
  - ESI6217 - Statistical Aspects of Digital Simulation (3)

Systems Engineering

- Earn at least 12 credits from the following:
  - ESI6358 - Decision Analysis (3)
  - ESI5359 - Risk Assessment and Management (3)
  - EIN6215 - System Safety Engineering and Management (3)
  - ESI5236 - Reliability Engineering (3)
  - ESI5236 - Reliability Engineering (3)
  - ESI6891 - IEMS Research Methods (3)

Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EIN 6971 Thesis The thesis option requires an additional 6 credit hours of thesis. Thesis students must complete an independent research project and write and successfully defend a thesis describing the project. Students may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic. The College of Engineering and Computer Science requires that all thesis defense announcements are approved by the student's advisor and posted on the college's website (http://www.cecs.ucf.edu/graddefense/) and on the College of Graduate Studies Events Calendar at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Complete the following:
        - EIN6950 - Industrial and Systems Engineering Capstone (3)
      - Earn at least 3 credits from the following types of courses:
        - Additional Elective Course. The nonthesis option requires a capstone course and an additional unrestricted elective course that supports the student's area of research and study interests. The capstone course should be completed toward the end of the student's graduate plan of study. As part of the requirements of these courses, students will complete an independent capstone project on a topic relevant to the industrial and systems engineering field and approved by the instructor. Students are expected to use and leverage knowledge obtained in the program to complete the project. This course serves as the culminating experience for students and shows their engagement in independent learning.

Grand Total Credits: 30

Track Details

Equipment Fee

Full-time students in the Industrial Engineering MSIE program pay a $58 equipment fee each semester that they are enrolled. Part-time students pay $29 each semester that they are enrolled.

Independent Learning

A research project serves as the independent learning experience for thesis students. Nonthesis students are required to complete the department's capstone course toward the end of their program.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
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https://funding.graduate.ucf.edu

Industrial Engineering PhD

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Program Website
http://www.iems.ucf.edu/

Program Handbook Link
Industrial Engineering PhD

Program Contact Information
Mansooreh Mollaghasemi, PhD
Associate Professor
mollagha@ucf.edu
Engineering 2, Room 312

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Industrial-Engineering-PhD.pdf.

Program Description
The Industrial Engineering PhD program prepares students for extensive research and careers in academia, industry and government while providing a broad knowledge of industrial engineering.

The Doctor of Philosophy in Industrial Engineering is intended for a student with a bachelor's or master's degree in Industrial Engineering or a closely related discipline.

The PhD program is designed to produce highly skilled researchers with both broad knowledge of industrial engineering and in-depth knowledge of specialty fields for careers in academia, industry, and government. The program allows a candidate to thoroughly study one aspect of industrial engineering through faculty expertise in research areas such as management systems, systems simulation and modeling, operations research, quality systems engineering, interactive simulation and training systems, systems engineering, and human systems engineering, human-computer interaction, and ergonomics.

The Industrial Engineering program is structured to support the emergence of Central Florida as a national center of high technology as well as supporting the diverse service industries in the region and throughout the nation.

In the Industrial Engineering PhD program, students may be able to individually craft their programs of study and select their courses to focus in one or more of the following research areas for their dissertations:

Human Systems Engineering/Ergonomics:
As technology has become more sophisticated, the need to design for the human user has become more difficult, yet even more important. Human engineering and ergonomics assist in ensuring that as technology advances, the abilities, limitations, and needs of humans are considered in the system design. This not only supports the needs of the user, it also optimizes the efficiency and usability of the system designed. Traditionally, ergonomics has been associated with biomechanical issues and work measurement and performance issues in physical system design, as well as occupational and industrial safety. The broader focus of human engineering encompasses those issues as well as incorporating the reaction and effectiveness of human interaction with systems, both physical systems and virtual systems such as computer-based models.

Research in the Human Systems Engineering and Ergonomics area provides students with the necessary knowledge in human
engineering and ergonomics to effectively design tasks, industrial systems, and work environments that maximize human performance, safety, and overall productivity.

Management Systems/Engineering management:

The Management Systems/Engineering Management research focuses on providing the knowledge for improving organizational systems. Engineering Management focuses on effective decision-making and successful project delivery in engineering and technological organizations. With technological advancements comes a new level of organizational complexity. As a result, new knowledge is needed to help the technical organization understand how to improve. The Management Systems/Engineering Management studies and research in the Industrial Engineering program are intended for individuals of all engineering disciplines. Research and coursework focus on a systems view of engineering problems related to the management of complex industrial, military, government, and social systems.

Operations Research:

The Operations Research courses in the Industrial Engineering MS program uses mathematics and computer-based systems to model operational processes and decisions in order to develop and evaluate alternatives that will lead to gains in efficiency and effectiveness. Drawing on probability, statistics, simulation, optimization, and stochastic processes, Operations Research provides many of the analytic tools used by industrial engineers as well as by other analysts to improve processes, decision-making, and management by individuals and organizations. Research in this area is ideal for students who have an undergraduate degree in engineering, mathematics, or science. The knowledge in these courses build on an undergraduate Engineering, Mathematics, or Science degree to develop a strong modeling and analytical capability to improve processes and decision-making.

Quality Systems Engineering:

The Quality Systems Engineering research in the Industrial Engineering MS program focuses on providing the knowledge for improving product and process quality in manufacturing and service industries. Quality Systems Engineering provides both the quantitative tools for measuring quality and the managerial focus and organizational insight required to implement effective continuous improvement programs and incorporate the voice of the customer. The Quality Systems Engineering courses builds on an undergraduate degree in industrial engineering or a closely related discipline to provide the necessary knowledge to plan, control, and improve the product assurance function in government, military, service, or manufacturing organizations.

Simulation Modeling and Analysis:

The Simulation Modeling and Analysis research and studies in the Industrial Engineering MS program focus on providing a fundamental understanding of the functional and technical design requirements for simulation in manufacturing and service industries. Research in this area is based on a systems modeling paradigm and provides coding and development capability in the context of a broader systems framework. Significant exposure to design and analysis aspects is a core element of the track. The Simulation Modeling and Analysis research and coursework prepare individuals with an undergraduate degree in Engineering, Science, Mathematics, or a closely related discipline for careers in simulation, focusing particularly on using simulation as an analysis and design tool for the manufacturing and service industries.

Systems Engineering:

Intelligence is being infused into everyday systems, processes and infrastructure that enable physical goods to be developed, manufactured, bought and sold. These same systems also facilitate the movement and delivery of global products and services that support worldwide markets such as finance, energy resources, and healthcare systems.

With these technological advancements, comes a new level of complexity as organizations struggle to integrate systems, processes and data feeds. As a result, the demand for systems engineering and related skills is expected to grow significantly.

Systems engineers design and implement computer systems, software, and networks, including defining complex system requirements, and determining system specifications, processes and working parameters.

The Systems Engineering studies and research in the Industrial Engineering MS program are intended for individuals of all engineering disciplines. Research and coursework focus on a systems view of engineering problems related to the management of complex industrial, military, government, and social systems.

Interactive Simulation and Training Systems:

The Interactive Simulation and Training Systems research within the Industrial Engineering MS program focuses on providing a fundamental understanding of significant topics relative to simulation systems and the requirements, design, development, and use of such systems for knowledge transfer in the technical environment. Courses in this area address the evolving and multiple discipline application of interactive simulation by providing a wealth of electives to support development of individual student interests and talents. In conjunction with UCF’s Institute for Simulation and Training, industrial organizations involved in simulation in the Central Florida region, military organizations, and other governmental organizations, ISTS research in the MS program provides exposure to both military and commercial interactive simulation and training systems.

The emphasis is on the application and development of interactive simulation and training systems to meet various requirements including, but not limited to: simulators, skill trainers, organizational learning systems, computer and web-based interactive simulation systems and other novel interactive simulation efforts. Courses in the interactive simulation and training systems area prepare individuals with an undergraduate degree in engineering, science, education, psychology, mathematics or other related disciplines for careers in simulation, focusing particularly on the interactive simulation and training systems industries.

The Industrial Engineering PhD program requires a minimum of 72 credit hours beyond the bachelor’s degree. If a student holds a master's degree, the student must complete at least 27 credit hours of required coursework, in addition to 15 credit hours of dissertation.
Of the total coursework taken, 27 hours must be formal coursework exclusive of independent study and 15 credit hours must consist of dissertation research (EIN 7980). All remaining hours are determined with a faculty adviser and approved by the department. Details about this program are located in the Industrial Engineering PhD Handbook.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

Bachelor's and Master's degree in Industrial Engineering or a closely related discipline.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses

6 Total Credits

- Complete the following:
  - ESI6891 - IEMS Research Methods (3)
  - ESI6247 - Experimental Design and Taguchi Methods (3)

Elective Courses

51 Total Credits

- Complete all of the following
  - At least seventeen unrestricted electives - A maximum of 30 semester credit hours from an earned master's degree may be applied toward these requirements. Waived credits are evaluated on a course-by-course basis. A maximum of 12 hours of Independent Study and/or Doctoral research is allowed in the Ph.D. program of study. Students, with the approval of their advisers and/or the graduate program director, may select from the following groups of courses to satisfy the needs of their research goals or career objectives. To assist students in achieving their goals and objectives, courses are grouped below to suggest focus areas, only as guides for advising and course selection. The listing of these courses does not guarantee that they will be offered by the department in a particular year or semester. In addition to the courses listed below, students may be allowed to take courses from the following disciplines, with the approval of the graduate program director, as an elective in their graduate plan of study. Other Engineering Programs
  - Computer Science
  - Mathematics and Statistics
  - Business Administration/Management

- Earn at least 51 credits from the following:
  - EIN5248 - Ergonomics (3)
  - EIN5251 - Usability Engineering (3)
  - EIN6258 - Human Computer Interaction (3)
  - EIN6271 - Human Reliability (3)
  - ESI6225 - Quality Design and Control (3)
  - ESI6224 - Quality Management (3)
  - EIN6336 - Production and Inventory Control (3)
  - EIN6336 - Production and Inventory Control (3)
  - ESI5227 - Total Quality Improvement (3)
  - EIN6182 - Engineering Management (3)
  - EIN5117 - Management Information Systems I (3)
  - EIN6370 - Innovation in Engineering Design (3)
  - EIN6399 - Operations Engineering (3)
  - EIN5108 - The Environment of Technical Organizations (3)
  - ESI6336 - Queueing Systems (3)
  - ESI5306 - Operations Research (3)
  - ESI6418 - Linear Programming and Extensions (3)
  - ESI6532 - Object-Oriented Simulation (3)
  - ESI5531 - Discrete Systems Simulation (3)
  - EIN5255C - Interactive Simulation (3)
  - EIN6528 - Simulation Based Life Cycle Engineering (3)
The doctoral committee must consist of a minimum of four members: at least three must be graduate faculty members from within the student's department, and one must be at large, from graduate faculty scholars outside the Industrial Engineering faculty. The committee chair must be a member of the graduate faculty who is approved to direct dissertations. Faculty members with joint appointments in IEMS may serve as department-faculty committee members. Adjunct faculty and off-campus experts who are graduate faculty scholars may serve as the outside-the-department person on the committee, as well as serve as co-chairs of the committee with the approval of the department Chair. The College of Graduate Studies reserves the right to review appointments to advisory committees, place a representative on any advisory committee, or appoint a co-adviser. Joint faculty members may serve as committee chairs. Off-campus experts and adjunct faculty who are graduate faculty scholars may not serve as committee chairs, but may serve as co-chairs. All committee members vote on acceptance or rejection of the dissertation proposal and the final dissertation. The dissertation proposal or final dissertation must be approved by the advisory committee with no more than one dissenting vote.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours. Evidence of successful completion of these requirements must be received by the College of Graduate Studies one day prior to the start of classes for the semester in which a student wishes to enroll in dissertation hours. - Completion or near completion of course work, except for dissertation hours. - Successful completion of the candidacy examination, including successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. - Submittal of an approved program of study.

Grand Total Credits: 72
Program Details

As a pre-doctoral student at the beginning of the PhD program, a preliminary plan of study must be developed with the graduate program director and meet with departmental approval. At this time transfer credit will be evaluated on a course-by-course basis. The student's plan of study itemizing the study plan must be approved prior to the end of the first semester of studies by the Graduate Director of the IEMS department.

After completion of the Qualifying Examination and admission as a doctoral student, the official plan of study is developed that must meet with departmental approval. The student's dissertation committee approves the final plan of study after the Candidacy Examination is passed. These steps are normally completed within the first year of study beyond the master's degree. The degree must be completed within seven years from the date of admission as a pre-doctoral student and within four years of passing the Candidacy Examination.

The Department of Industrial Engineering and Management Systems monitors student progress and may dismiss a student if performance standards or academic progress are not maintained. Satisfactory academic performance in a program includes, but is not limited to, maintaining at least a 3.0 GPA in all graduate work taken as part of (or transferred into) the plan of study. Satisfactory performance also involves maintaining the standards of academic progress and professional integrity expected in our discipline. Failure to maintain these standards may result in dismissal from the program.

Equipment Fee

Students in the Industrial Engineering PhD program pay a $58 equipment fee each semester that they are enrolled. For part-time students, the equipment fee is $29 per semester.

Independent Learning

The Independent Learning requirement is met by successful completion of the student's candidacy and dissertation defense examinations.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Materials Science and Engineering MSMSE

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Program Website
http://mse.ucf.edu/graduate-program/

Program Handbook Link
Materials Science and Engineering MSMSE
Is this program available 100% online?
Yes

UCF Online

Please note: Materials Science and Engineering (MSMSE) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Materials-Science-Engineering-MS.pdf.

Program Description

The Master of Science in Materials Science and Engineering program is primarily for students with bachelor's degrees in Materials Science and Engineering or a closely related discipline.

Fields of emphasis and research for materials science and engineering include crystal growth, high temperature materials and coatings, multicomponent interdiffusion, material stability and degradation, shape memory alloys, mechanical behavior, magnetic and optical and electronic materials, thin films, solar cells, sensors, ceramics, powder metallurgy, non-equilibrium processing of materials, nano synthesis and consolidation, nanomaterials including quantum dots nanowires and nanocomposites, biomaterials, and electrochemically active materials.

This degree has 1 track: Accelerated BS to MSMBE Track. Please scroll to the bottom of this page for further details on this Track.

The Materials Science and Engineering MSMSE program offers both thesis and nonthesis options with each requiring a minimum of 30 credit hours beyond the bachelor's degree. In general, the program includes 12-15 credit hours of required courses with the remaining courses being electives except for at least six credit hours of thesis work for students in the thesis option.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

A bachelor's degree in Materials Science and Engineering or a closely related discipline.

Prerequisites (or equivalent)

- Mathematics through Differential Equations (MAP 2302)
- Structure and Properties of Materials (EGN 3365)
- Mechanics of Materials (EGN 3331) or Thermodynamics (EGN 3343)
- Experimental Techniques in Mechanics and Materials (EMA 3012C)

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-5692
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Mailing Address
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses

15 Total Credits

- Complete all of the following
  - All students must take five required courses unless they hold a materials engineering undergraduate degree, in which case they may substitute an additional elective for EMA 5104.
  - Complete the following:
    - EMA5104 - Intermediate Structure and Properties of Materials (3)
    - EMA5106 - Metallurgical Thermodynamics (3)
    - EMA5317 - Materials Kinetics (3)
  - Choose 1 Group
    - Complete 1 of the following
      - Complete the following:
        - EMA6126 - Physical Metallurgy (3)
        - EMA6626 - Mechanical Behavior of Materials (3)
        - Complete the following:
          - EMA5060 - Polymer Science and Engineering (3)
          - EMA6319 - Colloids and Interface Engineering (3)

Elective Courses

9 Total Credits

- Complete all of the following
  - All students, both thesis and nonthesis, must take at least 9 credit hours of electives. Additional electives are listed below. Courses should be selected with faculty adviser approval. Elective course offering from outside EMA/EML are indicated by other course prefixes below:
  - Earn at least 9 credits from the following:
    - EMA5108 - Surface Science (3)
    - EMA5140 - Introduction to Ceramic Materials (3)
    - EMA5504 - Modern Characterization of Materials (3)
    - EMA6130 - Advanced Phase Transformations in Materials (3)
    - EMA6136 - Diffusion in Solids (3)
    - EMA5585 - Materials Science of Thin Films (3)
    - EMA6516 - X-ray Diffraction and Crystallography (3)
    - EMA5586 - Photovoltaic Solar Energy Materials (3)
    - EMA5584 - Biomaterials (3)
    - EMA6149 - Imperfections in Crystals (3)
    - EMA5505 - Scanning Electron Microscopy (3)
    - EMA5060 - Polymer Science and Engineering (3)
    - EMA6518 - Transmission Electron Microscopy (3)
    - EMA5705 - High Temperature Materials (3)
    - EMA6605 - Materials Processing Techniques (3)
    - EMA5610 - Laser Materials Processing (3)
    - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
    - EMA6611 - Optoelectronics Materials Processing (3)
    - CHM5450 - Polymer Chemistry (3)
    - CHM5451C - Techniques in Polymer Science (3)
    - CHM56711 - Chemistry of Materials (3)
    - EEE5332C - Thin Film Technology (3)
    - EEE5352 - Semiconductor Material and Device Characterization (3)
    - EEE6326C - MEMS Fabrication Laboratory (3)
    - EML5290 - Introduction to MEMS and Micromachining (3)
    - EML5291 - MEMS Materials (3)
    - OSE5312 - Light Matter Interaction (3)
    - PHZ5405 - Condensed Matter Physics (3)

Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EMA 6971 Thesis Thesis students must complete an independent research project, and write and successfully defend their thesis that describes the project. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Nonthesis students are required to demonstrate their ability to perform independently in research conditions by completing either EML 6085 - Research Methods in Mechanical and Aerospace Engineering or EMA/EML 6918. In addition, they must take another elective beyond the 9 credit hours of electives described above.
Earn at least 3 credits from the following:

- EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
- EMA6918 - Research (1 - 99)

Earn at least 3 credits from the following types of courses:
Additional Elective Course from list above.

Grand Total Credits: 30

Program Details

The thesis option is primarily for those students who can devote a full-time effort to completing an independent research project that leads to a thesis. A student pursuing the thesis option may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.

The nonthesis option is primarily designed for part-time and online students and requires 30 credit hours of coursework. In addition, students pursuing the nonthesis option are required to take EML 6085 - Research Methods in Mechanical and Aerospace Engineering or EMA 6918 Directed Research as part of their 30-credit-hour course requirement to demonstrate their ability to perform independently in research conditions. See the MSE program director for specific details.

All students are expected to identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. All programs of study must consist of at least 24 credit hours of required and elective courses, exclusive of thesis and research. At least half of the credit hours in a program of study must be at the 6000 level. The appropriate program of study form can be found at the program website listed above and students should consult with the MSE program director for assistance in filling out the program of study form and approval. Substitutions to the program of study must meet with the approval of the adviser and the MSE program director.

A student with an undergraduate degree outside of the materials science and engineering discipline is required to satisfy an articulation program and may have to take additional prerequisite courses.

Equipment Fee

Students in the Materials Science and Engineering MSMSE program pay $17 per semester for equipment each semester that they are enrolled. Part-time students pay $8.50 per semester.

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis or EML 6085 - Research Methods in Mechanical and Aerospace Engineering or EMA 6918 Directed Research for nonthesis students.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Materials Science and Engineering MSMSE - Materials Science and Engineering MSMSE, Accelerated BS to MSMBE Track

Track Website
http://mse.ucf.edu/graduate-program/
Track Handbook

Materials Science and Engineering MSMSE

Track Contact Information

Jiyu Fang PhD
Professor
jiyu.fang@ucf.edu
Telephone: 407-882-1182
Engineering I, RM 207B

Online Availability

No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Materials-Science-Engineering-MS.pdf.

Track Description

The accelerated undergraduate/graduate program in Materials Science and Engineering allows highly qualified UCF undergraduate majors in Mechanical Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program. Participation will enable completion of the Bachelor of Science and Master of Science degrees in five instead of six years for students enrolled in full-time course work.

The BSME is awarded after completing university requirements for the degree, including 128 total credit hours and completing of 71 credit hours of engineering courses. The MSMSE is awarded upon completion of the master's program. Courses designated in General Education Program and Common Program Prerequisites are usually completed in the first 60 hours (see engineering major requirements in the Undergraduate Catalog).

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

A bachelor's degree in Materials Science and Engineering from UCF.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-5692
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Undergraduate Requirements
0 Total Credits

- Please see the current edition of the Undergraduate Catalog for additional information about engineering programs.

Required Courses
15 Total Credits

- Complete all of the following
  - All students must take five required courses unless they hold a materials engineering undergraduate degree, in which case they may substitute an additional elective for EMA 5104.
  - Complete the following:
    - EMA5104 - Intermediate Structure and Properties of Materials (3)
    - EMA5106 - Metallurgical Thermodynamics (3)
    - EMA5317 - Materials Kinetics (3)

Choose 1 Group

- Complete 1 of the following
Complete the following:

- EMA6126 - Physical Metallurgy (3)
- EMA6626 - Mechanical Behavior of Materials (3)

Complete the following:

- EMA5060 - Polymer Science and Engineering (3)
- EMA5060 - Polymer Science and Engineering (3)

Elective Courses
9 Total Credits

- Complete all of the following
  - All students, both thesis and nonthesis, must take at least 9 credit hours of electives. Additional electives are listed below. Courses should be selected with faculty adviser approval. Elective course offering from outside EMA/EML are indicated by other course prefixes below:
  - Earn at least 9 credits from the following:
    - EMA5108 - Surface Science (3)
    - EMA5140 - Introduction to Ceramic Materials (3)
    - EMA5504 - Modern Characterization of Materials (3)
    - EMA6130 - Advanced Phase Transformations in Materials (3)
    - EMA6136 - Diffusion in Solids (3)
    - EMA5585 - Materials Science of Thin Films (3)
    - EMA6516 - X-ray Diffraction and Crystallography (3)
    - EMA5586 - Photovoltaic Solar Energy Materials (3)
    - EMA5584 - Biomaterials (3)
    - EMA6149 - Imperfections in Crystals (3)
    - EMA5505 - Scanning Electron Microscopy (3)
    - EMA5060 - Polymer Science and Engineering (3)
    - EMA6518 - Transmission Electron Microscopy (3)
    - EMA5705 - High Temperature Materials (3)
    - EMA6605 - Materials Processing Techniques (3)
    - EMA5610 - Laser Materials Processing (3)
    - EMA6611 - Optoelectronics Materials Processing (3)
    - CHM5450 - Polymer Chemistry (3)
    - CHM5451C - Techniques in Polymer Science (3)
    - EEE5332C - Thin Film Technology (3)
    - EEE5352 - Semiconductor Material and Device Characterization (3)
    - EEE6326C - MEMS Fabrication Laboratory (3)
    - EML5290 - Introduction to MEMS and Micromachining (3)
    - EML6085 - MEMS Materials (3)
    - OSE5312 - Light Matter Interaction (3)
    - Course Not Found
    - PHZ5405 - Condensed Matter Physics (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - EMA 6971 Thesis Thesis students must complete an independent research project, and write and successfully defend their thesis that describes the project. The College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's adviser and posted on the college's website and on the Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.
  - Nonthesis Option
    - Complete all of the following
      - Nonthesis students are required to demonstrate their ability to perform independently in research conditions by completing either EML 6085 - Research Methods in Mechanical and Aerospace Engineering or EMA/EML 6918. In addition, they must take another elective beyond the 9 credit hours of electives described above.
      - Earn at least 3 credits from the following:
        - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
        - EMA6918 - Research (1 - 99)
      - Earn at least 3 credits from the following types of courses:
        - Additional Elective Course from list above.

Grand Total Credits: 30
Track Details

The thesis option is primarily for those students who can devote a full-time effort to completing an independent research project that leads to a thesis. A student pursuing the thesis option may not register for thesis credit hours until an advisory committee has been appointed and the committee has reviewed the program of study and the proposed thesis topic.

The nonthesis option is primarily designed for part-time and online students and requires 30 credit hours of coursework. In addition, students pursuing the nonthesis option are required to take EML 6085 - Research Methods in Mechanical and Aerospace Engineering or EMA 6918 Directed Research as part of their 30-credit-hour course requirement to demonstrate their ability to perform independently in research conditions. See the MSE program director for specific details.

All students are expected to identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. All programs of study must consist of at least 24 credit hours of required and elective courses, exclusive of thesis and research. At least half of the credit hours in a program of study must be at the 6000 level. The appropriate program of study form can be found at the program website listed above and students should consult with the MSE program director for assistance in filling out the program of study form and approval. Substitutions to the program of study must meet with the approval of the adviser and the MSE program director.

A student with an undergraduate degree outside of the materials science and engineering discipline is required to satisfy an articulation program and may have to take additional prerequisite courses.

Equipment Fee

Students in the Materials Science and Engineering MSMSE program pay $17 per semester for equipment each semester that they are enrolled. Part-time students pay $8.50 per semester.

Independent Learning

The Independent Learning Requirement is met by successful completion of a master's thesis or EML 6085 - Research Methods in Mechanical and Aerospace Engineering or EMA 6918 Directed Research for nonthesis students.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Materials Science and Engineering PhD

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Program Website
http://mse.ucf.edu/graduate-program/

Program Handbook Link
Materials Science and Engineering PhD
Program Contact Information

Jiyu Fang PhD
Professor
jiyu.fang@ucf.edu
Telephone: 407-882-1182
Engineering I, RM 207B

Pamela Ross
pamela.ross@ucf.edu
Telephone: 407-823-3806
Engineering I, RM 207D

Is this program available 100% online?
No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Materials-Science-Engineering-PhD.pdf.

Program Description

The Materials Science and Engineering PhD program provides students with a fundamental and applied research-based education suitable for seeking employment in industry or academia.

The Materials Science and Engineering PhD program is designed for students with a master's degree in materials science and engineering or closely related disciplines. The program provides students with a fundamental and applied research-based education suitable for seeking employment in industry or academia.

The Materials Science and Engineering PhD program requires a minimum of 72 credit hours beyond the bachelor's degree. The program requires 27 hours of formal course work exclusive of independent study and a minimum of 15 hours of dissertation research (EMA 7980). A minimum of 12 credit hours of elective coursework is required to be taken at UCF. Details of program requirements are located in the Materials Science and Engineering PhD Handbook.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Master's and/or bachelor's degree in Materials Science and Engineering or a closely related discipline.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Elective Courses
57 Total Credits

- Complete all of the following

- The following core courses are used as the basis for the doctoral qualifying exam and are recommended, but not required: - EMA 5104 - Intermediate Structure and Properties of Materials 3 Credit Hours - EMA 5106 - Metallurgical Thermodynamics 3 Credit Hours - EMA 5317 - Materials Kinetics 3 Credit Hours - EMA 6126 - Physical Metallurgy 3 Credit Hours or EMA 6319 - Colloids and Interface Engineering 3 Credit Hours Elective courses that are commonly taught in Materials Science and Engineering being with the prefix EMA and EML. Other courses may be included in the elective hours with the approval of the student's faculty adviser and the Materials Science and Engineering graduate program director (indicated with another other prefix besides EMA/EML)

- Earn at least 57 credits from the following:
  - EMA5104 - Intermediate Structure and Properties of Materials (3)
The dissertation proposal and final dissertation must be approved by a majority of the advisory committee.

Members of the Dissertation Committee vote on acceptance or rejection of the dissertation proposal and the final dissertation.

Doctoral candidates as first author that are in print, or formally accepted for publication, must be evidenced by two refereed journal publications of the doctoral candidate as first author that are in print, or formally accepted for publication, or (2) satisfaction of an alternative publication requirement as recommended by the Dissertation Advisory Committee and approved by a majority vote at a meeting of the program faculty (those having primary or secondary appointments in the MSE Department).

All dissertations in Materials Science and Engineering must represent high-quality scientific work. Prior to scheduling the dissertation defense, the high quality of the research must be evidenced by: (1) two refereed journal publications with the doctoral candidate as first author that are in print, or formally accepted for publication, or (2) satisfaction of an alternative publication requirement as recommended by the Dissertation Advisory Committee and approved by a majority vote at a meeting of the program faculty (those having primary or secondary appointments in the MSE Department). The dissertation proposal must be successfully defended and accepted by the Dissertation Committee in a meeting convened for that purpose. The dissertation proposal must be a complete dissertation document provided to the committee at least two weeks prior to the date of defense. In addition, the high quality of the research must be evidenced by two refereed journal publications of the doctoral candidate as first author that are in print, or formally accepted for publication, prior to the dissertation defense. All members of the Dissertation Committee vote on acceptance or rejection of the dissertation proposal and the final dissertation. The dissertation proposal and final dissertation must be approved by a majority of the advisory committee.

Dissertation

15 Total Credits

- Earn at least 15 credits from the following types of courses:
  EMA 7980 The College of Engineering and Computer Science requires that all dissertation defense announcements are approved by the student's adviser and posted on the college's website, www.cecs.ucf.edu/graddefense and on the Events Calendar of the College of Graduate Studies website at least two weeks before the defense date.

Examinations

0 Total Credits

- The doctoral qualifying exam is a multi-part exam. The initial written assessment will be conducted during the fall term. The following spring term a second written assessment as well as oral assessment will be conducted. Upon successful completion of the doctoral qualifying exam process, a student is qualified to continue studying in the PhD program. For more information about the qualifying exam please visit, http://mse.ucf.edu/graduate-program/. The candidacy exam should be taken in the academic semester the student completes 57 credit hours of required course work and is scheduled by mutual agreement of the student and his/her dissertation committee. The student must prepare a written description of their proposed dissertation research prior to the examination, and present that to their dissertation committee to review prior to the candidacy examination. Additionally, the student may be questioned orally during the exam by the dissertation committee on topics relevant to the proposed dissertation research.

Admission to Candidacy

0 Total Credits

- The following items are required to be admitted to candidacy and enroll in dissertation hours (enrollment in dissertation hours begins the semester following the completion of these requirements). Evidence of meeting these requirements must be received by the College of Graduate Studies by the day before the first day of classes for the semester in which a student wishes to enroll in dissertation hours. - Completion of 51 credit hours of course work, except for dissertation hours. - Successful completion of the qualifying examination. - Successful completion of the candidacy examination. - Successful defense of the written dissertation proposal. - The dissertation advisory committee is formed, consisting of approved Graduate Faculty and Graduate Faculty Scholars. - Submission of an approved program of study

Dissertation Defense

0 Total Credits

- All dissertations in Materials Science and Engineering must represent high-quality scientific work. Prior to scheduling the dissertation defense, the high quality of the research must be evidenced by: (1) two refereed journal publications with the doctoral candidate as first author that are in print, or formally accepted for publication, or (2) satisfaction of an alternative publication requirement as recommended by the Dissertation Advisory Committee and approved by a majority vote at a meeting of the program faculty (those having primary or secondary appointments in the MSE Department). The dissertation proposal must be successfully defended and accepted by the Dissertation Committee in a meeting convened for that purpose. The dissertation proposal must be a complete dissertation document provided to the committee at least two weeks prior to the date of defense. In addition, the high quality of the research must be evidenced by two refereed journal publications of the doctoral candidate as first author that are in print, or formally accepted for publication, prior to the dissertation defense. All members of the Dissertation Committee vote on acceptance or rejection of the dissertation proposal and the final dissertation. The dissertation proposal and final dissertation must be approved by a majority of the advisory committee.
Program Details

Students entering the Materials Science and Engineering PhD program with a bachelor's degree are required to complete 72 credit hours of graduate coursework, of which 27 hours must be formal coursework, 12 credit hours must be elective courses taken at UCF and a minimum of 15 dissertation credit hours.

Students entering the Materials Science and Engineering PhD program with a master's degree are required to complete 72 credit hours of graduate coursework including up to 30 hours of credit transfer for formal courses from their master's degree. These students have to take at least 12 credit hours of formal elective courses as listed below at UCF and 27 credit hours of formal graduate coursework in total.

The rest of the hours in the PhD program can be chosen by the student in consultation with the adviser and the dissertation committee and with the approval of the program director.

Equipment Fee

Full-time students in the Materials Science and Engineering PhD program pay $17 per semester for equipment each semester that they are enrolled. Part-time students pay $8.50 per semester.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Mechanical Engineering MSME

College

College of Engineering and Computer Science

Department

Department of Mechanical and Aerospace Engineering

Program Website

http://www.mae.ucf.edu/

Program Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Is this program available 100% online?

Yes
UCF Online

Please Note: Mechanical Engineering MSME may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Mechanical-Engineering-MSME.pdf.

Program Description

The Master of Science degree in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution. The program offers Mechanical Systems, Thermofluids, Guidance Control and Dynamics, and Accelerated BS to MS tracks. Please scroll to the bottom of this page for further details on these Tracks. Each track requires 30 credit hours of courses, of which 24 credit hours must be formal course work, exclusive of thesis and research.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/
Mechanical Engineering MSME - Mechanical Engineering MSME, Accelerated BS to MSME Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information
Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Online Availability
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Mechanical-Engineering-MSME.pdf.

Track Description
The Accelerated Undergraduate/Graduate program in Mechanical Engineering allows highly qualified undergraduate majors in Mechanical Engineering to begin taking graduate-level courses that will count toward their master's degree while completing their baccalaureate degree program. Participation will enable completion of the Bachelor of Science and Master of Science degrees in five instead of six years for students enrolled in full-time course work.

The BSME is awarded after completing all university requirements, including 128 total credit hours and 71 credit hours of engineering courses. The MSME is awarded upon completion of the master's program. Courses designated in General Education Program and Common Program Prerequisites are usually completed in the first 60 hours (see engineering major requirements in the Undergraduate Catalog).

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites
This track is available to University of Central Florida undergraduate majors in Mechanical Engineering only.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Undergraduate Requirements

0 Total Credits

- Please see the current edition of the Undergraduate Catalog for additional information about this program.

Required/Track Courses

24 Total Credits

- Complete 1 of the following
  - Up to 12 credit hours of approved graduate level courses of grades "B" (3.0) or better may be counted towards the BS and MS degrees. Additional notes on the Accelerated Undergraduate and Graduate Program in Mechanical Engineering are as follows: Students who change degree programs and select this major must adopt the most current catalog. Students must earn at least a "B" (3.0) in each undergraduate and graduate engineering course for them to be counted toward the major. Accelerated Mechanical Engineering students must declare their interest in either the Mechanical Systems Track or the Thermofluids Track by completing a Program of Study with their adviser.

Mechanical Systems Track

- Complete all of the following
  - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
  - EML5237 - Intermediate Mechanics of Materials (3)
  - EML5271 - Intermediate Dynamics (3)
  - EML6211 - Continuum Mechanics (3)

- Earn at least 12 credits from the following types of courses:
  - Elective Coursework as listed on the Mechanical Systems Track Catalog Page

Thermofluids Track

- Complete all of the following
  - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
  - EML5152 - Intermediate Heat Transfer (3)
  - EML5713 - Intermediate Fluid Mechanics (3)
  - EML6104 - Classical Thermodynamics (3)

- Earn at least 12 credits from the following types of courses:
  - Elective Coursework as listed on the Thermofluids Track Catalog Page

Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - EML 6971 Thesis Additionally, all student pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar (0 credit hours) Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.
  - Nonthesis Option
    - Complete all of the following
      - Earn at least 3 credits from the following:
        - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
        - For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. In the case substitution XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research.
        - Earn at least 3 credits from the following types of courses:
          - Additional elective course as listed on the student's selected track catalog page

Grand Total Credits: 30

Track Details

Equipment Fee

- Students in the Mechanical Engineering MSME program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

Independent Learning

- The Independent Learning requirement is met by successful completion of a master's thesis for the thesis option. The nonthesis option independent learning experience is provided by the required course, EML 6085 - Research Methods in Mechanical and Aerospace Engineering (3 credit hours). For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML 6085 as the student's independent learning experience. In the case substitution XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Mechanical Engineering MSME - Mechanical Engineering MSME, Guidance Control and Dynamics Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Online Availability

Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Mechanical-Engineering-MSME.pdf.

Track Description

The Master of Science in Guidance, Control and Dynamics (MSME) is designed to prepare students for careers as engineers in the aerospace industry. The curriculum is developed with strong emphasis in courses related to guidance control and dynamics with applications in aerospace engineering.

The MSME is awarded upon completion of a minimum of 30 credit hours, including 9 credit hours of required courses, 15 credit hours of elective courses selected from an approved list of courses, and an additional 6 credit hours in either a thesis or nonthesis option.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

Bachelor's degree in Mechanical Engineering or closely related discipline. A student with an undergraduate degree outside of the selected departmental discipline may also be required to satisfy an articulation program.

Prerequisites (or equivalent)

- MAP 2302 - Differential Equations
- EML 3034C - Modeling Methods in Mechanical and Aerospace Engineering
- EAS 4134 - High-Speed Aerodynamics
- EAS 4105 - Flight Mechanics
- EAS 4200 - Flight Structures
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete all of the following
  - Complete the following:
    - EML5271 - Intermediate Dynamics (3)
    - EEL5630 - Digital Control Systems (3)
  - Complete at least 1 of the following:
    - EEL5173 - Linear Systems Theory (3)
    - EML5311 - System Control (3)

Elective Courses
15 Total Credits

- Complete at least 5 of the following:
  - EAS6403C - Attitude Determination and Control (3)
  - EAS6415 - Guidance, Navigation and Control (3)
  - EEL6616 - Adaptive Control (3)
  - EEL6621 - Nonlinear Control Systems (3)
  - EML5152 - Intermediate Heat Transfer (3)
  - EML5713 - Intermediate Fluid Mechanics (3)
  - EML6211 - Continuum Mechanics (3)
  - EML6223 - Advanced Vibrational Systems (3)
  - EML5237 - Intermediate Mechanics of Materials (3)
  - EML6155 - Convection Heat Transfer (3)
  - EML6157 - Radiation Heat Transfer (3)
  - EAS6808 - Space Environment and Payload Instrumentation (3)
  - EEL5432 - Satellite Remote Sensing (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
   - Earn at least 6 credits from the following types of courses:
     EML 6971 Thesis Additionally, all student pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar (0 credit hours) Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.
  - Nonthesis Option
   - Complete all of the following
     - Earn at least 3 credits from the following:
       - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
       - For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. In the case substitution XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research.
       - Earn at least 3 credits from the following types of courses:
         - Additional elective course

Grand Total Credits: 30
Track Details

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must be approved by the department and therefore students should consult with the MSME Graduate Director for assistance in filling out their program of study. Substitutions to the program of study must meet with the approval of the adviser and the department.

Equipment Fee

Students in the Mechanical Engineering MSME program pay a $90 equipment fee each semester that they are enrolled.

Independent Learning

The independent learning requirement is met by successful completion of a master's thesis for the thesis option. The nonthesis option independent learning experience is provided by the required course, EML 6085 - Research Methods in Mechanical and Aerospace Engineering (3 credit hours). For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research certifying independent learning.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Mechanical Engineering MSME - Mechanical Engineering MSME, Mechanical Systems Track

Track Website
http://www.mae.ucf.edu/

Track Contact Information

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

Online Availability

Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Mechanical-Engineering-MSME.pdf.
**Track Description**

The Master of Science degree in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution.

The Mechanical Systems track in the MSME program requires 30 credit hours, including 12 credit hours of required courses, 12 credit hours of elective courses selected from a list of approved courses, and 6 credit hours in a thesis or nonthesis option.

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

A bachelor's degree in Mechanical or Aerospace Engineering, or a closely related discipline. A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program and take additional prerequisites.

**Prerequisites (or equivalent)**

- Differential Equations (MAP 2302)
- Modeling Methods in Mechanical and Aerospace Engineering (EML 3034C)
- Introduction to Vibrations and Controls (EML 4225)
- Mechanical Systems Laboratory (EML 4301C)
- Machine Design and Analysis (EML 3500) or Flight and Structures (EAS 4200)

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Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
  - EML5237 - Intermediate Mechanics of Materials (3)
  - EML5271 - Intermediate Dynamics (3)
  - EML6211 - Continuum Mechanics (3)

Elective Courses
12 Total Credits

- Complete at least 4 of the following:
  - EML6305C - Experimental Mechanics (3)
  - EML5311 - System Control (3)
  - EML5546 - Engineering Design with Composite Materials (3)
  - EML6068 - Finite Elements in Mechanical, Materials, and Aerospace Engineering II (3)
  - EML6062 - Boundary Element Methods in Engineering (3)
  - EML6227 - Nonlinear Vibration (3)
  - EML6227 - Nonlinear Vibration (3)
  - EML5066 - Computational Methods in Mechanical and Aerospace Engineering (3)
  - EML5228C - Modal Analysis (3)
  - EML5532C - Computer-Aided Design for Manufacture (3)
  - EML6572 - Probabilistic Methods in Mechanical Design (3)
  - EML6808 - Analysis and Control of Robot Manipulators (3)
  - EML6233 - Fundamentals of Fatigue Analysis (3)
  - EML6547 - Engineering Fracture Mechanics in Design (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following

  Thesis Option
  - Earn at least 6 credits from the following types of courses:
    EML 6971 Thesis
  - Additionally, all student pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar (0 credit hours) Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option). The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.

  Nonthesis Option
  - Complete all of the following
    - Earn at least 3 credits from the following:
      - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
      - For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student’s independent learning experience. In the case substitution XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research.
      - Earn at least 3 credits from the following types of courses:
        - Additional elective course.

Grand Total Credits: 30
**Track Details**

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. Students should consult with the MMAE Graduate Program Director for assistance in completing the program of study form. The program of study must have departmental approval and must include at least 24 credit hours of formal course work, exclusive of thesis and research. Furthermore, at least half of the credit hours must be from courses at the 6000 level. Substitutions to the program of study must meet with the approval of the adviser and the department. More information is available from the MMAE departmental website listed above.

**Equipment Fee**

Students in the Mechanical Engineering MSME program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

**Independent Learning**

The Independent Learning requirement is met by successful completion of a master’s thesis for the thesis option. The independent learning experience in the nonthesis option is provided by the required course, EML 6085 - Research Methods in Mechanical and Aerospace Engineering (3 credit hours). For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

**Fellowship Information**

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Mechanical Engineering MSME - Mechanical Engineering MSME, Thermofluids Track**

**Track Website**

http://www.mae.ucf.edu/

**Track Contact Information**

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

**Online Availability**

Yes

**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Mechanical-Engineering-MSME.pdf.
Track Description

The Master of Science in Mechanical Engineering is primarily intended for students with a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline obtained from a recognized accredited institution.

The Thermofluids track in the MSME program requires 30 credit hours, including 12 credit hours of required courses, 12 credit hours of elective courses selected from a list of approved courses, and 6 credit hours in a thesis or nonthesis option.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

A bachelor's degree in Mechanical or Aerospace Engineering, or a closely related discipline. A student with an undergraduate degree outside of the selected departmental discipline may be required to satisfy an articulation program and take additional prerequisites.

Prerequisites (or equivalent)

- Differential Equations (MAP 2302)
- Modeling Methods in Mechanical and Aerospace Engineering (EML 3034C)
- Thermodynamics of Mechanical Systems (EML 3101)
- Heat Transfer (EML 4142)
- Energy Systems Laboratory (EML 4306)
- Fluid Mechanics II (EML 4703) or
- Propulsion Systems (EAS 4300)

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering (3)
  - EML5152 - Intermediate Heat Transfer (3)
  - EML5713 - Intermediate Fluid Mechanics (3)
  - EML6104 - Classical Thermodynamics (3)

Elective Courses
12 Total Credits

- Complete at least 4 of the following:
  - EML5402 - Turbomachinery (3)
  - EML6155 - Convection Heat Transfer (3)
  - EML6157 - Radiation Heat Transfer (3)
  - EML6725 - Computational Fluid Dynamics and Heat Transfer I (3)
  - EML6131 - Combustion Phenomena (3)
  - EML6154 - Conduction Heat Transfer (3)
  - EAS6185 - Turbulent Flow (3)
  - EML6712 - Mechanics of Viscous Flow (3)
  - EAS6138 - Advanced Gas Dynamics (3)
  - EAS5302 - Direct Energy Conversion (3)
  - EAS5315 - Rocket Propulsion (3)
  - EML5026C - Computational Engineering Analysis (3)
  - EML5066 - Computational Methods in Mechanical and Aerospace Engineering (3)
  - EML5105 - Gas Kinetics and Statistical Thermodynamics (3)
  - EML6062 - Boundary Element Methods in Engineering (3)
  - EML6144 - Boiling and Condensation Heat Transfer (3)
  - EML6726 - Computational Fluid Dynamics and Heat Transfer II (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following

  Thesis Option

  - Earn at least 6 credits from the following types of courses:
    - EML 6971 Thesis
    - Additionally, all student pursuing the thesis option must enroll in the following course: EML 5090 - Mechanical and Aerospace Seminar (0 credit hours)
    - Students must register for the seminar course a minimum of two times during their graduate career in the master's program (thesis option).
    - The students must also complete the course with a satisfactory (S) grade in both attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.

  Nonthesis Option

  - Complete all of the following
    - Earn at least 3 credits from the following:
      - EML6085 - Research Methods in Mechanical and Aerospace Engineering (3 - 99)
    - For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. In the case substitution XXX 6918 is approved, a letter must be provided by the member of the faculty supervising the directed research.
    - Earn at least 3 credits from the following types of courses:
      - Additional elective course.

Grand Total Credits: 30

2022-2023 Graduate Catalog
**Track Details**

All students must identify an adviser and file an official degree program of study prior to the completion of 9 credit hours of study. The program of study must have departmental approval and students should consult with the MMAE Graduate Program Director for assistance in completing their program of study form. At least 24 hours of the program of study must include formal course work, exclusive of thesis and research, and at least half of the credit hours must be from courses at the 6000 level. Substitutions to the program of study must meet with the approval of the adviser and the department. More information is available from the MMAE departmental website listed above.

**Equipment Fee**

Students in the Mechanical Engineering MSME program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

**Independent Learning**

The Independent Learning requirement is met by successful completion of a master's thesis for the thesis option. The independent learning experience in the nonthesis option is provided by the required course, EML 6085 - Research Methods in Mechanical and Aerospace Engineering (3 credit hours). For students who work on a research topic with an MAE faculty, XXX 6918 Directed Research (3 credit hours) may be used to substitute EML6085 as the student's independent learning experience. If the substitution of XXX 6918 is approved, a letter must be provided by the faculty member agreeing to supervise the directed research and certifying that the experience includes independent learning.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
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**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

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**Mechanical Engineering PhD**

**College**

College of Engineering and Computer Science

**Department**

Department of Mechanical and Aerospace Engineering

**Program Website**

http://www.mae.ucf.edu/

**Program Contact Information**

Jihua Gou PhD
Professor
jihua.gou@ucf.edu
Telephone: 407-823-5448
ENGR I - 381

**Is this program available 100% online?**

No
Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Mechanical-Engineering-PhD.pdf.

Program Description

The Mechanical Engineering PhD program prepares students with an in-depth study and emphasis on research in Aerospace Systems, Mechanical Systems, or Thermofluids.

The Doctor of Philosophy degree in Mechanical Engineering is intended for students with a master's or a bachelor's degree in Mechanical or Aerospace engineering or a closely related discipline. The doctoral program is intended to allow students to study in-depth, with an emphasis on research in Aerospace Systems, Mechanical Systems, or Thermofluids.

The Mechanical Engineering PhD program requires a minimum of 72 credit hours beyond a bachelor's degree. This program requires 15 dissertation credit hours minimum and may include up to a total of 12 credit hours combined of directed (XXX 6918) or doctoral research (XXX 7919) and/or of independent study (6908) with an approved Program of Study. At least 39 hours of the program of study must consist of formal coursework, exclusive of directed research (XXX 6918), doctoral research (XXX 7919) and independent study (XXX 6908). The rest of the hours can be chosen by the student in consultation with the adviser and the dissertation committee and with the approval of the graduate program coordinator. Details about this program are located in the Mechanical Engineering PhD Handbook.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Bachelor's or Master's degree in Mechanical or Aerospace Engineering or a closely related discipline.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Seminar
0 Total Credits

- Complete all of the following
  - Earn at least 0 credits from the following:
    - EML5090 - Mechanical and Aerospace Seminar (99)
    - The MAE Graduate Seminar is a zero credit hour (S/U) course that is offered each fall and spring academic semesters.
      Prior to graduation, all MAE graduate students who are pursuing PhD dissertation required to register, participate, and receive a satisfactory (S) for four semesters of MAE Graduate seminar, with at least two of these taken prior to candidacy.

Elective Courses
57 Total Credits

- Earn at least 57 credits from the following types of courses:
  May include up to a total of 12 credit hours combined of Directed (XXX 6918) or Doctoral Research (XXX 7919) and/or of Independent Study (6908) At least 45 credit hours must be formal coursework, exclusive of independent study, doctoral research and/or directed research.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  EML 7980 15 Credit Hours minimum

Examinations
0 Total Credits

- In addition to the Qualifying Examination discussed above, the student must pass a Candidacy Examination and a Dissertation Defense Examination. The Candidacy Examination is taken near the end of the course work and consists of a written and oral presentation of a research proposal. The MMAE department requires that a PhD student submits his/her candidacy exam the academic semester immediately following his/her successfully passing the PhD Qualifying Exam. The Dissertation Defense Examination is an oral examination taken in defense of the written dissertation. The College of Engineering and Computer Science requires that all dissertation defense announcements are approved by the student’s advisor and posted on the college's website and on the Events Calendar of the College of Graduate Studies website at least two weeks before the defense date. More information on these examinations and other requirements of the PhD program are contained in the Mechanical Engineering PhD Handbook.

Dissertation Committee
0 Total Credits

- The doctoral committee must consist of a minimum of five members: three must be graduate faculty members from within the student's department, and one must be at large from outside the Mechanical, Materials and Aerospace Engineering Department. The committee Chair must be a member of the graduate faculty approved to direct dissertations. Joint faculty members serve as department-faculty committee members as well as chairs of dissertation committees. Adjunct faculty and off-campus experts, if approved graduate faculty scholars, may serve as the outside-the-college person in the committee. Program areas may further specify additional committee membership. The UCF College of Graduate Studies reserves the right to review appointments to advisory committees, place a representative on any advisory committee, or appoint a co-adviser. All members vote on acceptance or rejection of the dissertation proposal and the final dissertation. The dissertation proposal and final dissertation must be approved by a majority of the advisory committee.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours (enrollment in dissertation hours begins the semester following the completion of these requirements). Evidence of meeting these requirements must be received by the College of Graduate Studies by the day before the first day of classes for the semester in which a student wishes to enroll in dissertation hours. Completion of all course work, except for dissertation hours. Successful completion of the candidacy examination. Successful defense of the written dissertation proposal. The dissertation advisory committee is formed, consisting of approved Graduate Faculty and Graduate Faculty Scholars. Submission of an approved program of study.

Grand Total Credits: 72
Program Details

Students entering the program with a master's degree are required to complete 42 credit hours minimum, of which 15 credit hours minimum must be formal coursework, exclusive of directed research (XXX 6918), doctoral research (XXX 7919), and independent study (XXX 6908), and 15 credit hours minimum of dissertation research (XXX 7980). No more than 12 credit hours combined of directed (XXX 6918) or doctoral research (XXX 7919) and/or independent study (XXX 6908) may be taken toward fulfilling the degree program of study coursework requirements.

Students entering the program with a bachelor's degree are required to complete 72 credit hours minimum, of which 39 credit hours minimum must be formal coursework, exclusive of directed research (XXX 6918), doctoral research (XXX 7919), and independent study (XXX 6908), and 15 credit hours minimum of dissertation research (XXX 7980). No more than 12 credit hours combined of directed (XXX 6918) or doctoral research (XXX 7919) and/or independent study (XXX 6908) may be taken toward fulfilling the degree program of study coursework requirements.

The rest of the hours in the PhD program can be chosen by the student in consultation with the adviser and the dissertation committee and with the approval of the Graduate Coordinator. These credit hours may include doctoral directed research hours or doctoral dissertation hours.

Unless a completed (signed) program of study itemizing the study plan is approved prior to the end of the first semester of studies, the Graduate Director of the MMAE department may choose not to accept any part of the coursework (including independent studies and/or directed research) taken by the student on a program of study subsequently submitted by the student.

Admission to doctoral status requires that the student (1) pass a PhD Qualifying Examination, (2) establish a Doctoral Advisory Committee and (3) submit a departmentally approved Program of Study. These steps are normally completed within the first year of study beyond the master's degree.

Students must register for the seminar course a minimum of four times during their graduate career in the doctoral program. Students must complete the EML 5936 seminar course twice prior to taking the candidacy exam and twice after completing the candidacy exam. The students must also complete the course with a satisfactory (S) grade in all attempts. If the student does not complete the course with a satisfactory grade, the student will be asked to repeat the course to meet program requirements.

Equipment Fee

Students in the Mechanical Engineering PhD program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

MAE Department Graduate Seminar Requirement

The MAE Graduate seminar is a zero (0) credit hour (S/U) course that is offered each fall and spring academic semesters. Prior to graduation, all MAE graduate students who are pursuing a PhD dissertation are required to register, participate, and receive a satisfactory (S) for four (4) semesters of MAE Graduate seminar, with at least two of these taken prior to candidacy.

Independent Learning

The Independent Learning Requirement is met by successful completion of the student's candidacy and dissertation defense examinations.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Mixed Reality Engineering Graduate Certificate
**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Program Contact Information**

**Joseph J. LaViola Jr.**
Program Director
Professor
jjl@cs.ucf.edu
Telephone: 407-882-2285
HEC 321

**Ryan P. McMahan**
Associate Program Director
Associate Professor
rpm@ucf.edu
Telephone: 407-823-4994
HEC 433

Is this program available 100% online?
No

**Program Description**
The Graduate Certificate in Mixed Reality Engineering aims to provide students with a comprehensive overview of virtual and augmented reality technologies culminating in the development of a mixed reality software application or system.

**Total Credit Hours Required: 9 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**
gradadmissions@ucf.edu
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Millican Hall 230
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Graduate Admissions

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**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**
Required Courses
9 Total Credits

- Complete the following:
  - CAP5115 - Virtual Reality Engineering (3)
  - CAP6110 - Augmented Reality Engineering (3)
  - CAP6117 - Mixed Reality Project (3)

Grand Total Credits: 9
Project Engineering Graduate Certificate

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Program Website
http://www.iems.ucf.edu/

Program Contact Information
Mansooreh Mollaghasemi PhD
Associate Professor
moliagha@ucf.edu
Engineering 2, Room 312

Is this program available 100% online?
Yes

UCF Online
Please note: Project Engineering Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description
The Graduate Certificate in Project Engineering is designed to meet the needs of engineers moving into management and other leadership roles.

The certificate program compliments their technical backgrounds with the human aspects, organizational and financial issues, project considerations, and analytical tools for effective decision making.

For the Project Engineering certificate, students complete three required courses and one elective course, for a total of 12 credit hours.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites
Admission is open to those with a bachelor's degree in industrial engineering or a closely related discipline from an accredited institution recognized by UCF.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
9 Total Credits

- Complete the following:
  - EIN5108 - The Environment of Technical Organizations (3)
  - EIN5117 - Management Information Systems I (3)
  - EIN5140 - Project Engineering (3)

Elective Courses
3 Total Credits

- Complete at least 1 of the following:
  - EIN6357 - Advanced Engineering Economic Analysis (3)
  - ESI6358 - Decision Analysis (3)

Grand Total Credits: 12

Quality Assurance Graduate Certificate

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Program Website
http://www.iems.ucf.edu/

Program Contact Information
Mansooreh Mollaghasemi, PhD
Associate Professor
mollagha@ucf.edu
Engineering 2, Room 312

Is this program available 100% online?
Yes

UCF Online
Please note: Quality Assurance Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description
The Graduate Certificate in Quality Assurance is designed to provide students with the knowledge and tools they need to help them understand how to increase process and product performance and to improve the quality and reliability of goods and services in any manufacturing, healthcare, and other service organizations.

Much of the resurgence of U.S. companies and service organizations in the global marketplace has been due to an increased emphasis on quality. Today's consumers are offered many alternatives to meet their needs, and they have consequently become very discriminating in their purchases. In addition, companies seek to be known as a quality organization, not merely the producer of quality products. The Graduate Certificate in Quality Assurance provides students with the knowledge they need to institute steps to make their organizations more competitive through an overall commitment to quality.

For the Quality Assurance certificate, students complete three required courses and one elective course, for a total of 12 credit hours.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree
Program Prerequisites

Admission is open to those with a bachelor's degree in industrial engineering or a closely related discipline from an accredited institution recognized by UCF.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete the following:
  - ESI5219 - Engineering Statistics (3)
  - ESI5236 - Reliability Engineering (3)
  - ESI6225 - Quality Design and Control (3)

Elective Courses
3 Total Credits

- Complete at least 1 of the following:
  - ESI5227 - Total Quality Improvement (3)
  - ESI6224 - Quality Management (3)

Grand Total Credits: **12**

Smart Cities Graduate Certificate

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

Program Website

http://www.cece.ucf.edu/

Program Contact Information

Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

Is this program available 100% online?

No
Program Description
In 2017, FUTURe CITy initiative was launched by Civil, Environmental and Construction Engineering (CECE) in the College of Engineering and Computer Science (CECS). FUTURe CITy initiative at UCF brings together a group of researchers and educators with a vision to synergistically explore the wide-ranging technological advances towards better serving urban residents. Towards furthering this vision, we envision this graduate certificate in Smart Cities to provide engineers and urban planners with a background in Smart Cities.

The certificate offers a 9 credit program with flexible course options listed below.

Total Credit Hours Required: 9 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information
gradmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
3 Total Credits
- Complete the following:
  - CGN5341 - Interdisciplinary Introduction to Smart Cities' Applications (3)

Elective Courses
6 Total Credits
- Complete at least 2 of the following:
  - CCE5220 - Sustainable Infrastructure Systems (3)
  - CEG6610 - Smart Underground Structures: Tunnels and Shafts (3)
  - CES6876 - Smart City Built Infrastructure (3)
  - CGN5340 - Internet of Things: Applications in Smart Cities (3)
  - CGN5617 - Infrastructure Systems Optimization and Identification (3)
  - CGN6342 - Modeling Human Behavior with Emerging Data (3)
  - CGN6343 - Cyber-Physical Systems and Smart Cities (3)
  - ENV6128 - Smart Air Quality Monitoring and Air Pollution Control (3)
  - ENV6533 - Smart Water and Wastewater Management (3)
  - TTE5531 - Active Mobility and Technologies: Synergy and Challenges (3)
  - TTE5532 - Policy Aspects of Smart City Transportation (3)
  - TTE6270 - Intelligent Transportation Systems (3)
  - TTE6275 - Connected and Autonomous Vehicles (3)
  - TTE6533 - Mobility in Smart Cities: Technologies and Application Areas (3)
  - TTE6608 - Algorithms and Models for Smart Cities (3)

Grand Total Credits: 9

Structural Engineering Graduate Certificate

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering
Is this program available 100% online?

No

Program Description

The Graduate Certificate in Structural Engineering provides qualified engineers and students with the knowledge to analyze and design structures that will perform safely.

Structural engineering plays a significant role in the ongoing infrastructure developments in the central Florida area. Engineers continually need to update their knowledge of the state-of-the-art in research and practice in order to ensure the safety of constructed facilities. The Graduate Certificate in Structural Engineering is designed to advance the knowledge of civil and structural engineers. The Graduate Certificate is a good way for qualified students to sample the graduate programs in this area. However, because these are graduate level classes, students must have an undergraduate degree in Civil Engineering or closely related discipline in order to be admitted.

For the Structural Engineering certificate, students have the flexibility to choose four courses from a list of approved engineering courses, for a total of 12 credit hours.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Admission is open to those with a bachelor's degree in Civil or Mechanical Engineering from an accredited institution recognized by UCF.

College of Graduate Studies Contact Information

ggradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

Required Courses
12 Total Credits

- Complete at least 4 of the following:
  - CEG6115 - Foundation Engineering (3)
  - CES5144 - Matrix Methods for Structural Analysis (3)
  - CES5325 - Bridge Engineering (3)
  - CES5606 - Advanced Steel Structures (3)
  - CES5706 - Advanced Reinforced Concrete (3)
  - CES6010 - Structural Reliability (3)
  - CES6116 - Finite Element Structural Analysis (3)
  - CES6209 - Dynamics of Structures (3)
  - CES6220 - Wind and Earthquake Engineering (3)
  - CES6230 - Advanced Structural Mechanics (3)
  - CES6527 - Nonlinear Structural Analysis (3)
  - CES6715 - Prestressed Concrete Structures (3)

Grand Total Credits: 12

**Sustainable and Resilient Energy Systems Graduate Certificate**

**College**
College of Engineering and Computer Science

**Department**
Department of Electrical and Computer Engineering

**Program Website**
https://www.ece.ucf.edu

**Program Contact Information**

Kalpathy Sundaram PhD
Professor
ece-grad@cecs.ucf.edu
Telephone: 407-823-5326
HEC 439B

**Is this program available 100% online?**
No

**Program Description**
The Graduate Certificate in "Sustainable and Resilient Energy Systems" provides students with an interdisciplinary curriculum focused on technologies and policies for future smart energy systems that are sustainable, resilient, efficient, and market-oriented. The program prepares students for holistic design and operation challenges of emerging energy systems with distributed renewable energy sources, advanced information, communication, control and optimization technologies, along with supporting economic and management policies. This graduate certificate is beneficial to individuals (professionals, engineers and researchers) who have an interest in deployment and operation of future smart energy systems, in particular the challenges from the technology and policy perspectives.

**UCF Partnerships**
The Sustainable and Resilient Energy Systems certificate partners with several UCF master's programs. If students complete the certificate and are accepted into a partnering program, all certificate coursework can be used toward that master's degree. Here is a list of our partnering UCF master's programs:

- Electrical Engineering MSEE
- Computer Engineering MSCpE

The Graduate Certificate in Sustainable and Resilient Energy Systems requires a total of 12 credit hours (4 courses). Nine credit hours are from the three required courses given below. The remaining three credit hours can be selected from the list of elective courses. Electives outside of the provided list require approval from the ECE graduate coordinator.

**Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree**
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete the following:
  - EEL5297 - Introduction to Smart Grid (3)
  - EEE5781 - Cyber-Physical Technologies for Smart Communities (3)
  - PAD5887 - Energy Policy (3)

Elective Courses
3 Total Credits

- Complete all of the following
  - Complete at least 1 of the following:
    - EEL5268 - Communications and Networking for Smart Grid (3)
    - EEL5291 - Distributed Control and Optimization for Smart Grid (3)
    - EMA5586 - Photovoltaic Solar Energy Materials (3)
    - EEL6257 - Data Analytics in Energy Systems (3)
    - EEE6712 - Modeling and Analysis of Networked Cyber-Physical Systems (3)
    - PAD6357 - Urban Resilience (3)
- EEL 5937 - Special Topics may also be taken

Grand Total Credits: 12

Systems Engineering Graduate Certificate

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Program Website
http://www.iems.ucf.edu/

Program Contact Information

Mansooreh Mollaghasemi, PhD
Associate Professor
mollah@ucf.edu
Engineering 2, Room 312

Is this program available 100% online?

Yes
UCF Online

Please note: Systems Engineering Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Systems Engineering focuses on introducing students to the fundamentals of systems requirements, architecture, and integration and testing. Systems Engineering is an interdisciplinary approach and means to enable the realization of successful systems. Systems Engineering integrates all the disciplines and specialty groups into a team effort forming a structured development process that proceeds from concept to production to operation. Systems Engineering considers both the business and the technical needs of all customers with the goal of providing a quality product that meets the user needs.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

Admission is open to those with a bachelor’s degree in engineering from an accredited institution recognized by UCF.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

Complete the following:
- EIN5140 - Project Engineering (3)
- ESI6511 - Systems Integration and Testing (3)
- ESI6551 - Systems Engineering (3)
- ESI6552 - Systems Architecture (3)

Grand Total Credits: 12

Systems Engineering, MSSE

College

College of Engineering and Computer Science

Department

Department of Industrial Engineering and Management Systems

Program Website

http://www.iems.ucf.edu/
Is this program available 100% online?
Yes

UCF Online

Please note: Systems Engineering MSEE may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CECS-Systems-Engineering-MSSE.pdf.

Program Description

The Master of Science in Systems Engineering (MSSE) is a fully online program that focuses on applications of systems engineering in designing, developing, integrating, and evaluating complex systems through their life cycle. This unique program is offered in response to the growing needs of the industry where systems thinking, complexity, globalization, quality, and productivity are the key business drivers.

The MSSE requires 30 credit hours of courses beyond the bachelor's degree. This program offers only the non-thesis option.

This web-based online MSSE is designed to attract students with a variety of engineering backgrounds and a keen interest in working as systems engineers, program/project managers, chief engineers, etc. The traditional engineer and scientist often lack preparation in the human, financial, software, and systems integration skills necessary to make project teams more productive, improve system and service quality, and promote the advancement of high technology for complex systems. Systems engineering is a practice-based discipline that focuses on developing these attributes with elements of engineering, systems, and management.

For information about the program, please contact IEMS Graduate Director Dr. Mansooreh Mollaghasemi (mollagha@ucf.edu).

Translating a specific design into an organizational or physical reality in the most effective manner, and with the highest quality, is the focus of the Industrial Engineering and Management Systems field. This program is tailored to meet the needs of a broad range of working professionals interested in leading systems engineering and management activities. This program was designed by industry to provide the skills needed to be successful in the defense, government, healthcare, etc., sectors that require engineers who can collect requirements, architect, and integrate human, software, and hardware elements of modern systems.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Students with undergraduate degrees in industrial or systems engineering or other engineering degrees are encouraged to apply for admission.

All applicants are expected to have completed the following prerequisites during their undergraduate engineering education:

- Mathematics through Calculus II (MAC 2312 or equivalent)
- Undergraduate probability and statistics for engineers (STA 3032 or equivalent)
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**
12 Total Credits

- Complete the following:
  - ESI6551 - Systems Engineering (3)
  - ESI6552 - Systems Architecture (3)
  - EIN5140 - Project Engineering (3)
  - ESI6511 - Systems Integration and Testing (3)

**Concentration Courses**
9 Total Credits

- Complete the following:
  - ESI6224 - Quality Management (3)
  - EIN6357 - Advanced Engineering Economic Analysis (3)
  - ESI6550 - Systems Thinking in Engineering (3)

**Elective Courses**
9 Total Credits

- Complete 1 of the following
  - Simulation, Optimization and Modeling
    - Complete at least 3 of the following:
      - EIN5255C - Interactive Simulation (3)
      - EIN6528 - Simulation Based Life Cycle Engineering (3)
      - EIN6936 - Seminar in Advanced Industrial Engineering (3)
      - ESI5531 - Discrete Systems Simulation (3)
      - ESI6217 - Statistical Aspects of Digital Simulation (3)
      - ESI6336 - Queueing Systems (3)
      - ESI6532 - Object-Oriented Simulation (3)

- Management Systems
  - Complete at least 3 of the following:
    - EINS108 - The Environment of Technical Organizations (3)
    - EINS117 - Management Information Systems I (3)
    - EIN6182 - Engineering Management (3)
    - EIN5356 - Cost Engineering (3)
    - ESI5227 - Total Quality Improvement (3)

- Quality and Production Systems
  - Complete at least 3 of the following:
    - ESI6225 - Quality Design and Control (3)
    - EIN6336 - Production and Inventory Control (3)
    - EIN5356 - Cost Engineering (3)
    - ESI5227 - Total Quality Improvement (3)

- Human System Integration
  - Complete at least 3 of the following:
    - EIN5248 - Ergonomics (3)
    - EIN5251 - Usability Engineering (3)
    - EIN6258 - Human Computer Interaction (3)
    - EIN6271 - Human Reliability (3)

**Grand Total Credits:** 30

**Program Details**

**Independent Learning**

The Independent Learning requirement is met by successful completion of the research studies required in the individual courses. Systems engineering by definition is an interdisciplinary major requiring independent learning across a wide spectrum of management, technology, and traditional engineering. These research studies require that students integrate material from all the courses in their program. The Systems Integration class, which is the fourth course in the core sequence, builds prior classes and requires independent research to describe, architecture, model, and ultimately integrate and test complex products and services.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Technologies for Smart Communities Graduate Certificate

College

College of Engineering and Computer Science

Department

Department of Electrical and Computer Engineering

Program Website

www.ece.ucf.edu

Program Contact Information

Kalpathy Sundaram PhD
Professor
ece-grad@cecs.ucf.edu
Telephone: 407-823-5326
HEC 439B

Is this program available 100% online?

No
Program Description

The Graduate Certificate in Technologies for Smart Communities provides students with an interdisciplinary curriculum focused on technologies that enable smart and connected communities of the future. The program prepares students for design and operation challenges of emerging smart and connected communities, in particular from technology perspective.

This graduate certificate is beneficial to individuals (professionals, engineers and computer scientists) who have an interest in deployment and operation of smart and connected communities, in particular the challenges that pertain to communications, sensing, and control technologies.

UCF Partnerships

The Technologies for Smart Communities certificate partners with several UCF master's programs. If students complete the certificate and are accepted into a partnering program, all certificate coursework can be used toward that master's degree. Here is a list of our partnering UCF master's programs:

- Electrical Engineering MSEE
- Computer Engineering MSCpE

The Graduate Certificate in Technologies for Smart Communities requires a total of 12 credit hours (4 courses). Six credit hours are from two required courses given below. The remaining six credit hours can be selected from the list of elective courses. Electives outside of the provided list require approval from the ECE graduate coordinator.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - EEE5781 - Cyber-Physical Technologies for Smart Communities (3)
  - EEL6257 - Data Analytics in Energy Systems (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - EEL5297 - Introduction to Smart Grid (3)
  - PAD5887 - Energy Policy (3)
  - EEL5268 - Communications and Networking for Smart Grid (3)
  - EEL6683 - Cooperative Control of Networked Autonomous Systems (3)
  - EEL5669 - Introduction to Robotics and Autonomous Vehicles (3)
  - EEE6712 - Modeling and Analysis of Networked Cyber-Physical Systems (3)
  - EEL6590 - Advanced Topics in Communications (3)
  - EEL6788 - Advanced Topics in Computer Networks (3)
  - EEL5291 - Distributed Control and Optimization for Smart Grid (3)

Grand Total Credits: 12
Training Simulation Graduate Certificate

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Program Prerequisites**
Admission is open to those with a bachelor's degree in industrial engineering or a closely related discipline from an accredited institution recognized by UCF.

**College of Graduate Studies Contact Information**
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Transportation Engineering Graduate Certificate

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Program Website**
http://www.cece.ucf.edu/graduate/

**Program Contact Information**
Andrew Randall PhD PE
Professor
andrew.randall@ucf.edu
Telephone: 407-823-6429
Engineering II, 211-L

TBD
Graduate Student Services Coordinator
Engineering II, 211-K

**Is this program available 100% online?**
No
Program Description

The Graduate Certificate in Transportation Engineering is designed for professionals who are faced with solving transportation needs. Transportation engineering is crucial for the Orlando area.

As gridlock becomes more evident, more skilled professionals will be needed.

For the Transportation Engineering certificate, students have the flexibility to choose four courses from a list of approved engineering courses, for a total of 12 credit hours.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

Students must have completed an undergraduate Transportation course (such as TTE 4004) or an equivalent.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete at least 4 of the following:
  - CGN6655 - Regional Planning, Design, and Development (3)
  - TTE5204 - Traffic Engineering (3)
  - TTE6256 - Traffic Operations (3)
  - TTE5805 - Geometric Design of Transportation Systems (3)
  - TTE6205 - Highway Capacity (3)
  - TTE6270 - Intelligent Transportation Systems (3)
  - TTE6315 - Traffic Safety Analysis (3)
  - TTE6526 - Planning and Design of Airports (3)
  - TTE6625 - Mass Transportation Systems (3)

Grand Total Credits: 12

Travel Technology and Analytics MS

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

Program Website

https://www.ucf.edu/degree/travel-technology-and-analytics-ms/

Program Contact Information

Naveen Eluru PhD
Associate Professor
naveen.eluru@ucf.edu
Telephone: 407-823-4815
Engineering II - RM 301D

2022-2023 Graduate Catalog
**Is this program available 100% online?**

Yes

**UCF Online**

Please note: Travel Technology and Analytics MS may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit [http://global.ucf.edu/](http://global.ucf.edu/). If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to [State Restrictions](#) for current information.

**Program Description**

The interdisciplinary Master of Science in Travel Technology and Analytics, offered jointly by the College of Engineering and Computer Science (Departments of Computer Science; Industrial Engineering and Management Systems; Civil, Environmental, and Construction Engineering) and the Rosen College of Hospitality Management (Departments of Tourism, Events, and Attractions; Hospitality Services), introduces graduate students to the technical aspects of big data analytics, including predictive analytics, algorithm design and models for SMART-cities, SMART-technologies and travel systems, and service systems quality engineering, in the specific context of global travel and tourism. The value and importance of such a program is demonstrated by travel and tourism and is the number one industry globally with immense economic, social, cultural and environmental impacts. Locally, the program promises to deliver significant value for the industry benefitting from a large number of visitors to the state and especially central Florida.

This powerful industry with $8.3 trillion in economic benefits globally, which functions at the intersection of engineering and management, is being transformed by rapidly increasing technological innovations and advances and is adapting to these changes by creating new employment opportunities to match. The dynamic nature of the industry and technological advances reveal the need for a workforce with advanced skills: fluency in data science and analytics, understanding of complex travel systems, strategic problem solving, big-picture thinking, technical knowledge, and practical skills aligned with technological advances. The changing nature of travel and tourism employment reveals emerging positions in areas of online travel agencies [OTA], global distribution systems [GDS], data analytics, data architecture, predictive analytics, mobile devices, travel apps, geolocation, data visualization, data translation, programming, interface design, virtual reality [VR], augmented reality [AR], hologram technology, travel click technology, business intelligence [BI], social media management, SMART-city design and development, and SMART-technologies and travel systems. The broader travel industry and its subsectors (transportation, lodging, and attractions) are experiencing the disruptive effects of direct and indirect distribution impacted by mobile devices, e-commerce, role of IT in distribution and dynamic pricing, and a highly perishable inventory (e.g., hotel rooms, airline seats) as well as those of artificial intelligence (AI) and machine learning and becoming increasingly more dependent on analytics as a key facet of business strategy.

**Highlights:**

- Academically-rich, industry-relevant interdisciplinary program
- Flexible course offerings in face-to-face, mixed and online modalities
- Offered at UCF’s main campus and UCF’s Rosen College of Hospitality Management campus
- Exponential industry growth locally, regionally, nationally and globally
- Cutting edge curriculum with a strong STEM foundation
- Research opportunities in both colleges
- Skills found highly desirable by industry leaders ranging from the local to the international level

**Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree**

**Program Prerequisites**

A Bachelor’s degree in a STEM-related discipline from an accredited institution.

Depending on the degree completed, one or more prerequisite courses may be required, namely: STA 2023 (Statistical methods) and STA 3032 (Probability and Statistics for Engineers) or CAP 4630 (Artificial Intelligence).
**Degree Requirements**

**Required Courses**
18 Total Credits

- Complete all of the following
  - Complete the following:
    - HMG6449 - Smart Travel and Tourism (3)
    - HMG6710 - International Tourism Management (3)
    - ESI6261 - Service System Quality Engineering (3)
    - TTE6667 - Discrete Choice Modeling in Transportation (3)
    - TTE6608 - Algorithms and Models for Smart Cities (3)
    - TTE6910 - Travel Technology and Analytics Capstone Course (3)

- Co-requisite Courses - HMG 6710 and HMG 6449

**Electives**
12 Total Credits

- Complete all of the following
  - Tourism and Hospitality Courses
    - Complete at least 2 of the following:
      - HMG6291 - Hospitality Entrepreneurship: Concept Creation to Capitalization (3)
      - HMG6446 - Hospitality/Tourism Information Technology (3)
      - HMG6466 - Applied Revenue Management Techniques in Hospitality (3)
      - HMG6556 - Digital Marketing and Big Data Management for Hospitality and Tourism (3)
      - HMG6565 - Social Media in Hospitality and Tourism (3)
      - HMG6566 - Principles of Destination Marketing and Management (3)
      - HMG6585 - Data Analysis in Hospitality and Tourism Research (3)
      - HMG6738 - Tourism Industry Analysis (3)
      - HMG6251 - International Lodging Accommodations Analysis (3)
      - HMG6347 - Contemporary Issues in the Resort Industry (3)

  - Technology Courses
    - Complete at least 2 of the following:
      - CAP5610 - Machine Learning (3)
      - CNT5008 - Computer Communication Networks Architecture (3)
      - COP5711 - Parallel and Distributed Database Systems (3)
      - COP6526 - Parallel and Cloud Computation (3)
      - CGN6655 - Regional Planning, Design, and Development (3)
      - EINS1117 - Management Information Systems I (3)
      - ESI6224 - Quality Management (3)
      - ESI6225 - Quality Design and Control (3)

**Optional Elective Courses**
0 Total Credits

- STA 5703 - Data Mining Methodology I 3 Credit Hours
- STA 6704 - Data Mining Methodology II 3 Credit Hours
- STA 5206 - Statistical Analysis 3 Credit Hours
- STA 6714 - Data Preparation 3 Credit Hours

Grand Total Credits: **30**
**Program Details**

The program will be 30 credits (18 core/required and 12 electives). There will be no thesis requirement, however, a semester-long applied capstone project (involving industry and approved by the program director) will be required. The program will provide employable technical skills including the development of algorithms, discrete choice models, service systems quality engineering, machine learning, digital marketing, and big data management, and computer systems to extract insight from big data. The foregoing will be appropriately contextualized within the global travel industry and its trajectory toward increasing technological innovations that continue to drive the industry. The curriculum includes six (6) required courses that ensure that students have skills in algorithms and statistical techniques for extracting information in addition to awareness of the global travel and tourism industry including. Although courses can generally be taken in any order, the first two (2) required (co-requisite) courses serve as pre-requisites for all remaining courses in the program.

**Financial Information**

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**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

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**College of Graduate Studies**

**Geographic Information Systems Graduate Certificate**

**College**

College of Graduate Studies

**Department**

College of Graduate Studies Dean's Office

**Program Website**

https://graduate.ucf.edu/GIS

**Program Handbook Link**

Geographic Information Systems Graduate Certificate Handbook

**Program Contact Information**

John Walker, PhD  
Associate Professor  
john.walker@ucf.edu

**Is this program available 100% online?**

No
Program Description

The Geographic Information Systems (GIS) Graduate Certificate provides students with the interdisciplinary background in geography and the technical skills in the application of GIS. The certificate will enhance the student’s ability to understand, visualize and analyze geospatial data to address questions related to place and spatial interactions.

GIS and geospatial analyses allow students and researchers to see old problems in new ways making connections by overlaying digital maps and examining spatial networks and processes.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 - 14 Total Credits

- Complete all of the following
  - Group A - First Core Course
    - Complete at least 1 of the following:
      - ANG5852 - GIS Methods in Anthropology (3)
      - ANG6181C - GIS Applications in Anthropology (3)
      - CCJ6079 - Crime Mapping and Analysis in Criminal Justice (3)
      - PAD6716 - Information Systems for Public Managers and Planners (3)
      - POS6743 - Geographic Tools for Political Science Research (3)
      - SYA6356 - Geographic Information Systems in Society (3)
  - Group B - Second Core Course
    - Complete at least 1 of the following:
      - ANG5853 - Advanced GIS Methods in Anthropology (3)
      - CCJ6077 - Advanced Crime Mapping and Analysis in Criminal Justice (3)
      - SYA6452 - GIS Applications (3)
  - Group C - Electives
    - Complete all of the following
      - Complete at least 2 of the following:
        - BSC5824 - Biogeography (4)
        - CAP6121 - 3D User Interfaces for Games and Virtual Reality (3)
        - CCJ6073 - Data Management Systems for Crime Analysis (3)
        - CCJ7725 - The Geography of Crime: Theory and Methods (3)
        - CWR5634 - Water Resources in a Changing Environment (3)
        - CWR6126 - Groundwater Modeling (3)
        - CWR6535 - Modeling Water Resources Systems (3)
        - EEL5432 - Satellite Remote Sensing (3)
        - EEL5820 - Image Processing (3)
        - ENG6808 - Narrative Information Visualization (3)
        - ENV6047 - Environmental Informatics and Remote Sensing (3)
        - HIS5925 - History in the Digital Age (3)
        - HIS6165 - Digital Tools for Historians (3)
        - HIS6167 - Spatial History (3)
        - HUM5396 - Place and Space (3)
        - TTE6938 - Special Topics (3)
        - SYA6458 - Advanced Topics in Geographic Information Systems in Society (3)
        - PCB6328C - Landscape Ecology (4)
        - STA6709 - Spatial Statistics (3)

- It is recommended that students take Group C courses after taking Group A and B courses.

Grand Total Credits: **12 - 14**

2022-2023 Graduate Catalog
Interdisciplinary Studies MA

College
College of Graduate Studies

Department
College of Graduate Studies Dean’s Office

Program Website
https://www.graduate.ucf.edu/IDS/

Program Handbook Link
Interdisciplinary Studies MA

Program Contact Information
Elizabeth Smock EdD
gradids@ucf.edu
Telephone: 407-823-2853
MH 230

Is this program available 100% online?
No

Program Description
The Master of Arts in Interdisciplinary Studies is a unique program designed for students who want to develop their own precision degree program by combining areas of study traditionally associated with a Master of Arts (Humanities, Social Sciences, Communication, etc.). Students have the flexibility to create an individually tailored plan by choosing two concentrations that culminate in either a thesis or nonthesis experience based on their future aspirations.

The Nonthesis Track culminates in a capstone experience that prepares students for applied, non-research oriented careers.

The Thesis Track culminates in a scholarly publication that includes original research undertaken during your time as a graduate student. This provides excellent preparation for the future pursuit of a doctoral degree or research-oriented career.

Please scroll to the bottom of this page for further details on these Tracks.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Interdisciplinary Studies MA - Interdisciplinary Studies MA, Nonthesis Track

Track Website
https://www.graduate.ucf.edu/IDS/

Track Handbook
Interdisciplinary Studies MA, Nonthesis Track
Track Contact Information

Elizabeth Smock EdD
gradids@ucf.edu
Telephone: 407-823-2853
TCH 213B

Online Availability
No

Track Description

The Nonthesis Track in the Master of Arts in Interdisciplinary Studies program allows students the flexibility to develop an individually tailored plan of study using courses traditionally associated with a Master of Arts (Humanities, Social Sciences, Communication, etc.) This track can combine a variety of concentrations and culminates in a capstone experience. The precision program is designed to help students prepare for applied, non-research oriented careers.

This is an excellent program for a number of endeavors appropriate for the twenty-first century. By combining the knowledge from two disciplines, supported by cross-disciplinary electives, students precisely define their own area of expertise. This unique option is ideal for students who have varied interests that can be connected by a common theme or goal.

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Institution Codes

GRE: 5233
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TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

9 Total Credits

- Complete all of the following
  - Complete the following:
    - IDS6308 - Ways of Knowing (3)
  - Earn at least 3 credits from the following types of courses:
    - A critical thinking and writing course in one of the chosen concentrations or in an area that supports the plan of study.
  - Earn at least 3 credits from the following types of courses:
    - A research methods course in one of the chosen concentrations or in an area that supports the plan of study.

**Elective Courses**

24 Total Credits

- Complete all of the following
  - Students take a minimum of 24 credit hours of electives, including two concentrations of 9 credit hours each of restricted electives and 6 credit hours of unrestricted electives. The unrestricted electives can be from either concentration or additional areas that support the capstone project or intended use of the degree. Students who choose one of the pre-approved concentrations such as Diversity and Inclusion or Project Management can choose courses from those course listings on our website. Those students do not need to list 2 concentrations. Course and concentration selections are done in consultation with and with approval from the program director or academic coordinator. Coursework must be selected so that at least 50 percent of credit hours in the program is taken at the 6000 level. Students must earn course grades of "B" or higher to gain credit toward their master's degree.
  - Restricted Elective Courses
    - Complete all of the following
      - Earn at least 9 credits from the following types of courses:
        - Three courses in the first concentration.
      - Earn at least 9 credits from the following types of courses:
        - Three courses in the second concentration.
  - Unrestricted Elective Courses
    - Earn at least 6 credits from the following types of courses:
      - Two additional elective courses.

**Capstone**

0 Total Credits

- Students choose to complete a project, an internship, or a written comprehensive examination as their capstone experience. The capstone project should reflect a combination of the two concentrations in the degree by finding an applied policy area, special topic, or issue that crosses both areas. Some examples of project types include: writing a grant proposal for an agency, program evaluation and recommendations, or a "best practices" literature review in a particular area. Students must choose three advisers for the project, one from each concentration area and one from any supporting discipline. The project will be evaluated on a pass/fail basis. Students who feel an internship will best support their plan of study and professional goals will enroll in IDS 5949 Co-op Interdisciplinary Study (0 credits) and IDS 6949 Co-op Interdisciplinary Study (3 credits) after locating an acceptable internship host site, with the approval of the program coordinator. The written examination will entail the selection of an exam committee of three faculty who will formulate questions to address both concentration areas. The student will have 48 hours to choose 2 of the 3 questions and complete the take-home exam. The exam should be completed in the student's final semester of enrollment. The exam will be graded on a pass/fail basis. If the student does not pass both questions with a 70% or higher, the student will have two additional chances to retake the exam with new questions. The exam can be taken only once per semester. If the student must retake the exam, the student must enroll in IDS 6999 Graduation Requirement to remain active in the program.

**Independent Learning**

0 Total Credits

- The program is designed to provide numerous independent learning opportunities. The required methods course will introduce students to research methodology that they will apply to independent research/capstone work. IDS 6308 acquaints students with interdisciplinarity through the use of student-driven analyses, discussions, and presentations. The required critical thinking and writing course involves students in verbal and written discussions, analyses, and critiques of work they create and from the published literature. Additionally, the completion of the capstone experience will require independent learning that will be evaluated by faculty in the specified disciplines.

**Grand Total Credits: 33**
Financial Information
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https://funding.graduate.ucf.edu

Interdisciplinary Studies MA - Interdisciplinary Studies MA, Thesis Track

Track Website
https://www.graduate.ucf.edu/IDS/

Track Handbook
Interdisciplinary Studies MA, Thesis Track

Track Contact Information
Elizabeth Smock EdD
gradids@ucf.edu
Telephone: 407-823-2853
TCH 213B

Online Availability
No

Track Description
The Thesis Track in the Master of Arts in Interdisciplinary Studies program allows students the flexibility to develop an individually tailored plan of study using courses traditionally associated with a Master of Arts (Humanities, Social Sciences, Communication, etc.). This precision track can combine a variety of concentrations and culminates in a research thesis, which provides excellent preparation for a future doctoral degree or a research-oriented career.

The Master of Arts in Interdisciplinary Studies is an excellent program for a variety of twenty-first century endeavors. By combining the knowledge from two disciplines, supported by cross-disciplinary electives, students precisely define their own area of expertise. This unique option is ideal for students who have varied interests that can be connected by a common theme or goal.
**Degree Requirements**

**Required Courses**
6 Total Credits

- Complete all of the following
  - Complete the following:
    - IDS6308 - Ways of Knowing (3)
  - Earn at least 3 credits from the following types of courses:
    A research methods course in one of the chosen concentrations

**Elective Courses**
21 Total Credits

- Complete all of the following
  - Students take a minimum of 18 credit hours in restricted electives, including two concentrations of 9 credit hours of courses each. Course and concentration selections are done in consultation with and with approval of the program director or academic coordinator, as well as with the student’s faculty adviser and thesis committee.
    - Restricted Elective Courses
  - Complete all of the following
    - Earn at least 9 credits from the following types of courses:
      Electives in the first concentration.
    - Earn at least 9 credits from the following types of courses:
      Electives in the second concentration.
  - Unrestricted Elective Course
  - Earn at least 3 credits from the following types of courses:
    in a discipline that complements the concentrations and further focuses the program of study.

**Thesis**
6 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS6971 - Thesis Research (3)
  - Students should select a faculty adviser and form a thesis committee of two additional members no later than their third semester in the program. Before officially beginning work on the thesis, the student must submit a thesis proposal to the committee for approval. This proposal must cover the thesis topic and plan of approach. By the end of their degree, students will complete 6 credit hours of thesis and successfully defend their thesis. The thesis consists of a common theme with an introduction and literature review, details of the study, and results and conclusions. The thesis must be prepared and submitted in writing as well as presented and defended orally.

**Independent Learning**
0 Total Credits

- The thesis serves as the independent learning experience. In addition, the required methods course introduces students to research methodology that they will apply to their independent research work, and IDS 6308 acquaints them with interdisciplinarity through the use of student-driven analyses, discussions, and presentations.

Grand Total Credits: **33**
Financial Information

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https://funding.graduate.ucf.edu
Interdisciplinary Studies MS

College
College of Graduate Studies

Department
College of Graduate Studies Dean's Office

Program Website
https://www.graduate.ucf.edu/IDS/

Program Handbook Link
Interdisciplinary Studies MS

Program Contact Information
Elizabeth Smock EdD
gradids@ucf.edu
Telephone: 407-823-2853
TCH 213B

Is this program available 100% online?
No

Program Description
The Master of Science in Interdisciplinary Studies is a unique program designed for students who want to develop their own precision degree program by combining areas of study traditionally associated with a Master of Science (Engineering, Life and Physical Sciences, etc.). Students have the flexibility to create an individually tailored plan by choosing two concentrations that culminate in either a thesis or nonthesis experience based on their future aspirations.

The Nonthesis Track culminates in a capstone experience that prepares students for applied, non-research oriented careers.

The Thesis Track culminates in a scholarly publication that includes original research undertaken during students' graduate program. This provides excellent preparation for the future pursuit of a doctoral degree or research-oriented career.

Please scroll to the bottom of this page for further details on these Tracks.

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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Interdisciplinary Studies MS - Interdisciplinary Studies MS, Nonthesis Track

Track Website
https://www.graduate.ucf.edu/IDS/

Track Handbook
Interdisciplinary Studies MS, Nonthesis Track
Track Contact Information

Elizabeth Smock EdD
gradids@ucf.edu
Telephone: 407-823-2853
TCH 213B

Online Availability
No

Track Description

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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
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ETS PPI: 5233
Degree Requirements

Required Courses
9 Total Credits

- Complete all of the following
  - Complete the following:
    - IDS6308 - Ways of Knowing  (3)
    - IDS6351 - Critical Thinking and Writing  (3)
  - Earn at least 3 credits from the following types of courses:
    - A research methods course in one of the chosen concentrations

Elective Courses
24 Total Credits

- Complete all of the following
  - Students take a minimum of 24 credit hours of electives, including two concentrations of 9 credit hours each of restricted electives and 6 credit hours of unrestricted electives. The additional electives can be from either concentration or additional areas that support the capstone project or intended use of the degree. Students who choose one of the pre-approved concentrations such as Diversity and Inclusion or Project Management can choose courses from those course listings on our website. Those students do not need to list 2 concentrations. Course and concentration selections are done in consultation with and with approval from the program director or academic coordinator.
  - Earn at least 9 credits from the following types of courses:
    - Three courses in the first concentration.
  - Earn at least 9 credits from the following types of courses:
    - Three courses in the second concentration.

Capstone
0 Total Credits

- Students choose to complete a project, an internship, or a written comprehensive examination as their capstone experience. The capstone project should reflect a combination of the two concentrations in the degree by finding an applied policy area, special topic, or issue that crosses both areas. Some examples of project types include: writing a grant proposal for an agency, program evaluation, and recommendations, or a "best practices" literature review in a particular area. Students must choose three advisers for the project—one from each concentration area and one from a complementary discipline. The project will be evaluated on a pass/fail basis. The written examination will entail the selection of an exam committee of three faculty that will formulate questions to address both concentration areas. The student will have 48 hours to choose 2 of the 3 questions and complete the take-home exam. The exam should be completed in the student’s final semester of enrollment. The exam will be graded on a pass/fail basis. If the student does not pass both questions with a 70% or higher, the student will have two additional chances to retake the exam with new questions. The exam can be taken only once per semester. If the student must retake the exam, the student must enroll in IDS 6999 Graduation Requirement to remain active in the program.

Grand Total Credits: 33

Financial Information

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2022-2023 Graduate Catalog
Fellowship Information

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Interdisciplinary Studies MS - Interdisciplinary Studies MS, Thesis Track

Track Website
https://www.graduate.ucf.edu/IDS/

Track Handbook
Interdisciplinary Studies MS, Thesis Track

Track Contact Information
Elizabeth Smock EdD
gradids@ucf.edu
Telephone: 407-823-2853
TCH 213B

Online Availability
No

Track Description
The Thesis Track in the Master of Science in Interdisciplinary Studies program allows students the flexibility to develop an individually tailored plan of study using courses traditionally associated with a Master of Science (Engineering, Life and Physical Sciences, etc.) This precision track can combine a variety of concentrations and culminates in a research thesis, which provides excellent preparation for a future doctoral degree or a research-oriented career.

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Institution Codes
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Degree Requirements

Required Courses
6 Total Credits

- Complete all of the following
  - Complete the following:
    - IDS6308 - Ways of Knowing (3)
  - Earn at least 3 credits from the following types of courses:
    - A research methods course in one of the chosen concentrations

Elective Courses
21 Total Credits

- Complete all of the following
  - Restricted Elective Courses
    - Complete all of the following
      - Students take a minimum of 18 credit hours in restricted electives, including two concentrations of 9 credit hours of courses each. Course and concentration selections are done in consultation with and with approval of the program director or academic coordinator, as well as with the student's faculty adviser and thesis committee.
      - Earn at least 9 credits from the following types of courses:
        - Three courses in the first concentration.
      - Earn at least 9 credits from the following types of courses:
        - Three courses in the second concentration.

- Unrestricted Elective Course
  - Earn at least 3 credits from the following types of courses:
    - in a discipline that complements the concentrations and further focuses the program of study.

Thesis
6 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS6971 - Thesis Research (3)
  - Students should select a faculty adviser and form a thesis committee of two additional members by their third semester in the program. Before officially beginning work on the thesis, the student must submit a thesis proposal to the committee for approval. This proposal must cover the thesis topic and plan of approach. By the end of their degree, students will complete 6 credit hours of thesis and successfully defend their thesis. The thesis consists of a common theme with an introduction and literature review, details of the study, and results and conclusions. The thesis must be prepared and submitted in writing as well as presented and defended orally.

Independent Learning
0 Total Credits

- The thesis serves as the independent learning experience. In addition, the required methods course introduces students to research methodology that they will apply to independent research work, and IDS 6308 acquaints students with interdisciplinarity through the use of student-driven analyses, discussions and presentations.

Grand Total Credits: 33

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

2022-2023 Graduate Catalog
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Modeling and Simulation MS

College
College of Graduate Studies

Department
College of Graduate Studies Dean's Office

Program Website
https://msgrad.ist.ucf.edu

Program Handbook Link
Modeling and Simulation MS

Program Contact Information
Prof. Ghaith Rabadi
Program Director
Ghaith.Rabadi@ucf.edu
Telephone: 407-882-1329
Partnership Building 2, Room 131H
http://ghaithrabadi.com/

Kirsten Seitz
kirsten.seitz@ucf.edu
Telephone: 407-882-1407
Partnership 2 Building, Room 131D

Is this program available 100% online?
No
Program Description

The UCF School of Modeling, Simulation, and Training (SMST) considers its degree programs as transdisciplinary, intended for those who wish to pursue a career in the fields of academia, government, military/defense, healthcare/medicine, entertainment, technology, education, or service/manufacturing. Most engineering or scientific fields use simulation as an exploration, modeling, or analysis technique. However, Modeling and Simulation is not limited to engineering and science, as it is also used in training, management, and concept exploration. These programs involve constructing human-centered, equipment-centered, and stand-alone computer-based models of existing and conceptual systems and processes.

UCF SMST sought feedback from industry practitioners to identify key competencies for students in our degree programs. This input has been critical to the development of our curriculum, which is designed to provide a broad overall perspective of the developing simulation industry and an awareness of the economic considerations. UCF SMST’s objective is to provide education on evaluating the human, organization, equipment, and systems under study through the evaluation of output from the corresponding simulation construct. Alumni of SMST degree programs have both general and specialized skills in Modeling and Simulation.

Though not required, many students in the Modeling and Simulation M.S. program choose to focus their study and research efforts in an area of specialization. Students can base their specialization on their academic and professional goals, and seek feedback from their faculty adviser and the Modeling and Simulation graduate program director. Common areas of specialization are listed below (descriptions can be found at msgrad.ist.ucf.edu). This is not an exhaustive list, as the field continues to grow and evolve.

- Behavioral Cybersecurity
- Computer Visualization
- Human Systems
- Instructional and Training Simulation
- Interactive Simulation and Intelligent Systems
- Simulation in Government and Military
- Simulation in Healthcare and Medicine
- Simulation Infrastructure
- Simulation Management
- Simulation Modeling and Analysis

Program Prerequisites

Though UCF SMST does not have a mandated prerequisite for its graduate programs, the most successful students are those who have an academic and/or work background that has prepared them in mathematics (introductory calculus and probability and statistics) and computer literacy, preferably familiarity with at least one higher order programming language (e.g., Python, C/C++/C#, Visual Basic, Java, etc.). Students with undergraduate or graduate degrees in Engineering, Computer Science, or Mathematics will generally have this background.

Students without this background are encouraged to select the elective course IDC 5570 (Introductory Mathematics for Modeling and Simulation). This course will prepare them for the required core course COT 6571 (Mathematical Foundations of Modeling and Simulation).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete all of the following
- Complete the following:
Complete the following:

- IDS6262 - Research Design for Modeling and Simulation (3)  

Complete the following:

- IDS6916 - Simulation Research Methods and Practicum (3)

Earn at least 15 credits from the following types of courses:

All Modeling and Simulation MS students must take at least 9 credit hours of unrestricted electives that support the student’s area of graduate study. Unrestricted electives must consist of at least 9 credit hours of formal courses, which may include independent study (up to 6 credit hours). The remaining credit may consist of additional thesis (for thesis option students only), directed research, and additional courses as advised appropriately by the faculty adviser and/or program director.

**Thesis/Nonthesis Option**

**Complete 1 of the following**

**Thesis Option**

- Complete the following:
  - IDS6971 - Thesis Research (3)

**Non Thesis Option**

- Complete the following:
  - Complete at least 1 of the following:
    - IDC5602 - Cybersecurity: A Multidisciplinary Approach (3)
    - IDC6601 - Behavioral Aspects of Cybersecurity (3)
    - IDC6700 - Interdisciplinary Approach to Data Visualization (3)
    - IDS5142 - Modeling and Simulation for Instructional Design (3)
    - IDS6145 - Simulation Techniques (3)

**Unrestricted Electives**

Earn at least 3 credits from the following types of courses:

Nonthesis students are required to take an additional 3 credit hours of unrestricted electives that support the student’s area of graduate study.

**Modeling and Simulation MS Electives**

Complete all of the following:

- In addition to successfully enrolling and completing the core courses, students are required to carefully select electives with the guidance of a faculty adviser. Elective choices should be made with the intent to strengthen a research interest and/or area of focus in order to meet the individual student's educational goals and objectives. Listed below are suggested courses in various areas of focus or specialization. These course groupings are mere guides, are not exhaustive and are only meant to assist with advising and course selection in order to meet the individual student's educational goals and objectives. They are not intended to restrict elective choices among focus areas as we strongly encourage Modeling and Simulation students to maintain an interdisciplinary approach to their graduate studies. If a student identifies another UCF course which may be of value to his/her modeling and simulation research area, but is not already identified in a list below, he/she may request approval from the Graduate Program Director for the course to be used as an elective in the Graduate Plan of Study. All such requests must be made in advance of enrolling in the course. Those electives categorized as “General” would be appropriate for all students regardless of focus area. The remaining categories are grouped by area of research interest.

**General**

- ESI 6247 - Experimental Design and Taguchi Methods 3 Credit Hours
- ESI 6258 - Human Computer Interaction 3 Credit Hours
- ESI 6532 - Object-Oriented Simulation 3 Credit Hours
- ESI 6601 - Behavioral Aspects of Cybersecurity 3 Credit Hours
- ESI 6700 - Interdisciplinary Approach to Data Visualization 3 Credit Hours
- ESI 6907 Independent Study (variable) 3 Credit Hours
- ESI 6917 Directed Research (variable) 3 Credit Hours
- ESI 6946 Internship (variable) 3 Credit Hours
- ESI 6971 - Thesis Research (3 Credit Hours)
- ESI 6991 - IEMS Research Methods 3 Credit Hours
- ESI 5531 - Engineering Statistics 3 Credit Hours
- ESI 5907 Independent Study (variable) 3 Credit Hours
- ESI 5917 Directed Research (variable) 3 Credit Hours
- IDS 6918 Directed Research (variable) 3 Credit Hours
- IDS 6918 - Directed Research (variable) 3 Credit Hours
- IDS 6919 Doctoral Research (variable) 3 Credit Hours
- PHI 5340 - Research Methods in the Cognitive Sciences 3 Credit Hours
- Research Methodology 4 Credit Hours
- STA 5205 - Experimental Design 3 Credit Hours

**Fundamentals of Modeling and Simulation**

- EIN 6258 - Human Computer Interaction 3 Credit Hours
- ESI 5219 - Engineering Statistics 3 Credit Hours
- ESI 6217 - Statistical Aspects of Digital Simulation 3 Credit Hours
- ESI 6247 - Experimental Design and Taguchi Methods 3 Credit Hours
- ESI 6532 - Object-Oriented Simulation 3 Credit Hours
- IDC 6700 - Interdisciplinary Approach to Data Visualization 3 Credit Hours

**2022-2023 Graduate Catalog**
Plan of Study

0 Total Credits

- After admission to the Modeling and Simulation M.S. program and before the end of the second term of enrollment, students must submit a Graduate Plan of Study (GPS) to the Modeling and Simulation Graduate Program office. The GPS helps the student design an appropriate program of coursework to support the student’s educational needs, goals, and objectives. The GPS should be developed in concert with the student's faculty adviser or (if adviser is not yet identified) program director and form a unified cohesive strategy for degree completion. All graduate program credit must be at the 5000-level or higher, with a minimum of 50% at the 6000- or 7000-level.

Culminating Experience

0 Total Credits

- Students are eligible to complete their specific culminating experience once they are within 6 credits of completing all coursework (i.e., completed at least 24 credits of coursework); have an approved up-to-date GPS on file with the graduate program; and have an advisory committee on file (thesis students, please refer to the information below; non-thesis students, the advisory committee is selected by the SMST Graduate Program). Detailed information and protocol regarding the culminating experiences can be found at msgrad.ist.ucf.edu.

Thesis Adviser and Advisory Committee

0 Total Credits

- Students are responsible for selecting an adviser from a list of faculty members authorized to direct theses to serve as the chair of their advisory committee. Then, in concert with their adviser, the student must identify and select the remaining members of the advisory committee. The advisory committee must contain a minimum of three members (chair plus two members). All committee members must hold a terminal degree and be in fields related to the student’s thesis topic. At least two members, including the chair, must be classified as Modeling and Simulation graduate faculty. These faculty members should be from (or represent) at least two different colleges. At least one member must have served as a committee member on a prior SMST advisory committee. With approval from the Modeling and Simulation Graduate Program Director, a committee member may serve as a committee's co-chair. The UCF College of Graduate Studies, as well as UCF SMST, reserve the right to review appointments to advisory committees; place a representative on any advisory committee; or appoint a co-adviser.

Thesis Defense

0 Total Credits

- The thesis defense is a formal oral presentation of the written project before the student's advisory committee. All dissertation defenses are announced in advance and open to the public. Committee members vote either "Pass" or "Fail" of the written thesis and oral defense. The thesis and its defense must be approved by a majority vote, with no more than one dissenting vote. Normally, students are granted one opportunity to pass the thesis defense. In extenuating circumstances and at the discretion of the Modeling and Simulation Graduate Program Director, a student may be allowed one additional attempt to pass the thesis defense (no more than two attempts will be allowed). Non-thesis Experience An advisory committee comprised of 2-3 members of the UCF SMST Core Curriculum committee identifies a non-thesis capstone project. The current requirement is a professional portfolio, highlighting a student's educational and professional skills, reflecting the discipline in which the student plans to pursue their Modeling and Simulation career. The details and standards for the project will be...
presented in IDS6916, but the student has until their last semester to submit their final portfolio. Students who declare an intent to graduate with the non-thesis option will be enrolled in a portfolio webcourse and invited to participate in workshops to receive feedback prior to the announced deadline. Portfolios are graded "Pass" or "Fail." Normally, a student is granted one opportunity to pass the requirement. In extenuating circumstances and at the discretion of the Modeling and Simulation Graduate Program Director, a student may be allowed one additional attempt to pass the non-thesis project requirement (no more than two attempts will be allowed).

Time to Completion
0 Total Credits

- Students are granted 7 years (21 semesters) from the term of admission to complete their degree program. Failure to comply with the "7-Year Rule" may result in dismissal from the program, and may require reapplication to the program as well as repeating coursework and other program requirements.

Equipment Fee
0 Total Credits

- Full-time students in the Modeling and Simulation MS program pay a $27 equipment fee each semester that they are enrolled. Part-time students pay a $13.50 equipment fee each semester that they are enrolled.

Independent Learning
0 Total Credits

- A thesis serves as the independent learning experience for thesis students. Nonthesis students are required to take IDS 6916 where a research project is required and submit an end-of-program portfolio.

Grand Total Credits: 36

Financial Information

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Modeling and Simulation of Behavioral Cybersecurity Graduate Certificate

College
College of Graduate Studies

Department
College of Graduate Studies Dean’s Office

Program Website
https://msgrad.ist.ucf.edu

Program Contact Information
Bruce Caulkins PhD, Colonel (Ret), US Army
bruce.caulkins@ucf.edu
Telephone: 407-882-2427
Partnership II Building, Room 319
Is this program available 100% online?

No

Program Description

The Graduate Certificate in Modeling and Simulation of Behavioral Cybersecurity provides students with an interdisciplinary modeling and simulation approach to cybersecurity with a particular emphasis on the behavioral aspects of cybersecurity and cyber operations.

This graduate certificate is beneficial to individuals who have an interest in interdisciplinary studies and problem-solving for modeling, simulation, and behavioral aspects of cybersecurity.

UCF Partnerships

The Modeling and Simulation of Behavioral Cybersecurity certificate partners with several UCF master's programs. If students complete the certificate and are accepted into a partnering program, all certificate coursework can be used toward that master's degree. Here is a list of our partnering UCF master's programs:

- Computer Engineering MSCpE
- Industrial Engineering MS
- Modeling and Simulation MS
- Cyber Security and Privacy MS

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
15 Total Credits

- Complete the following:
  - IDC5602 - Cybersecurity: A Multidisciplinary Approach (3)
  - CNT5410L - Cyber Operations Lab (3)
  - IDC6600 - Emerging Cyber Issues (3)
  - IDC6601 - Behavioral Aspects of Cybersecurity (3)
  - IDC6941 - Capstone in Modeling and Simulation of Behavioral Cybersecurity (3)

Grand Total Credits: 15
Modeling and Simulation of Technical Systems Graduate Certificate

**College**
College of Graduate Studies

**Department**
College of Graduate Studies Dean's Office

**Program Website**
https://msgrad.ist.ucf.edu

**Program Contact Information**

R. Paul Wiegand III, PhD  
Interim Program Director  
wiegand@ist.ucf.edu  
Telephone: 407-882-0313  
PII 209

Kirsten Seitz  
Kirsten.Seitz@ucf.edu  
Telephone: 407-882-1407  
Partnership 2 Building, Room 131D

**Is this program available 100% online?**
No

**Program Description**

**PROGRAM DISCONTINUED EFFECTIVE FALL 2019**

The Graduate Certificate in Modeling and Simulation of Technical Systems provides students with the necessary knowledge in modeling and simulation fundamentals, including modeling techniques and applications, with special emphasis on modeling and simulation in testing and evaluation.

This graduate certificate is beneficial to technical professionals involved with constructing and using simulation models of dynamic systems. All courses of the certificate program will be delivered electronically via distance education. Students are required to apply to the Out-of-State Cohort Track or the In-State Cohort Track.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233
Modeling and Simulation of Technical Systems Graduate Certificate - Modeling and Simulation of Technical Systems, In State Cohort Track Graduate Certificate

Track Website
http://www.ist.ucf.edu/grad

Track Contact Information

R. Paul Wiegand III, PhD
Interim Program Director
wiegand@ist.ucf.edu
Telephone: 407-882-0313
PILL 209

Kirsten Seitz
Kirsten.Seitz@ucf.edu
Telephone: 407-882-1407
Partnership 2 Building, Room 131D

Online Availability
No

Track Description

PROGRAM DISCONTINUED EFFECTIVE FALL 2019

The Graduate Certificate in Modeling and Simulation of Technical Systems provides students with the necessary knowledge in modeling and simulation fundamentals, including modeling techniques and applications, with special emphasis on modeling and simulation in testing and evaluation.

This graduate certificate is beneficial to technical professionals involved with constructing and using simulation models of dynamic systems. All courses of the certificate program will be delivered electronically via distance education.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
16 Total Credits

- Complete the following:
  - IDS6147 - Perspectives on Modeling and Simulation (3)
  - ESI5531 - Discrete Systems Simulation (3)
  - IDS6146 - Modeling and Simulation Systems (3)
  - IDS6950 - Modeling and Simulation Capstone Report Planning (1)
  - IDS6149 - Modeling and Simulation for Test and Evaluation (3)
  - IDS6916 - Simulation Research Methods and Practicum (3)

Grand Total Credits: 16

Track Details

For the Modeling and Simulation of Technical Systems Graduate Certificate, Florida residents will follow the regular in-state tuition and fees schedule for the university.
Modeling and Simulation of Technical Systems Graduate Certificate - Modeling and Simulation of Technical Systems, Out of State Cohort Track Graduate Certificate

Track Website
http://www.ist.ucf.edu/grad

Track Contact Information
Joseph LaViola, Jr. PhD
Assistant Professor
jjil@eecs.ucf.edu
Telephone: 407-882-2285
HEC Bldg, Room 321

Kirsten Seitz
Kirsten.Seitz@ucf.edu
Telephone: 407-882-1407
Partnership 2 Building, Room 131D

Online Availability
No

Track Description
PROGRAM DISCONTINUED EFFECTIVE FALL 2019
The Graduate Certificate in Modeling and Simulation of Technical Systems provides students with the necessary knowledge in modeling and simulation fundamentals, including modeling techniques and applications, with special emphasis on modeling and simulation in testing and evaluation.

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College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
16 Total Credits

- Complete the following:
  - IDS6147 - Perspectives on Modeling and Simulation (3)
  - ESI5531 - Discrete Systems Simulation (3)
  - IDS6146 - Modeling and Simulation Systems (3)
  - IDS6950 - Modeling and Simulation Capstone Report Planning (1)
  - IDS6149 - Modeling and Simulation for Test and Evaluation (3)
  - IDS6916 - Simulation Research Methods and Practicum (3)

Grand Total Credits: **16**

Track Details
For the Modeling and Simulation of Technical Systems Graduate Certificate, the cost per credit hour is $800.00.*

*Fee is subject to change.
Modeling and Simulation PhD

**College**
College of Graduate Studies

**Department**
College of Graduate Studies Dean’s Office

**Program Website**
https://msgrad.ist.ucf.edu

**Program Handbook Link**
Modeling and Simulation PhD

**Program Contact Information**

**Prof. Ghaith Rabadi**
Program Director
Ghaith.Rabadi@ucf.edu
Telephone: 407-882-1329
Partnership Building 2, Room 131H
http://ghaithrabadi.com/

**Kirsten Seitz**
Kirsten.Seitz@ucf.edu
Telephone: 407-882-1407
Partnership 2 Building, Room 131D

**Is this program available 100% online?**
No
Program Description

The UCF School of Modeling, Simulation, and Training (SMST) considers its degree programs as transdisciplinary, intended for those who wish to pursue a career in the fields of academia, government, military/defense, healthcare/medicine, entertainment, technology, education, or service/manufacturing. Most engineering or scientific fields use simulation as an exploration, modeling, or analysis technique. However, Modeling and Simulation is not limited to engineering and science, as it is also used in training, management, and concept exploration. These programs involve constructing human-centered, equipment-centered, and stand-alone computer-based models of existing and conceptual systems and processes.

UCF SMST sought feedback from industry practitioners to identify key competencies for students in our degree programs. This input has been critical to the development of our curriculum, which is designed to provide a broad overall perspective of the developing simulation industry and an awareness of the economic considerations. UCF SMST’s objective is to provide education on evaluating the human, organization, equipment, and systems under study through the evaluation of output from the corresponding simulation construct. Alumni of SMST degree programs have both general and specialized skills in Modeling and Simulation.

Students in the Modeling and Simulation Ph.D. program are required to focus their study and research efforts in two areas of specialization. Students base their specialization on their academic and professional goals and determine these areas in consultation with their faculty adviser and the Modeling and Simulation graduate program director. Common areas of specialization are listed below (descriptions can be found at msgrad.ist.ucf.edu). This is not an exhaustive list, as the field continues to grow and evolve.

- Behavioral Cybersecurity
- Computer Visualization
- Human Systems
- Instructional and Training Simulation
- Interactive Simulation and Intelligent Systems
- Simulation in Government and Military
- Simulation in Healthcare and Medicine
- Simulation Infrastructure
- Simulation Management
- Simulation Modeling and Analysis

Program Prerequisites

Though UCF SMST does not have a mandated prerequisite for its graduate programs, the most successful students are those who have an academic and/or work background that has prepared them in mathematics (introductory calculus and probability and statistics) and computer literacy, preferably, familiarity with at least one higher order programming language (e.g., Python, C/C++, Visual Basic, Java, etc.). Students with undergraduate or graduate degrees in Engineering, Computer Science, or Mathematics will generally have this background.

Students without this background are encouraged to select the elective course IDC 5570 (Introductory Mathematics for Modeling and Simulation). This course will prepare them for the required core course COT 6571 (Mathematical Foundations of Modeling and Simulation).

College of Graduate Studies Contact Information

gRADAdmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Core
15 Total Credits
- Complete the following:
Modeling and Simulation PhD Elective Courses

39 Total Credits

Complete all of the following

- Complete at least 1 of the following:
  - IDC5602 - Cybersecurity: A Multidisciplinary Approach (3)
  - IDC6601 - Behavioral Aspects of Cybersecurity (3)
  - IDC6700 - Interdisciplinary Approach to Data Visualization (3)
  - IDS5142 - Modeling and Simulation for Instructional Design (3)
  - IDS6146 - Modeling and Simulation Systems (3)
  - IDS6149 - Modeling and Simulation for Test and Evaluation (3)
  - IDS6916 - Simulation Research Methods and Practicum (3)

- Students must select an elective course taught by the Modeling and Simulation Graduate Program. Approved courses are listed below, but others may be used with the program director's approval.

Unrestricted Electives

39 Total Credits

Earn at least 39 credits from the following types of courses:

- All Modeling and Simulation Ph.D. students must take at least 39 credits of unrestricted elective courses that reflect their two areas of specialization. Students are expected to carefully select electives with guidance from the program director and/or their faculty adviser. The UCF SMST has identified and approved over 175 courses that students may choose as unrestricted electives. This list can be found at msgrad.ist.ucf.edu. New courses are developed at the university every semester, so this list is updated once a semester. If a student identifies a course that will benefit their area of study but is not on the published list, they may request approval from the program director for inclusion in their plan of study. Unrestricted electives must consist of at least 9 credit hours of formal courses, excluding independent study. The remaining credits may consist of additional coursework, directed research, independent study, and additional dissertation as advised appropriately by faculty adviser and/or program director.

Modeling and Simulation PhD Elective Courses

0 Total Credits

Complete all of the following

- In addition to successfully completing the core courses for the M&S PhD program, students are required to carefully select electives with the guidance of a Program Director or faculty adviser. Elective choices should be made with the intent to strengthen a research interest and/or area of focus in order to meet the individual student's educational goals and objectives. Listed below are suggested courses in various areas of focus or specialization. These course groupings are mere guides, are not exhaustive and are only meant to assist with advising and course selection in order to meet the individual student's educational goals and objectives. They are not intended to restrict elective choices among focus areas as we strongly encourage Modeling and Simulation students to maintain an interdisciplinary approach to their graduate studies. If a student identifies another UCF course which may be of value to his/her M&S research area, but is not already identified in a list below, that student may request approval from the Graduate Program Director for the course to be used as an elective in the Graduate Plan of Study. All such requests must be made in advance of enrolling in the course. Those electives categorized as "General" and "Fundamentals of Modeling and Simulation" would be appropriate for all students regardless of interest area. The remaining categories are grouped by area of interest.

General

- ESI 6247 - Experimental Design and Taguchi Methods 3 Credit Hours ESI 6891 - IEMS Research Methods 3 Credit Hours
- IDS 5907 - Independent Study Variable IDS 5917 - Directed Research Variable IDS 6908 - Independent Study Variable
- IDS 6918 - Directed Research Variable IDS 6946 - Internship Variable IDS 7919 - Doctoral Research Variable
- PHI 5340 - Research Methods in the Cognitive Sciences 3 Credit Hours PSY 6216C - Research Methodology 4 Credit Hours
- STA 5205 - Experimental Design 3 Credit Hours
- ESI 6217 - Statistical Aspects of Digital Simulation 3 Credit Hours
- ESI 6247 - Experimental Design and Taguchi Methods 3 Credit Hours
- ESI 6532 - Object-Oriented Simulation 3 Credit Hours
- IDS 6700 - Interdisciplinary Approach to Data Visualization 3 Credit Hours
- IDS 6147 - Perspectives on Modeling and Simulation 3 Credit Hours
- IDS 6149 - Modeling and Simulation for Test and Evaluation 3 Credit Hours
- IDS 6950 - Modeling and Simulation Capstone Report Planning 1 Credit Hours
- IDS 6145 - Simulation Techniques 3 Credit Hours

Behavioral Cybersecurity

- CAP 6133 - Advanced Topics in Computer Security and Computer Forensics 3 Credit Hours
- CDA 6530 - Performance Models of Computers and Networks 3 Credit Hours
- CJE 6688 - Cyber Crime and Criminal Justice 3 Credit Hours
- CNT 5410L - Cyber Operations Lab 3 Credit Hours
- COT 5405 - Design and Analysis of Algorithms 3 Credit Hours
- EEL 6785 - Computer Network Design 3 Credit Hours
- EEL 6883 - Software Engineering II 3 Credit Hours
- ESI 5531 - Discrete Systems Simulation 3 Credit Hours
- ESI 5570 - Human Factors 3 Credit Hours
- ETL 6506 - Human Cognition and Learning 3 Credit Hours
- IDC 5602 - Cybersecurity: A Multidisciplinary Approach 3 Credit Hours
- IDS 6600 - Emerging Cyber Issues 3 Credit Hours
- IDS 6916 - Simulation Research Methods and Practicum 3 Credit Hours

2022-2023 Graduate Catalog
Simulation Infrastructure
Simulation for Test and Evaluation 3 Credit Hours
Design 3 Credit Hours
ESI 6247 - Experimental Design and Taguchi Methods 3 Credit Hours
IDS 6149 - Modeling and Interaction 3 Credit Hours
EIN 6645 - Real-Time Simulation Agents 3 Credit Hours
Usability Engineering 3 Credit Hours
EIN 5255C - Interactive Simulation 3 Credit Hours
EIN 6258 - Human Computer Architecture 3 Credit Hours
HUM 5802 - Applied Contemporary Humanities Dynamic Media 3 Credit Hours
DIG 6812 - Digital Interaction for Informal Learning 3 Credit Hours
EEL 6823 - Image Processing II 3 Credit Hours
EEL 6843 - Machine Perception 3 Credit Hours
ESI 6247 - Experimental Design and Taguchi Methods 3 Credit Hours
IDC 6700 - Research 3 Credit Hours
ESI 5531 - Discrete Systems Simulation 3 Credit Hours STA 5820 - Image Processing 3 Credit Hours STA 5825 - Pattern Recognition and Learning from Big Data STA 5874 - Expert Systems and Knowledge Engineering 3 Credit Hours
EEL 6825 - Human Performance 3 Credit Hours ESI 6258 - Human Factors I 3 Credit Hours EXP 5208 - Sensation and Perception 3 Credit Hours EXP 5256 - Human Factors II 3 Credit Hours EXP 6258 - Human Factors III 3 Credit Hours EXP 6506 - Human Cognition and Learning 3 Credit Hours EXP 6541 - Advanced Human Computer Interaction 3 Credit Hours IDS 6148 - Human Systems Integration for Modeling and Simulation 3 Credit Hours IDS 6149 - Modeling and Simulation for Test and Evaluation 3 Credit Hours PHI 5225 - Philosophy of Language 3 Credit Hours PHI 5325 - Topics in Philosophy of Mind 3 Credit Hours PHI 5327 - Topics in the Cognitive Sciences 3 Credit Hours PHI 5329 - Philosophy of Neuroscience 3 Credit Hours PSB 5005 - Physiological Psychology 3 Credit Hours TTE 6270 - Intelligent Transportation Systems 3 Credit Hours

Computer Visualization
CAP 5725 - Computer Graphics I 3 Credit Hours
CAP 6411 - Computer Vision Systems 3 Credit Hours
CAP 6412 - Advanced Computer Vision 3 Credit Hours
CAP 6676 - Knowledge Representation 3 Credit Hours CDA 5106 - Advanced Computer Architecture 3 Credit Hours
COT 5405 - Design and Analysis of Algorithms 3 Credit Hours DIG 6605 - Physical Computing 3 Credit Hours DIG 6647 - History and Theory of Dynamic Media 3 Credit Hours EEL 6258 - Human Computer Interaction 3 Credit Hours
EEL 5713 - Linear Systems Theory 3 Credit Hours EEL 5711C - Engineering Applications of Computer Graphics 3 Credit Hours EEL 5820 - Image Processing 3 Credit Hours EEL 5825 - Pattern Recognition and Learning from Big Data EEL 5874 - Expert Systems and Knowledge Engineering 3 Credit Hours EEL 6822 - Image Processing II 3 Credit Hours EEL 6843 - Machine Perception 3 Credit Hours ESI 6258 - Human Factors I 3 Credit Hours EXP 5208 - Sensation and Perception 3 Credit Hours EXP 5256 - Human Factors II 3 Credit Hours EXP 6258 - Human Factors III 3 Credit Hours EXP 6506 - Human Cognition and Learning 3 Credit Hours EXP 6541 - Advanced Human Computer Interaction 3 Credit Hours IDS 6148 - Human Systems Integration for Modeling and Simulation 3 Credit Hours IDS 6149 - Modeling and Simulation for Test and Evaluation 3 Credit Hours PHI 5225 - Philosophy of Language 3 Credit Hours PHI 5325 - Topics in Philosophy of Mind 3 Credit Hours PHI 5327 - Topics in the Cognitive Sciences 3 Credit Hours PHI 5329 - Philosophy of Neuroscience 3 Credit Hours PSB 5005 - Physiological Psychology 3 Credit Hours TTE 6270 - Intelligent Transportation Systems 3 Credit Hours

Quantitative Methods for Simulation, Modeling and Analysis
CAP 5512 - Evolutionary Computation 3 Credit Hours
CAP 6515 - Algorithms in Computational Biology 3 Credit Hours
CDA 6530 - Performance Models of Computers and Networks 3 Credit Hours COT 5405 - Design and Analysis of Algorithms 3 Credit Hours EEL 5713 - Linear Systems Theory 3 Credit Hours EEL 6878 - Modeling and Artificial Intelligence 3 Credit Hours EIN 6528 - Simulation Based Life Cycle Engineering 3 Credit Hours ESI 5306 - Operations Research 3 Credit Hours ESI 5531 - Discrete Systems Simulation 3 Credit Hours ESI 6258 - Human Computer Interaction 3 Credit Hours
EEL 5713 - Linear Systems Theory 3 Credit Hours EEL 5711C - Engineering Applications of Computer Graphics 3 Credit Hours EEL 5820 - Image Processing 3 Credit Hours EEL 5825 - Pattern Recognition and Learning from Big Data EEL 5874 - Expert Systems and Knowledge Engineering 3 Credit Hours EEL 6822 - Image Processing II 3 Credit Hours EEL 6843 - Machine Perception 3 Credit Hours ESI 6258 - Human Factors I 3 Credit Hours EXP 5208 - Sensation and Perception 3 Credit Hours EXP 5256 - Human Factors II 3 Credit Hours EXP 6258 - Human Factors III 3 Credit Hours EXP 6506 - Human Cognition and Learning 3 Credit Hours EXP 6541 - Advanced Human Computer Interaction 3 Credit Hours IDS 6148 - Human Systems Integration for Modeling and Simulation 3 Credit Hours IDS 6149 - Modeling and Simulation for Test and Evaluation 3 Credit Hours PHI 5225 - Philosophy of Language 3 Credit Hours PHI 5325 - Topics in Philosophy of Mind 3 Credit Hours PHI 5327 - Topics in the Cognitive Sciences 3 Credit Hours PHI 5329 - Philosophy of Neuroscience 3 Credit Hours PSB 5005 - Physiological Psychology 3 Credit Hours TTE 6270 - Intelligent Transportation Systems 3 Credit Hours

Simulation in Healthcare
CAP 6515 - Algorithms in Computational Biology 3 Credit Hours
CAP 6676 - Knowledge Representation 3 Credit Hours DIG 6647 - History and Theory of Dynamic Media 3 Credit Hours DIG 6812 - Digital Interaction for Informal Learning 3 Credit Hours EEL 5820 - Image Processing 3 Credit Hours EEL 6823 - Image Processing II 3 Credit Hours EIN 6645 - Real-Time Simulation Agents 3 Credit Hours ESI 5531 - Discrete Systems Simulation 3 Credit Hours HUM 5802 - Applied Contemporary Humanities 3 Credit Hours NGR 6717 - Introduction to Healthcare Simulation 3 Credit Hours NGR 6771L - Healthcare Simulation Practicum VAR Credit Hours NGR 6794 - Organizational Leadership and Operations in Healthcare Simulation 3 Credit Hours NGR 6978 - Healthcare Simulation Capstone Project 3 Credit Hours PHI 5329 - Philosophy of Neuroscience 3 Credit Hours PSB 5005 - Physiological Psychology 3 Credit Hours SPA 6417 - Cognitive/Communicative Disorders 3 Credit Hours

Interactive Simulation and Intelligent Systems
CAP 5512 - Evolutionary Computation 3 Credit Hours
CAP 6510 - Machine Learning 3 Credit Hours
CAP 6536 - Advanced Artificial Intelligence 3 Credit Hours
CAP 6671 - Intelligent Systems: Robots, Agents, and Humans 3 Credit Hours
CAP 6676 - Knowledge Representation 3 Credit Hours DIG 6647 - History and Theory of Dynamic Media 3 Credit Hours DIG 6812 - Digital Interaction for Informal Learning 3 Credit Hours DIG 5771C - Engineering Applications of Computer Graphics 3 Credit Hours DIG 5874 - Expert Systems and Knowledge Engineering 3 Credit Hours DIG 6647 - Interactive Simulation and Artificial Intelligence 3 Credit Hours EIN 5251 - Usability Engineering 3 Credit Hours EIN 5255C - Interactive Simulation 3 Credit Hours EIN 6258 - Human Computer Interaction 3 Credit Hours EIN 6645 - Real-Time Simulation Agents 3 Credit Hours EIN 6647 - Intelligent Simulation 3 Credit Hours EIN 6649C - Intelligent Tutoring Training System Design 3 Credit Hours EME 6458 - Virtual Teaching and the Digital Educator 3 Credit Hours EME 6507 - Multimedia for Education and Training 3 Credit Hours EME 6601 - Instructional Simulation Design for Training and Education 3 Credit Hours EME 6614 - Instructional Game Design for Training and Education 3 Credit Hours EME 6646 - Instructional Game Design for Training and Education 3 Credit Hours EXP 5208 - Sensation and Perception 3 Credit Hours EXP 5256 - Human Factors I 3 Credit Hours EXP 6258 - Human Performance 3 Credit Hours EXP 6506 - Human Cognition and Learning 3 Credit Hours EXP 6541 - Advanced Human Computer Interaction 3 Credit Hours IDS 6148 - Human Systems Integration for Modeling and Simulation 3 Credit Hours IDS 6149 - Modeling and Simulation for Test and Evaluation 3 Credit Hours PHI 5225 - Philosophy of Language 3 Credit Hours PHI 5325 - Topics in Philosophy of Mind 3 Credit Hours PHI 5327 - Topics in the Cognitive Sciences 3 Credit Hours PHI 5329 - Philosophy of Neuroscience 3 Credit Hours PSB 5005 - Physiological Psychology 3 Credit Hours TTE 6270 - Intelligent Transportation Systems 3 Credit Hours
Dissertation Adviser and Advisory Committee

Candidacy Examination

Milestones

Equipment Fee

Plan of Study

Waived Credits

Dissertation

Total Credits

Plan of Study

Total Credits

Milestones

Total Credits

Candidacy Examination

Total Credits

Dissertation Adviser and Advisory Committee

Total Credits

- CAP 6671 - Intelligent Systems: Robots, Agents, and Humans 3 Credit Hours
- CAP 6106 - Advanced Computer Architecture 3 Credit Hours
- CAP 6107 - Parallel Computer Architecture 3 Credit Hours
- CDA 6530 - Performance Models of Computers and Networks 3 Credit Hours
- CNT 5008 - Computer Communication Networks Architecture 3 Credit Hours
- COT 5405 - Design and Analysis of Algorithms 3 Credit Hours
- DIG 6605 - Physical Computing 3 Credit Hours
- EEL 5173 - Linear Systems Theory 3 Credit Hours
- EEL 6762 - Performance Analysis of Computer and Communication Systems 3 Credit Hours
- EEL 6785 - Computer Network Design
- EEL 6878 - Modeling and Artificial Intelligence 3 Credit Hours
- EEL 6883 - Software Engineering II
- ESI 6551 - Systems Engineering 3 Credit Hours
- MAT 5712 - Scientific Computing 3 Credit Hours

Simulation Management

- EIN 5108 - The Environment of Technical Organizations 3 Credit Hours
- EIN 5140 - Project Engineering 3 Credit Hours
- EIN 5356 - Cost Engineering 3 Credit Hours
- EIN 6182 - Engineering Management 3 Credit Hours
- EIN 6215 - System Safety Engineering and Management 3 Credit Hours
- EIN 6339 - Operations Engineering 3 Credit Hours
- EIN 6357 - Advanced Engineering Economic Analysis 3 Credit Hours
- EIN 6528 - Simulation Based Life Cycle Engineering 3 Credit Hours
- EIN 6577 - Total Quality Improvement 3 Credit Hours
- EIN 6624 - Quality Management 3 Credit Hours
- EIN 6658 - Decision Analysis 3 Credit Hours
- EIN 6651 - Systems Engineering 3 Credit Hours
- IDS 6700 - Interdisciplinary Approach to Data Visualization 3 Credit Hours
- IDS 6149 - Modeling and Simulation for Test and Evaluation 3 Credit Hours

The doctoral program will allow up to 30 credit hours to be waived from an earned master's degree.

Earn at least 15 credits from the following types of courses:

- Before entering the dissertation portion of the degree program, a student must successfully complete the qualifying examination and candidacy examination milestones. More information for both examinations can be found at msgrad.ist.ucf.edu.
- XXX 7980 - Dissertation Research 15 Credit Hours

After admission to the Modeling and Simulation Ph.D. program and before the end of the third term of enrollment, students must submit a Graduate Plan of Study (GPS) to the Modeling and Simulation Graduate Program office. The GPS helps the student design an appropriate program of coursework to support the student's educational needs, goals, and objectives. The GPS should be developed in concert with the student's faculty adviser or (if adviser is not yet identified) program director and form a unified cohesive strategy for degree completion. All doctoral program credit must be at the 5000-level or higher, with a minimum of 50% at the 6000- or 7000-level. Students are eligible to make changes to their Graduate Plan of Study at any time, with the approval of their faculty adviser and the Modeling and Simulation Graduate Program.

Full-time students in the Modeling and Simulation PhD program pay a $27 equipment fee each semester that they are enrolled. Part-time students pay a $13.50 equipment fee each semester that they are enrolled.

In addition to their coursework, all Modeling and Simulation Ph.D. students are required to successfully complete three milestones before the award of their degree: qualifying examination; candidacy examination; and dissertation defense.

Students are eligible to complete the SMST Candidacy Examination (CE) requirement once they successfully complete the QE: are within 6 credits of completing all coursework (i.e., completed at least 51 credits of coursework); have an approved up-to-date GPS on file with the graduate program; and have an advisory committee (approved by the College of Graduate Studies) on file. The CE consists of: Dissertation research proposal Oral defense of the dissertation research proposal Refereed published (or accepted for publication) manuscript on the student's dissertation topic Detailed information and protocol regarding the CE can be found at msgrad.ist.ucf.edu

Students are responsible for selecting an adviser from a list of faculty members authorized to direct dissertations to serve as the chair of their advisory committee. Then, in concert with their adviser, the student must identify and select the remaining members of the advisory committee. The advisory committee must contain a minimum of four members (chair plus three members). All committee members must hold a terminal degree and be in fields related to the student's dissertation topic. At least three members, including the chair, must be classified as Modeling and Simulation graduate faculty. These faculty members must be from (or represent) at least two different colleges. At least one member must have served as a committee member on a prior SMST advisory committee. With approval from the Modeling and Simulation Graduate Program Director, a committee member may serve as a committee's co-chair. The UCF College of Graduate Studies, as well as UCF SMST, reserve the right to review appointments to advisory committees; place a representative on any advisory committee; or appoint a co-adviser.
Admission to Candidacy

Students who fulfill all the requirements for the candidacy examination and have an approved advisory committee on file will be admitted to candidacy and authorized to enroll for dissertation hours.

Dissertation Defense

The dissertation defense is a formal oral presentation of the written dissertation before the student's advisory committee. All dissertation defenses are announced in advance and open to the public. Committee members vote either "Pass" or "Fail" of the written dissertation and oral defense. The dissertation and its defense must be approved by a majority vote, with no more than one dissenting vote. Normally, students are granted one opportunity to pass the dissertation defense. In extenuating circumstances and at the discretion of the Modeling and Simulation Graduate Program Director, a student may be allowed one additional attempt to pass the dissertation defense (no more than two attempts will be allowed).

Time to Completion

Students are granted 7 years (21 semesters) from the term of admission to complete their degree program. Failure to comply with the "7-Year Rule" may result in dismissal from the program, and may require reapplication to the program as well as repeating coursework and other program requirements.

Independent Learning

The dissertation is an independent project completed under the guidance of a student's faculty advisory committee. All research, data collection and analysis, and writing of the project are completed by the student, creating a challenging and fulfilling independent learning experience.

Grand Total Credits: 72

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2827
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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Nanotechnology MS

College
College of Graduate Studies

Department
NanoScience Technology Center

Program Website
nano.ucf.edu

Program Handbook Link
Nanotechnology MS
Program Contact Information

Saiful Khondaker PhD
Professor
Saiful@ucf.edu
Telephone: 407-882-2844
PVL 0432

Is this program available 100% online?
No

Program Description

The Master of Science in Nanotechnology program provides students with scientific knowledge and research training in nanoscience and nanotechnology. The program prepares students for seeking employment in industry and academia involved in nanotechnology research, product development and commercialization, or to pursue advanced PhD degrees in related areas.

The Nanotechnology MS program consists of 30 credit hours of study that covers Fall, Spring and Summer consecutive academic terms. Admissions to the program occur in both the Fall and Spring semester of each year, and students are expected to finish the degree in two years.

The program of study includes a balanced course offering including interdisciplinary scientific courses and research training in the field of nanotechnology. The curriculum of courses is delivered via face-to-face instruction. The program includes 3 credit hours of independent study and 6 credit hours of thesis research under the supervision of a faculty at the NanoScience Technology Center. This training will provide students with hands-on research experiences on nanomaterial synthesis, nanostructure fabrication and characterization, and application development in their interested areas.

This degree has 1 track: Non-Thesis Track. Please scroll to the bottom of this page for further details on this Track.

Program Prerequisites

Applicants should have obtained an undergraduate degree in one of the following areas: physics, chemistry, biology, or engineering.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

15 Total Credits

- Complete all of the following
  - Core Courses
    - Complete at least 4 of the following:
      - IDS6250 - Introduction to Nanoscience and Nanotechnology (3)
      - IDS6254 - Nanofabrication and Characterization (3)
      - IDS6252 - Biomedical Nanotechnology (3)
      - IDS6255 - Nanotechnology in Energy and Sustainability (3)
      - IDS6253 - Bioanalytical Technology (3)
  - Independent Study
    - Earn at least 3 credits from the following types of courses:
      Students will take 3 credit hours of independent study, resulting in a required research report of independent learning experience. Independent Study must have a formally defined core of knowledge to be learned by the student. In accordance with the policy of the College of Graduate Studies, the core of knowledge to be learned by the student must be specified in written form and approved by the student, the instructor, and the program coordinator prior to enrollment in Independent Study.

**Elective Courses**

9 Total Credits

- Complete at least 3 of the following:
  - IDS6257 - Principles and Techniques of Nanobiology (3)
  - IDS6258 - Advanced Materials and Nanotechnology for Rechargeable Batteries (3)
  - IDS6260 - Electrical and Optical Properties of Nanoscale Materials and Devices (3)
  - IDS6261 - Nanotechnology for Sustainable Agriculture (3)
  - EMA5586 - Photovoltaic Solar Energy Materials (3)
  - EMA5060 - Polymer Science and Engineering (3)
  - EMA6518 - Transmission Electron Microscopy (3)
  - EMA6605 - Materials Processing Techniques (3)
  - PHY5933 - Selected topics in biophysics of macromolecules (3)
  - OSE5312 - Light Matter Interaction (3)
  - OSE6938 - ST: Infrared Detectors (3)
  - PCB5225 - Molecular Biology of Disease (3)
  - PCB5238 - Immunobiology (3)
  - PCB5236 - Cancer Biology (3)
  - CHM6710 - Applied Analytical Chemistry (3)
  - Course Not Found

**Thesis**

6 Total Credits

- Complete all of the following
  - Earn at least 6 credits from the following:
    - IDS6971 - Thesis Research (3)
  - Students will conduct and complete an independent thesis research project under the supervision of a NanoScience Technology Center faculty. The student will defend the thesis at the completion of the study. Students will gain hands-on research experiences on nanomaterial synthesis, nanostructure fabrication and characterization, and application development in their interested areas.

Grand Total Credits: 30

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid.ucf.edu
Fellowship Information

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gradfellowship@ucf.edu
funding.graduate.ucf.edu

Nanotechnology MS - Nanotechnology MS, Non-Thesis Track

Track Website
http://nano.ucf.edu

Track Handbook
Nanotechnology MS, Non-Thesis Track

Track Contact Information
Saiful Khondaker PhD
Professor
Saiful@ucf.edu
Telephone: 407-882-2844
PVL 0432

Online Availability
No

Track Description
The Master of Science in Nanotechnology Non-Thesis Track program provides students with knowledge and research training in nanoscience and nanotechnology. The program prepares students for seeking employment in industry and academia involved in nanotechnology research, product development, and commercialization, or to pursue advanced PhD degrees in related areas.

Track Prerequisites
Applicants should have obtained an undergraduate degree in one of the following areas: physics, chemistry, biology, or engineering.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

Core Courses
- Complete at least 4 of the following:
  - IDS6250 - Introduction to Nanoscience and Nanotechnology (3)
  - IDS6252 - Biomedical Nanotechnology (3)
  - IDS6253 - Bioanalytical Technology (3)
  - IDS6254 - Nanofabrication and Characterization (3)
  - IDS6255 - Nanotechnology in Energy and Sustainability (3)

Independent Study
3 Total Credits
- Complete all of the following
  - Earn at least 3 credits from the following:
    - IDS6908 - Directed Independent Studies (3)
  - Students will receive basic training under the supervision of a NanoScience Technology Center faculty to conduct research, including ethical training, safety training, attending seminar presentations, conducting a literature survey, and using various instrumentation techniques for research.

Elective Courses
15 Total Credits
- Complete all of the following
  - Elective Courses
    - Complete all of the following
      - Earn at least 6 credits from the following:
        - IDS6257 - Principles and Techniques of Nanobiology (3)
        - IDS6258 - Advanced Materials and Nanotechnology for Rechargeable Batteries (3)
        - IDS6260 - Electrical and Optical Properties of Nanoscale Materials and Devices (3)
        - IDS6261 - Nanotechnology for Sustainable Agriculture (3)
        - EMA5586 - Photovoltaic Solar Energy Materials (3)
        - EMA5060 - Polymer Science and Engineering (3)
        - EMA6518 - Transmission Electron Microscopy (3)
        - EMA6605 - Materials Processing Techniques (3)
        - OSE5312 - Light Matter Interaction (3)
        - MCB5225 - Molecular Biology of Disease (3)
        - PCB5238 - Immunobiology (3)
        - PCB5236 - Cancer Biology (3)
        - CHM6710 - Applied Analytical Chemistry (3)
    - Elective courses may be chosen from the following recommended course list. Core courses taken beyond the 4-core course requirement may be used to satisfy the elective course requirement. Other courses may be taken as elective courses upon the approval of your graduate program director.

Open Elective Courses
- Earn at least 9 credits from the following types of courses:
  - As part of completing programmatic requirements, student must also select an additional 9 credit hours of open elective courses in the general field of science, engineering, or business. These courses must be at the graduate level and be approved by the Program Director before registration. To be noted, one of these open electives could also be another 3 credit hours of Independent Study to continue research training under the supervision of a faculty.

Grand Total Credits: 30

Financial Information

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Grad Fellowships
Telephone: 407-823-0127
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funding.graduate.ucf.edu

Nondegree or Transient

College
College of Graduate Studies

Department
College of Graduate Studies Dean's Office

Program Website
http://www.graduate.ucf.edu/

Is this program available 100% online?
No

Program Description
The Nondegree program is for students who have completed at least a baccalaureate degree from an accredited institution recognized by UCF in the United States and are not seeking a graduate degree. Students in this status may be interested in taking graduate courses at UCF for personal or professional enhancement, to prepare for possible admission to a graduate degree-seeking or certificate program, or to complete enrollment requirements at another university. Students who are enrolled in a graduate program at another university and want to take courses at UCF and transfer it to their home institution are considered transient students and nondegree-seeking at UCF.

Not all graduate degree programs at UCF allow students in Nondegree status to enroll in their courses. It is best to contact the program director for the graduate program that offers the course prior to applying.

Admission into Nondegree status does not guarantee admission to a graduate degree-seeking or certificate program at UCF. International students are not eligible for Nondegree status unless they hold an eligible visa. International students taking online courses from their home country are eligible to be nondegree seeking since they do not require a visa.

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gradadmissions@ucf.edu
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College of Health Professions and Sciences

2022-2023 Graduate Catalog
Aging Studies Graduate Certificate

College

College of Health Professions and Sciences

Department

School of Social Work

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
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Institution Codes

GRE: 5233
GMAT: RZT-HT-58
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ETS PPI: 5233

Anatomical Sciences Graduate Certificate

College

College of Health Professions and Sciences

Department

School of Kinesiology and Rehabilitation Sciences

Program Website

https://healthprofessions.ucf.edu/physicaltherapy/anatomical-sciences/

Program Contact Information

Patrick Pabian DPT, PhD
patrick.pabian@ucf.edu
Telephone: 407-823-3462
HS 1 256

Is this program available 100% online?

No

Program Description

The Anatomical Sciences Graduate Certificate provides students with coursework to become an effective anatomist in higher education fields related to health and medical sciences. The program provides a depth of understanding of the anatomical sciences and substantial hands-on experience in the gross anatomy laboratory. The amount and level of coursework offers students the rigorous training to develop distinct expertise in anatomy knowledge, dissection technique, and instruction of anatomy requisite for careers as an anatomist in health or medical science education.

Program Prerequisites

Admission is open to those who have completed a graduate program in Physical Therapy, Occupational Therapy, or other related health or medical science-related discipline. Alternatively, those with a Bachelor’s degree from a regionally accredited institution with a GPA of at least 3.5 in the following pre-requisite coursework will be considered:

Pre-requisites

- Anatomy or Anatomy and Physiology (8 credits total with labs)
- Physics (8 credits total with labs)
- Biology (6 credits minimum)
- Chemistry (6 credits minimum)
**College of Graduate Studies Contact Information**

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Graduate Admissions

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Orlando, FL 32816-0112

**Institution Codes**  
GRE: 5233  
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ETS PPI: 5233

**Degree Requirements**

**Required Courses**  
18 Total Credits

- Complete the following:
  - PHT6115C - Gross Anatomy/Neuroscience I (6)
  - PHT6118C - Gross Anatomy/Neuroscience II (6)
  - PHT6510 - Administration of Anatomical Sciences Laboratory (3)
  - PHT6119L - Seminar in Anatomical Sciences Techniques (3)

**Elective Courses**  
2 Total Credits

- Earn at least 2 credits from the following:
  - BSC5665 - Clinical Embryology and Congenital Malformations (3)
  - APK6102 - Functional Anatomy and Kinesiology (3)
  - APK6107 - Cardiovascular Exercise Physiology (3)
  - PHT5125 - Clinical Kinesiology (2)
  - PHT6306 - Pathology in Rehabilitation (2)
  - ZOO5758C - Vertebrate Histology (4)
  - ANG5525C - Human Osteology (4)
  - ANG6520C - Advanced Human Osteology (3)

Grand Total Credits: **20**

**Financial Information**

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http://finaid.ucf.edu

**Athletic Training MAT**

**College**

College of Health Professions and Sciences

**Department**

School of Kinesiology and Rehabilitation Sciences

**Program Website**

https://healthprofessions.ucf.edu/athletictraining
Program Handbook Link

Athletic Training Program Handbook

Program Contact Information

Athletic Training Program
atinfo@ucf.edu
Telephone: 407-823-2747
Health Sciences II 119

Kristen Schellhase EdD, LAT, ATC
Program Director/Senior Lecturer
kristen.schellhase@ucf.edu
Telephone: 407-823-3463
Health Sciences II 121

Is this program available 100% online?

No

Licensure Disclosure

The program is fully accredited by the Commission on Accreditation of Athletic Training Education (CAATE) through 2026-27. For information on how this program may prepare students for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Master-of-Athletic-Training-June2020.pdf.

Program Description

The Master of Athletic Training (MAT) program is designed to enable students to demonstrate, in the classroom and during clinical experiences, that they have achieved levels of comprehension, competency, and proficiency expected of entry-level athletic trainers.

The program's classroom component is divided into two sections: athletic training theory and practice, and clinical experiences. The courses are designed to expose students to information through multiple didactic, laboratory, and clinical experiences. These courses incorporate the Curricular Content Standards set forth by the Commission on Accreditation of Athletic Training Education (CAATE).

All students are required to complete the curriculum in the established sequence of courses.

By combining excellence in teaching, the latest technologies available in education, and outstanding clinical site affiliations, graduates of the program are fully prepared to take and pass the comprehensive Board of Certification (BOC) exam and start their careers as athletic trainers.

The MAT degree program is a two-year full-time professional master's program. The courses are taken in a prescribed sequence over 6 semesters, including 18 credit hours of clinical practice. Clinical practice occurs under the direct supervision of a certified and licensed athletic trainer.

Mission

The Master of Athletic Training program prepares graduates to advance the quality of healthcare provided to physically active people through interdisciplinary patient-centered education. The Program is committed to providing students with enriching didactic, clinical, and research experiences that foster communication, critical thinking, leadership, and collaboration. Graduates of the Program will understand the role of the athletic trainer as a member of the healthcare team and will advocate for the advancement of the profession.

Vision

The Master of Athletic Training program aspires to be a nationally recognized leader in athletic training education where diverse students, faculty, and preceptors advance healthcare through innovation in education, research, and clinical practice.

Values

The Master of Athletic Training program faculty values initiative, integrity, compassion, inclusion, and altruism.
**Program Prerequisites**

Completion of prerequisite coursework outlined below with a minimum grade of "C" (2.0) is required. Candidates with all prerequisites completed at the time of application may be given preference over those still completing courses. Courses older than 10 years will not be accepted.

**General Bio/Biology** - A minimum of 4 credits (including a lab) for science majors - Biology courses for non-science majors and non-human biology courses are not acceptable.

**Human Anatomy and Physiology** - A minimum of 8 credits (including two labs) for science majors - Anatomy and physiology courses for non-science majors and non-human anatomy and physiology courses are not acceptable.

- Option 1: One semester of Human Anatomy with lab and one semester of Human Physiology with lab
- Option 2: Two semesters of Anatomy and Physiology combined courses with a lab each (A&P-I and A&P-II)

**Statistics** - A minimum of 3 credit hours

**Human Nutrition/Clinical Nutrition** - A minimum of 3 credit hours for science or health/medicine/nursing majors

**General Psychology** - A minimum of 3 credit hours - Any course taken within a psychology department/unit will be acceptable.

**Exercise Physiology** - A minimum of 3 credit hours

**Biomechanics or Kinesiology** - A minimum of 3 credit hours

**General Chemistry/Chemistry I** - A minimum of 4 credits (including a lab) for science majors

**Physics I** - A minimum of 4 credits (including a lab) for science majors

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses

65 Total Credits

- Complete all of the following
  
  **Summer 1 - Semester 1**
  - Complete the following:
    - ATR5016 - Foundational Behaviors of Athletic Training Practice I (1)
    - ATR5106C - Prevention of Injury and Illness in Athletic Training Practice (2)
    - ATR5206C - Functional Human Anatomy for Athletic Trainers (3)
    - ATR5117C - Acute Care in Athletic Training Practice I (3)
  
  **Fall 1 - Semester 2**
  - Complete the following:
    - ATR5017 - Foundational Behaviors of Athletic Training Practice II (1)
    - ATR5219C - Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice I (3)
    - ATR5306C - Therapeutic Interventions in Athletic Training Practice I (3)
    - ATR5406C - General Medical Conditions in Athletic Training Practice I (2)
    - ATR5617 - Athletic Training Research I (1)
    - ATR5815L - Practicum in Athletic Training I (2)
  
  **Spring 1 - Semester 3**
  - Complete the following:
    - ATR5217C - Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice II (3)
    - ATR5307C - Therapeutic Interventions in Athletic Training Practice II (3)
    - ATR5516 - Healthcare Administration in Athletic Training Practice I (2)
    - ATR5825L - Practicum in Athletic Training II (2)
    - ATR6407C - General Medical Conditions in Athletic Training Practice II (2)
  
  **Summer 2 - Semester 4**
  - Complete the following:
    - ATR6218C - Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice III (3)
    - ATR6308C - Therapeutic Interventions in Athletic Training Practice III (3)
    - ATR6618C - Athletic Training Research II (1)
    - ATR6835L - Practicum in Athletic Training III (1)
  
  **Fall 2 - Semester 5**
  - Complete the following:
    - ATR6309C - Therapeutic Interventions in Athletic Training Practice IV (3)
    - ATR6845L - Practicum in Athletic Training IV (9)
  
  **Spring 2 - Semester 6**
  - Complete the following:
    - ATR6517 - Healthcare Administration in Athletic Training Practice II (2)
    - ATR6505 - Athletic Training Seminar (1)
    - ATR6118L - Acute Care in Athletic Training Practice II (1)
    - ATR6619C - Athletic Training Research III (4)
    - ATR6855L - Practicum in Athletic Training V (4)

Comprehensive Examination

0 Total Credits

- Passing a comprehensive examination with a grade of 80 percent or better is a requirement for continued progress in the Master of Athletic Training degree. This examination will be given to every student at the end of the third semester (mid-point of the program). Students must take the exam at that time and will be allowed a maximum of three (3) attempts. Failure to pass the examination in 3 attempts will result in a review by the AT Program Progression and Retention Committee and may result in dismissal from the program.

Grand Total Credits: 65
Program Details

Equipment Fee
Students enrolled full-time in the Master of Athletic Training degree program pay an estimated Equipment Fee of $56 each semester they are enrolled.

Additional Program Costs
Current expenses for tuition fees and other university fees are listed on the UCF Student Accounts website(https://studentaccounts.ucf.edu/tf-graduate/). Additionally, several MAT courses include Material and Supply fees which are listed in the UCF Graduate Catalog. Students in the MAT program are also expected to pay for the following: nametags, CPR/First Aid/AED certification, appropriate clinical attire, transportation costs, and background checks/fingerprinting.

Independent Learning
All students in the Master of Athletic Training program are required to engage in independent learning, a process in which individuals take the initiative, with or without the help of others, to attain knowledge, skills, and professional behaviors. Activities such as case studies, critical analysis of literature, research/capstone projects, and clinical practica provide important independent learning experiences that give students ample opportunity to demonstrate and develop independent learning skills.

Financial Information
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https://funding.graduate.ucf.edu

Athletic Training MAT - Athletic Training MAT, UCF BS to UCF MAT Track

Track Website
https://healthprofessions.ucf.edu/athletictraining

Track Handbook
Athletic Training MAT Handbook

Track Contact Information

Kristen Schellhase EdD, LAT, ATC
Program Director/Associate Lecturer
kristen.schellhase@ucf.edu
Telephone: 407-823-3463
Health Sciences II 121

Kim MacLennan
Academic Program Coordinator
kim.maclennan@ucf.edu
Telephone: 407-823-2747
Health Sciences II 119

Online Availability
No
Licensure Disclosure

The program is fully accredited by the Commission on Accreditation of Athletic Training Education (CAATE) through 2026-27. For information on how this program may prepare students for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Master-of-Athletic-Training-June2020.pdf.

Track Description

This program is temporarily not accepting applications effective Fall 2022.

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The MAT degree program is a two-year full-time professional master’s program. The courses are taken in a prescribed sequence over 6 semesters, including 18 credit hours of clinical practice. Clinical practice occurs under the direct supervision of a certified and licensed athletic trainer.

Track Prerequisites

This track and its application process should ONLY be used by students who hold or will earn a degree from UCF AND only intend to apply to the UCF Master of Athletic Training. An application through ATCAS is ONLY required for students holding a UCF bachelor’s degree if they intend to apply to athletic training graduate programs at other institutions AND UCF.

Completion of prerequisite coursework outlined below with a minimum grade of "C" (2.0) is required. Candidates with all prerequisites completed at the time of application may be given preference over those still completing courses. Courses older than 10 years will not be accepted.

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General Chemistry/Chemistry I - A minimum of 4 credits (including a lab) for science majors

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2022-2023 Graduate Catalog
College of Graduate Studies Contact Information

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ETS PPI: 5233
Degree Requirements

Required Courses

65 Total Credits

- Complete all of the following

  Summer 1 - Semester 1
  - Complete the following:
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    - ATR5106C - Prevention of Injury and Illness in Athletic Training Practice (2)
    - ATR5206C - Functional Human Anatomy for Athletic Trainers (3)
    - ATR5117C - Acute Care in Athletic Training Practice I (3)

  Fall 1 - Semester 2
  - Complete the following:
    - ATR5017 - Foundational Behaviors of Athletic Training Practice II (1)
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    - ATR5825L - Practicum in Athletic Training II (2)
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  - Complete the following:
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    - ATR6309C - Therapeutic Interventions in Athletic Training Practice IV (3)
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Grand Total Credits: 65
Track Details

Equipment Fee

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Communication Sciences and Disorders MA

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Program Website
https://healthprofessions.ucf.edu/csd/masters/

Program Handbook Link
Communication Sciences and Disorders Handbook
Program Contact Information

Jacqueline Towson, PhD
Associate Professor
csdgraduate@ucf.edu
Telephone: 407-823-4798
HS2 101

Christie Hasegawa
Graduate Advisor
csdgraduate@ucf.edu
407-823-4890

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Communication-Sciences-Disorders-MA.pdf.

Program Description
The MA in Communication Sciences and Disorders is intended for those interested in working with children and adults who have communication disorders. The School of Communication Sciences and Disorders offers a traditional plan of study for full-time students with undergraduate degrees in communication sciences and disorders or speech-language pathology and audiology. In addition to the traditional plan of study, three tracks in the MA in Communication Sciences and Disorders are also offered: Accelerated, Consortium and Out of Field tracks. All programs are offered face-to-face on the Orlando campus, but each has unique admission requirements and sequencing of courses based on the student's academic and professional background. Students must begin the program in the semester for which they are admitted and must follow the prescribed sequence of academic and clinical courses outlined in the catalog for that track.

Each track provides academic and clinical education experiences necessary for certification by the American Speech-Language-Hearing Association (ASHA), the Florida Department of Education, and licensure by the state of Florida. For information on how this program may prepare students for professional licensure, please visit https://healthprofessions.ucf.edu/csd/masters/.

The ASHA Council on Academic Accreditation (CAA) has accredited the Master of Arts Degree in Communication Sciences and Disorders at UCF since 1986.

The Communication Sciences and Disorders program strives to educate students to become successful practitioners in the field of speech-language pathology. To that end, the ASHA Code of Ethics is reinforced throughout the academic curriculum. Violations of the ASHA Code of Ethics are grounds for academic sanctions or dismissal from the program.

The Traditional program is a full-time cohort program (six consecutive semesters, including two summers) for students with undergraduate degrees in communication sciences and disorders or speech-language pathology and audiology. Students with undergraduate degrees in other majors (out of field) should apply to the Out of Field track to complete additional undergraduate prerequisite coursework.

The Consortium track is a part-time cohort program offered as a cooperative effort between the UCF School of Communication Sciences and Disorders and the Central Florida Public School Consortium to address the critical shortage of public school speech-language pathologists in the area. Applicants to this track must be employed in one of the following participating school districts in the Central Florida Consortium: Brevard, Citrus, Flagler, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia.

The Accelerated (BA/BS to MA) requires full-time enrollment and enables highly qualified current UCF undergraduate students in Communication Sciences and Disorders to share one semester of courses between the undergraduate and graduate degree programs. Students enroll in graduate-level courses in the final semester of their undergraduate program to satisfy the bachelor's degree requirements. If admitted to the master's program, they are allowed to use those courses toward the master's degree.

The Out of Field track is a full-time cohort program for students who do not have a bachelor's degree in communication sciences and disorders or a related field or those who have not completed the necessary discipline-specific undergraduate prerequisite classes. It requires two semesters of undergraduate courses in addition to the graduate curriculum requirements and is typically completed in eight consecutive semesters.

Please scroll to the bottom of this page for further details on these Tracks.
Program Prerequisites

- To be certified to practice by the American Speech-Language-Hearing Association (ASHA), all applicants must have transcript credit, which could include course work, advanced placement, CLEP, or examination equivalency, for each of the following areas at the undergraduate level: biological sciences, physical sciences, social/behavioral sciences, and statistics.
  - Courses must be taken outside the discipline.
  - Courses other than statistics may consist of any number of credits.
  - Statistics course must be at least 3 credit hours and may be at the undergraduate (i.e. STA 2014 Principles of Statistics OR STA 2023 Statistical Methods I) or graduate level.
  - Courses must be completed with a grade of "C" or better.
- This program requires an undergraduate degree in communication sciences and disorders or speech-language pathology and audiology. Applicants with undergraduate degrees in other majors (out-of-field) should apply to the Out of Field track which includes additional required credit hours.

College of Graduate Studies Contact Information

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Institution Codes
GRE: 7407
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

39 Total Credits

- Complete the following:
  - SPA6204 - Articulation/Phonological Dis (3)
  - SPA6211 - Voice and Upper Airway Disorders (3)
  - SPA6225C - Fluency Disorders (3)
  - SPA6236 - Motor Speech Disorders in Adults and Children (3)
  - SPA6327 - Aural Habilitation Rehab (3)
  - SPA6410 - Aphasia and Related Disorders (3)
  - SPA6474 - Assessment and Management of Culturally and Linguistically Diverse Populations (3)
  - SPA6541 - Assessment of Language Disorders in Children and Adolescents (3)
  - SPA6542 - Intervention of Language Disorders in Children and Adolescents (3)
  - SPA6559 - Augmentative and Alternative Communication (3)
  - SPA6565 - Feeding and Swallowing Disorders (3)
  - SPA6805 - Research in Communicative Disorders (3)
  - SPA6417 - Management of Acquired Cognitive/Communication Disorders Across the Lifespan (3)

**Clinical Practice**

24 Total Credits

- Complete all of the following
  - Complete the following:
    - SPA6551 - Foundations of Clinical Practice: Level I (1)
    - SPA6503 - Foundations of Clinical Practice Level II (1)
    - SPA6503L - Found Clinic Practice-II APP (1)
    - SPA6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology (1)
    - SPA6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia (1)
    - SPA6942 - Foundations of Clinical Practice: Level III (1)
    - SPA6942L - Found Clinic Practice-III APP (1)
    - SPA6943 - Advanced Clinical Practice Seminar (1)
  - Earn at least 2 credits from the following types of courses: Students are required to take both SPA 6503L and SPA 6942L twice.
  - Earn at least 14 credits from the following types of courses: SPA 6946 - Clinical Practice
  - Supervised clinical practice is an integral part of the graduate program in Communication Sciences and Disorders. It provides students with an opportunity to apply classroom knowledge to the evaluation and management of individuals with a wide variety of communication disorders. Students complete three clinical practica at the UCF Communication Disorders Clinic and other affiliated facilities, as well as external rotations in schools, hospitals, rehabilitation centers, skilled nursing facilities, long-term care facilities, community clinics, and private practices. Through these practica and external rotations, students obtain a minimum of 400 clock hours of supervised clinical experience in accordance with the guidelines outlined by the American Speech-Language-Hearing Association (ASHA). Clinical practica and external rotations vary in length and do not always coincide with the academic calendar.

**Thesis/Nonthesis Option**

9 Total Credits

- Complete 1 of the following
  - Thesis Option
  - Complete all of the following
    - Earn at least 6 credits from the following types of courses: SPA 6971 - Thesis
    - Earn at least 3 credits from the following types of courses: Elective course selected in consultation with Faculty advisor.
    - Thesis hours cannot be counted toward graduation requirements if students fail to complete or successfully defend their thesis. For additional information, thesis students and their advisory committees should refer to the thesis requirements in the UCF Graduate Catalog.
  - Nonthesis Option
  - Earn at least 9 credits from the following types of courses: Elective courses selected in consultation with Faculty advisor.

**Comprehensive Examination and Clinical Documentation**

0 Total Credits

- In addition to the coursework and supervised clinical clock hour requirements listed above, satisfactory completion of a School Comprehensive Examination and submission of final clinical documentation, including demonstration of clinical competence and professionalism are required for completion of the master's degree in Communication Sciences and Disorders.

Grand Total Credits: 72
**Program Details**

**Equipment Fee**

Students in the Communication Sciences and Disorders MA Program pay a $90 equipment fee each semester they are enrolled.

**Additional Program Costs**

The program requires students to pay additional fees for the required background checks, clinic uniform, and registration for the academic/clinical competencies tracking system. In addition, some courses have Material and Supply fees that are charged in the semester the course is taken.

**Sample Plan of Study for the Traditional Program**

The Traditional MA program requires a prescribed sequence of academic and clinical courses which may vary according to the semester of entry. The following is a sample plan of study.

**Semester 1 (13 credit hours)**
- SPA 6204 - Articulation/Phonological Dis 3 Credit Hours
- SPA 6541 - Assessment of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6542 - Intervention of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6551 - Foundations of Clinical Practice: Level I 1 Credit Hours
- SPA 6805 - Research in Communicative Disorders 3 Credit Hours

**Semester 2 (15 Credit Hours)**
- SPA 6211 - Voice & Upper Airway Disorders 3 Credit Hours
- SPA 6410 - Aphasia and Related Disorders 3 Credit Hours
- SPA 6417 - Management of Acquired Cognitive-Communication Disorders Across the Lifespan 3 Credit Hours
- SPA 6503 - Foundations of Clinical Practice Level II 1 Credit Hours
- SPA 6503L - Found Clinic Practice-II APP 1 Credit Hours (X 2)
- SPA 6559 - Augmentative and Alternative Communication 3 Credit Hours

**Semester 3 (13 Credit Hours)**
- SPA 6327 - Aural Habilitation Rehab 3 Credit Hours
- SPA 6474 - Assessment and Management of Culturally and Linguistically Diverse Populations 3 Credit Hours
- SPA 6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology 1 Credit Hours
- SPA 6565 - Feeding and Swallowing Disorders 3 Credit Hours
- SPA 6942 - Foundations of Clinical Practice: Level III 1 Credit Hours
- SPA 6942L - Found Clinic Practice-III APP 1 Credit Hours (X 2)

**Semester 4**
- SPA 6225C - Fluency Disorders 3 Credit Hours
- SPA 6236 - Motor Speech Disorders in Adults and Children 3 Credit Hours
- SPA 6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia 1 Credit Hours
- SPA 6943 - Clinical Practice 1 Credit Hours
- SPA 6946 - Clinical Practice*
- Elective 3 Credit Hours*

**Semester 5**
- SPA 6946 - Clinical Practice*
- Elective 3 Credit Hours*

**Semester 6**
- SPA 6946 - Clinical Practice*
- Elective 3 Credit Hours*

*A total of 14 credit hours of SPA 6946 Clinical Practice is required. Electives are selected in consultation with the clinical and academic advisors and may be completed in the fourth, fifth and/or sixth semester depending on the clinical placement credit hours each semester.

**Independent Learning**

All students in the Master of Arts in Communication Sciences and Disorders program engage in independent learning through inquiry, dialogue, and practice. Experiences such as client case studies, scholarly reviews, research projects, clinical practica and external rotations provide students independent learning opportunities to attain knowledge, skills, and professional behaviors. In capstone external rotations, students bridge university classroom and clinic lessons to real-world educational and health-related settings.
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Communication Sciences and Disorders MA - Communication Sciences and Disorders MA, Accelerated BA/BS to MA Track

Track Website
https://healthprofessions.ucf.edu/csd/masters/

Track Handbook
Communication Sciences and Disorders Handbook

Track Contact Information

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Online Availability
No

Licensure Disclosure

For information on how this program may prepare students for professional licensure, please visit https://healthprofessions.ucf.edu/csd/masters/.

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Communication-Sciences-Disorders-MA.pdf.
**Track Description**

The Communication Sciences and Disorders MA program is intended for those interested in working with children and adults who have communication disorders. The School of Communication Sciences and Disorders offers an Accelerated BA/BS to MA Track for highly qualified UCF undergraduate majors in communication sciences and disorders that enables them to complete a master's degree in one less semester than students in the Traditional program. Once students complete the BA/BS, they must apply and be admitted to the master's degree program. Students must begin the program in the semester for which they are admitted and must follow the prescribed sequence of academic and clinical courses outlined in the catalog for that track. The program is offered face-to-face on the Orlando campus.

The Communication Sciences and Disorders program strives to educate students to become successful practitioners in the field of speech-language pathology. To that end, the American Speech-Language-Hearing Association (ASHA) Code of Ethics is reinforced throughout the academic curriculum. Violations of the ASHA Code of Ethics are grounds for academic sanctions or dismissal from the program.

**Track Prerequisites**

To be certified to practice by the American Speech-Language-Hearing Association (ASHA), all applicants must have transcript credit, which could include course work, advanced placement, CLEP, or examination equivalency, for each of the following areas at the undergraduate level: biological sciences, physical sciences, social/behavioral sciences, and statistics.

- Courses must be taken outside the discipline.
- Courses other than statistics may consist of any number of credits.
- Statistics course must be at least 3 credit hours and may be at the undergraduate (i.e. STA 2014 Principles of Statistics OR STA 2023 Statistical Methods I) or graduate level.
- Courses must be completed with a grade of "C" or better.

For the Accelerated BA/BS to MA track, UCF undergraduate students enroll in up to 16 credit hours of graduate-level courses while completing the bachelor's degree. This enables students to achieve a master's degree in the UCF School of Communication Sciences and Disorders in one less semester.

Up to 16 credit hours of approved 6000-level courses as outlined below, with grades of "B" (3.0) or better, may be counted toward the BA/BS and MA degrees. Additional requirements include:

- Adopting the most current undergraduate catalog for students changing degree programs.
- Earning at least a "B" (3.0) in each undergraduate and graduate course to be counted toward the major.
- Being assessed tuition and fees at the graduate rate for graduate courses.

**Undergraduate Requirements**

The Shared Courses below may be used to replace:

- SPA 4400 Language Disorders Across the Life Span
- SPA 4476 Speech Disorders Across the Life Span
- SPA 4478 Multicultural Aspects of Communication Disorders and Differences
- SPA 4803 Research Methods in Communication Sciences and Disorders
- SPA 4870 Capstone Course
- one restricted elective in the undergraduate curriculum

**Shared Courses**

The following is a list of graduate courses that may be used to fulfill degree requirements for both the undergraduate and graduate programs.

- SPA 6204 - Articulation/Phonological Dis 3 Credit Hours
- SPA 6410 - Aphasia and Related Disorders 3 Credit Hours
- SPA 6551 - Foundations of Clinical Practice: Level I 1 Credit Hours
- SPA 6541 - Assessment of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6542 - Intervention of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6805 - Research in Communicative Disorders 3 Credit Hours
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

- **39 Total Credits**
  - Complete the following:
    - SPA6204 - Articulation/Phonological Disorders (3)
    - SPA6211 - Voice and Upper Airway Disorders (3)
    - SPA6225C - Fluency Disorders (3)
    - SPA6236 - Motor Speech Disorders in Adults and Children (3)
    - SPA6327 - Aural Habilitation Rehab (3)
    - SPA6410 - Aphasia and Related Disorders (3)
    - SPA6474 - Assessment and Management of Culturally and Linguistically Diverse Populations (3)
    - SPA6559 - Augmentative and Alternative Communication (3)
    - SPA6565 - Feeding and Swallowing Disorders (3)
    - SPA6805 - Research in Communicative Disorders (3)
    - SPA6541 - Assessment of Language Disorders in Children and Adolescents (3)
    - SPA6542 - Intervention of Language Disorders in Children and Adolescents (3)
    - SPA6417 - Management of Acquired Cognitive/Communication Disorders Across the Lifespan (3)

**Clinical Practice**

- **24 Total Credits**
  - Complete all of the following
    - Complete the following:
      - SPA6551 - Foundations of Clinical Practice: Level I (1)
      - SPA6503 - Foundations of Clinical Practice Level II (1)
      - SPA6503L - Found Clinic Practice-II APP (1)
      - SPA6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology (1)
      - SPA6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia (1)
      - SPA6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia (1)
      - SPA6942L - Found Clinic Practice-III APP (1)
      - SPA6943 - Advanced Clinical Practice Seminar (1)
    - Earn at least 2 credits from the following types of courses:
      - Students will repeat SPA 6503L and SPA 6942L twice.
    - Earn at least 14 credits from the following types of courses:
      - SPA 6946 - Clinical Practice
    - Supervised clinical practice is an integral part of the graduate program in Communication Sciences and Disorders. It provides students with an opportunity to apply classroom knowledge to the evaluation and management of individuals with a wide variety of communication disorders. Students complete three clinical practica at the UCF Communication Disorders Clinic and other affiliated facilities, as well as external rotations in schools, hospitals, rehabilitation centers, skilled nursing facilities, long-term care facilities, community clinics, and private practices. Through these practica and external rotations, students obtain a minimum of 400 clock hours of supervised clinical experience in accordance with the guidelines outlined by the American Speech-Language-Hearing Association (ASHA). Clinical practica and external rotations vary in length and do not always coincide with the academic calendar.

**Thesis/Nonthesis Option**

- **9 Total Credits**
  - Complete 1 of the following
    - Thesis Option
      - Complete all of the following
        - Earn at least 6 credits from the following types of courses:
          - SPA 6971 - Thesis
        - Earn at least 3 credits from the following types of courses:
          - Select one 3 credit hour elective course in consultation with Faculty Advisor.
        - Thesis hours cannot be counted toward graduation requirements if students fail to complete or successfully defend their thesis. For additional information, thesis students and their advisory committees should refer to the thesis requirements in the UCF Graduate Catalog.
    - Nonthesis Option
      - Earn at least 9 credits from the following types of courses:
        - Students will work with Faculty advisor to choose 3 electives to complete this requirement.

**Comprehensive Examination and Clinical Documentation**

- **0 Total Credits**
  - In additional to the coursework and supervised clinical clock hour requirements listed above, satisfactory completion of a School Comprehensive Examination and submission of final clinical documentation, including demonstration of clinical competence and professionalism are required for completion of the master's degree in Communication Sciences and Disorders.

**Grand Total Credits:** 72
Track Details

Equipment Fee

Students in the Communication Sciences and Disorders MA Program pay a $90 equipment fee each semester they are enrolled.

Additional Program Cost

The program requires students to pay additional fees for the required background checks, clinic uniform, and registration for the academic/clinical competencies tracking system. In addition, some courses have Material and Supply fees that are charged in the semester the course is taken.

Sample Plan of Study for the Traditional Program

The Accelerated BA/BS to MA program requires a prescribed sequence of academic and clinical courses which may vary according to the semester of entry. The following is a sample plan of study.

Semester 1 (13 credit hours) - typically completed as an undergraduate student

- SPA 6204 - Articulation/Phonological Dis 3 Credit Hours
- SPA 6541 - Assessment of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6542 - Intervention of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6551 - Foundations of Clinical Practice: Level I 1 Credit Hours
- SPA 6805 - Research in Communicative Disorders 3 Credit Hours

Semester 2 (15 Credit Hours)

- SPA 6211 - Voice Disorders 3 Credit Hours
- SPA 6410 - Aphasia and Related Disorders 3 Credit Hours
- SPA 6417 - Management of Acquired Cognitive/Communication Disorders Across the Lifespan 3 Credit Hours
- SPA 6503 - Foundations of Clinical Practice Level II 1 Credit Hours
- SPA 6503L - Found Clinic Practice-II APP 1 Credit Hours (X 2)
- SPA 6559 - Augmentative and Alternative Communication 3 Credit Hours

Semester 3 (13 Credit Hours)

- SPA 6327 - Aural Habilitation Rehab 3 Credit Hours
- SPA 6474 - Assessment and Management of Culturally and Linguistically Diverse Populations 3 Credit Hours
- SPA 6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology 1 Credit Hours
- SPA 6565 - Feeding and Swallowing Disorders 3 Credit Hours
- SPA 6942 - Foundations of Clinical Practice: Level III 1 Credit Hours
- SPA 6942L - Found Clinic Practice-III APP 1 Credit Hours (X 2)

Semester 4

- SPA 6225C - Fluency Disorders 3 Credit Hours
- SPA 6236 - Motor Speech Disorders in Adults and Children 3 Credit Hours
- SPA 6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia 1 Credit Hours
- SPA 6943 - Clinical Practice 1 Credit Hours
- SPA 6946 - Clinical Practice*
  - Elective 3 Credit Hours*

Semester 5

- SPA 6946 - Clinical Practice*
  - Elective 3 Credit Hours*

Semester 6

- SPA 6946 - Clinical Practice*
  - Elective 3 Credit Hours*

* A total of 14 credit hours of SPA 6946 Clinical Practice is required. Electives are selected in consultation with the clinical and academic advisors and may be completed in the fourth, fifth and/or sixth semester depending on the clinical placement credit hours each semester.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student’s graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Communication Sciences and Disorders MA - Communication Sciences and Disorders MA, Consortium Track

Track Website
https://healthprofessions.ucf.edu/csd/masters/

Track Handbook
Communication Sciences and Disorders Handbook

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HS2 101

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Graduate Advisor
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Telephone: 407-823-4890

Online Availability
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Communication-Sciences-Disorders-MA.pdf.
**Track Description**

The MA in Communication Sciences and Disorders is intended for those interested in working with children and adults who have communication disorders. The School of Communication Sciences and Disorders offers the Consortium track which is designed specifically for students with a bachelor's degree in communication sciences and disorders or speech-language pathology and audiology who currently work in participating central Florida public school districts and have been providing speech and language services for at least one semester prior to application. The goal of this program is to address the critical shortage of public-school speech-language pathologists. It represents a cooperative effort between the UCF School of Communication Sciences and Disorders and the Central Florida Public School Consortium. Participating school districts in the Central Florida Consortium are Brevard, Citrus, Flagler, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia.

Students must begin the program in the semester for which they are admitted and enroll every semester, including summers, for eight semesters following a prescribed sequence of academic and clinical courses. The program is offered face-to-face on the Orlando campus.

The Communication Sciences and Disorders program strives to educate students to become successful practitioners in the field of speech-language pathology. To that end, the American Speech-Language-Hearing Association (ASHA) Code of Ethics is reinforced throughout the academic curriculum. Students who violate the ASHA Code of Ethics may be subject to academic sanctions or dismissed from the program.

**Track Prerequisites**

To be certified to practice by the American Speech-Language-Hearing Association (ASHA), all students must have transcript credit, which could include course work, advanced placement, CLEP, or examination equivalency, for each of the following areas at the undergraduate level: biological sciences, physical sciences, social/behavioral sciences, and statistics.

- Courses must be taken outside the discipline.
- Courses other than statistics may consist of any number of credits.
- Statistics course must be at least 3 credit hours and may be at the undergraduate (i.e. STA 2014 Principles of Statistics OR STA 2023 Statistical Methods I) or graduate level.
- Courses must be completed with a grade of "C" or better.

This track requires an undergraduate degree in communication sciences and disorders or speech-language pathology and audiology and full-time employment in one of the participating school districts listed above.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 7407  
TOEFL: 5233  
ETS PPI: 5233
Degree Requirements

Required Courses 39 Total Credits

- Complete the following:
  - SPA6204 - Articulation/Phonological Dis (3)
  - SPA6211 - Voice and Upper Airway Disorders (3)
  - SPA6225C - Fluency Disorders (3)
  - SPA6236 - Motor Speech Disorders in Adults and Children (3)
  - SPA6327 - Aural Habilitation Rehab (3)
  - SPA6410 - Aphasia and Related Disorders (3)
  - SPA6474 - Assessment and Management of Culturally and Linguistically Diverse Populations (3)
  - SPA6559 - Augmentative and Alternative Communication (3)
  - SPA6565 - Feeding and Swallowing Disorders (3)
  - SPA6805 - Research in Communicative Disorders (3)
  - SPA6541 - Assessment of Language Disorders in Children and Adolescents (3)
  - SPA6542 - Intervention of Language Disorders in Children and Adolescents (3)
  - SPA6417 - Management of Acquired Cognitive/Communication Disorders Across the Lifespan (3)

Clinical Practice 24 Total Credits

- Complete all of the following
  - Complete the following:
    - SPA6551 - Foundations of Clinical Practice: Level I (1)
    - SPA6503 - Foundations of Clinical Practice Level II (1)
    - SPA6503L - Found Clinic Practice-II APP (1)
    - SPA6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology (1)
    - SPA6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia (1)
    - SPA6942L - Found Clinic Practice-III APP (1)
    - SPA6942L - Found Clinic Practice-III APP (1)
    - SPA6943 - Advanced Clinical Practice Seminar (1)
  - Earn at least 2 credits from the following types of courses:
    - Students will repeat SPA 6503L and SPA 6942L twice.
  - Earn at least 14 credits from the following types of courses:
    - SPA 6946 - Clinical Practice
  - Supervised clinical practice is an integral part of the graduate program in communication sciences and disorders. It provides students with an opportunity to apply classroom knowledge to the evaluation and management of individuals with a wide variety of communication disorders. Students complete three clinical practica at the UCF Communication Disorders Clinic and other affiliated facilities, as well as external rotations in schools, hospitals, rehabilitation centers, skilled nursing facilities, long-term care facilities, community clinics, and private practices. Through these practica and external rotations, students obtain a minimum of 400 clock hours of supervised clinical experience in accordance with the guidelines outlined by the American Speech-Language-Hearing Association (ASHA). Clinical practica and external rotations vary in length and do not always coincide with the academic calendar.

Thesis/Nonthesis Option 9 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        - SPA 6971 - Thesis
      - Earn at least 3 credits from the following types of courses:
        - 1 Elective course selected in consultation with Faculty advisor.
      - Thesis hours cannot be counted toward graduation requirements if students fail to complete or successfully defend the thesis. For additional information, thesis students and their advisory committees should refer to the thesis requirements in the UCF Graduate Catalog.
  - Nonthesis Option
    - Earn at least 9 credits from the following types of courses:
      - Appropriate electives selected in consultation with Faculty advisor.

Comprehensive Examination and Clinical Documentation 0 Total Credits

- In additional to the coursework and supervised clinical clock hour requirements listed above, satisfactory completion of a School Comprehensive Examination and submission of final clinical documentation, including demonstration of clinical competence and professionalism are required for completion of the master's degree in Communication Sciences and Disorders.

Grand Total Credits: 72

Track Details

Consortium track students typically complete one external rotation outside of the school setting. The second external rotation must be completed during the academic year.
Consortium track students typically complete one external rotation outside of the school setting. The second external rotation must be completed in a school setting that is different from the practitioner's primary employment setting.

**Equipment Fee**

Students in the Communication Sciences and Disorders MA Program pay a $90 equipment fee each semester that they are enrolled.

**Additional Program Costs**

The program requires students to pay additional fees for the required background checks, clinic uniform, and registration for the academic/clinical competencies tracking system. In addition, some courses have Material and Supply fees that are charged in the semester the course is taken.

The Consortium track requires a prescribed sequence of academic and clinical courses which must be followed. The following is a sample plan of study.

**Semester 1 - Spring (7 credit hours)**
- SPA 6541 - Assessment of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6542 - Intervention of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6551 - Foundations of Clinical Practice: Level I 1 Credit Hours

**Semester 2 - Summer (13 Credit Hours)**
- SPA 6410 - Aphasia and Related Disorders 3 Credit Hours
- SPA 6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology 1 Credit Hours
- SPA 6559 - Augmentative and Alternative Communication 3 Credit Hours
- SPA 6565 - Feeding and Swallowing Disorders 3 Credit Hours
- SPA 6942 - Foundations of Clinical Practice: Level III 1 Credit Hours
- SPA 6942L - Found Clinic Practice-III APP 1 Credit Hours (X 2)

**Semester 3 - Fall (9 Credit Hours)**
- SPA 6204 - Articulation/Phonological Dis 3 Credit Hours
- SPA 6474 - Assessment and Management of Culturally and Linguistically Diverse Populations 3 Credit Hours
- SPA 6503 - Foundations of Clinical Practice Level II 1 Credit Hours
- SPA 6503L - Found Clinic Practice-II APP 1 Credit Hours (X 2)

**Semester 4 - Spring (6 Credit Hours)**
- SPA 6225C - Fluency Disorders 3 Credit Hours
- SPA 6236 - Motor Speech Disorders in Adults and Children 3 Credit Hours

**Semester 5 - Summer**
- SPA 6211 - Voice Disorders 3 Credit Hours
- SPA 6327 - Aural Habilitation Rehab 3 Credit Hours
- SPA 6943 - Clinical Practice 1 Credit Hours
- SPA 6946 - Clinical Practice*

**Semester 6 - Fall (7 Credit Hours)**
- SPA 6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia 1 Credit Hours
- Elective - SPA 6843 Severe Reading and Writing Disorders 3 Credit Hours
- Elective - SPA 6057 Methods of Speech Language Disorders 3 Credit Hours

**Semester 7 - Spring**
- SPA 6417 - Management of Acquired Cognitive-Communication Disorders Across the Lifespan 3 Credit Hours
- SPA 6805 - Research in Communicative Disorders 3 Credit Hours
- SPA 6946 - Clinical Practice*

**Semester 8 - Summer**
- SPA 6946 - Clinical Practice*
- Elective 3 Credit Hours*

*A total of 14 credit hours of SPA 6946 Clinical Practice is required. Electives are selected in consultation with the clinical and academic advisors.

**Independent Learning**

All students in the Master of Arts in communication sciences and disorders program engage in independent learning through inquiry, dialogue, and practice. Experiences such as client case studies, scholarly reviews, research projects, clinical practica and external
rotations provide students independent learning opportunities to attain knowledge, skills and professional behaviors. In capstone external rotations, students bridge university classroom and clinic lessons to real-world educational and health-related settings.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Communication Sciences and Disorders MA - Communication Sciences and Disorders MA, Out of Field Track

Track Website
Master's Program - UCF School of Communication Sciences and Disorders

Track Handbook
Communication Sciences and Disorders MA Handbook

Track Contact Information
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Telephone: 407-823-4798
HS 2 101

Christie Hasegawa
Graduate Advisor
csdgraduate@ucf.edu
Telephone: 407-823-4890

Online Availability
No

Licensure Disclosure
This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Communication-Sciences-Disorders-MA.pdf.
Track Description

The MA in Communication Sciences and Disorders is intended for those interested in working with children and adults who have communication disorders. The School of Communication Sciences and Disorders offers the Out of Field track for highly-competitive students who do not hold a bachelor’s degree in communication sciences and disorders or speech-language pathology and audiology and who have not completed the required undergraduate prerequisite courses. The Out of Field program requires an additional 21 credit hours of undergraduate foundation core coursework that is typically completed in the first two semesters of the graduate program prior and must be completed prior to starting graduate coursework.

Out of field students who completed undergraduate courses as part of a formal bridge program should apply to the traditional program, not the Out of Field program.

Students must begin the program in the semester for which they are admitted and must follow the prescribed sequence of academic and clinical courses outlined in the catalog for that track.

Track Prerequisites

General Program Prerequisites

To be certified to practice by the American Speech-Language-Hearing Association (ASHA), all applicants must have transcript credit, which could include course work, advanced placement, CLEP, or examination equivalency, for each of the following areas at the undergraduate level: biological sciences, physical sciences, social/behavioral sciences, and statistics. Out of field students who have not completed these courses must complete these general prerequisites prior to enrolling in graduate coursework.

- Courses must be taken outside the discipline.
- Courses other than statistics may consist of any number of credits.
- Statistics course must be at least 3 credit hours and may be at the undergraduate or graduate level (i.e. STA 2014 Principles of Statistics - OR - STA 2023 Statistical Methods I).
- Courses must be completed with a grade of "C" or better.
- A maximum of two of these may be completed after admission as an Out of Field Graduate student.

Communication Sciences and Disorders Foundation Core - 21 Credit Hours

The Communication Sciences and Disorders foundation core is designed to help prepare students who do not have an undergraduate degree in communication sciences and disorders or speech language pathology and audiology for graduate coursework in the program. Once admitted to the program, out of field students must complete the Foundation Core prior to enrolling in any graduate coursework. All undergraduate Foundation Core courses are part of the student's official graduate plan of study and all graduate policies, including low grade policy and minimum GPA policy apply.

- LIN 3716/3716L - Language Development and Lab 5 Credit Hours
- SPA 3101 - Physiological Bases of Speech and Hearing 3 Credit Hours
- SPA 3104 - Neural Bases of Communication 3 Credit Hours
- SPA 3112C - Basic Phonetics and Lab 4 Credit Hours
- SPA 3011 - Speech Science 3 Credit Hours
- SPA 4032 - Audiology 3 Credit Hours

Out of field students who have completed a formal bridge program should apply to the traditional Communication Sciences and Disorders program, not the Out of Field track.

College of Graduate Studies Contact Information

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 7407
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Core Courses**

39 Total Credits

- Complete the following:
  - SPA6204 - Articulation/Phonological Disorders (3)
  - SPA6211 - Voice and Upper Airway Disorders (3)
  - SPA6225C - Fluency Disorders (3)
  - SPA6236 - Motor Speech Disorders in Adults and Children (3)
  - SPA6327 - Aural Habilitation Rehab (3)
  - SPA6410 - Aphasia and Related Disorders (3)
  - SPA6417 - Management of Acquired Cognitive/Communication Disorders Across the Lifespan (3)
  - SPA6474 - Assessment and Management of Culturally and Linguistically Diverse Populations (3)
  - SPA6541 - Assessment of Language Disorders in Children and Adolescents (3)
  - SPA6542 - Intervention of Language Disorders in Children and Adolescents (3)
  - SPA6559 - Augmentative and Alternative Communication (3)
  - SPA6565 - Feeding and Swallowing Disorders (3)
  - SPA6805 - Research in Communicative Disorders (3)

**Clinical Practice**

24 Total Credits

- Complete all of the following
  - Complete the following:
    - SPA6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology (1)
    - SPA6503 - Foundations of Clinical Practice Level II (1)
    - SPA6503L - Found Clinic Practice-II APP (1)
    - SPA6503L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology (1)
    - SPA6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia (1)
    - SPA6942L - Found Clinic Practice-III APP (1)
    - SPA6942L - Found Clinic Practice-III APP (1)
    - SPA6943 - Advanced Clinical Practice Seminar (1)
  - Students must complete SPA 6503L and SPA 6942L twice
  - Earn at least 14 credits from the following types of courses: SPA6946 Clinical Practice
  - Supervised clinical practice is an integral part of the graduate program in Communication Sciences and Disorders. It provides students with an opportunity to apply classroom knowledge to the evaluation and management of individuals with a wide variety of communication disorders. Students complete three clinical practica at the UCF Communication Disorders Clinic and other affiliated facilities, as well as external rotations in schools, hospitals, rehabilitation centers, skilled nursing facilities, long-term care facilities, community clinics, and private practices. Through these practica and external rotations, students obtain a minimum of 400 clock hours of supervised clinical experience in accordance with the guidelines outlined by the American Speech-Language-Hearing Association (ASHA). Clinical practica and external rotations vary in length and do not always coincide with the academic calendar.

**Thesis/Nonthesis Option**

9 Total Credits

- Complete 1 of the following
  - Complete all of the following
    - Earn at least 6 credits from the following types of courses: SPA 6971 - Thesis
    - Earn at least 3 credits from the following types of courses:
      Elective course selected in consultation with Faculty advisor.
  - Earn at least 9 credits from the following types of courses:
    Elective courses selected in consultation with Faculty advisor.

**Comprehensive Examination and Clinical Documentation**

0 Total Credits

- In addition to the coursework and supervised clinical clock hour requirements listed above, satisfactory completion of a School Comprehensive Examination and submission of final clinical documentation, including demonstration of clinical competence and professionalism are required for completion of the master's degree in Communication Sciences and Disorders.

Grand Total Credits: **72**

**Track Details**

**Equipment Fee**

Students in the Communication Sciences and Disorders MA Program pay a $90 equipment fee each semester they are enrolled.
Additional Program Costs

The program requires students to pay additional fees for the required background checks, clinic uniform, and registration for the academic/clinical competencies tracking system. In addition, some courses have Material and Supply fees that are charged in the semester the course is taken.

Sample Plan of Study for the Out of Field Track

The Out of Field track requires a prescribed sequence of academic and clinical courses, including undergraduate courses, which may vary according to the semester of entry. The following is a sample plan of study.

Semester 1 (11 credit hours)
- LIN 3716/3716L - Language Development and Lab 5 Credit Hours
- SPA 3101 - Physiological Bases of Speech and Hearing 3 Credit Hours
- SPA 3104 - Neural Bases of Communication 3 Credit Hours

Semester 2 (10 credit hours)
- SPA 3112C - Basic Phonetics and Lab 4 Credit Hours
- SPA 3011 - Speech Science 3 Credit Hours
- SPA 4032 - Audiology 3 Credit Hours

Semester 3 (Semester 1 of graduate coursework) (13 credit hours)
- SPA 6204 - Articulation/Phonological Dis 3 Credit Hours
- SPA 6541 - Assessment of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6542 - Intervention of Language Disorders in Children and Adolescents 3 Credit Hours
- SPA 6551 - Foundations of Clinical Practice: Level I 1 Credit Hours
- SPA 6805 - Research in Communicative Disorders 3 Credit Hours

Semester 4 (15 credit hours)
- SPA 6211 - Voice Disorders 3 Credit Hours
- SPA 6410 - Aphasia and Related Disorders 3 Credit Hours
- SPA 6417 - Management of Acquired Cognitive-Communication Disorders Across the Lifespan 3 Credit Hours
- SPA 6503 - Foundations of Clinical Practice Level II 1 Credit Hours
- SPA 6503L - Found Clinic Practice-II APP 1 Credit Hours (X 2)
- SPA 6559 - Augmentative and Alternative Communication 3 Credit Hours

Semester 5 (13 credit hours)
- SPA 6327 - Aural Habilitation Rehab 3 Credit Hours
- SPA 6474 - Assessment and Management of Culturally and Linguistically Diverse Populations 3 Credit Hours
- SPA 6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology 1 Credit Hours
- SPA 6565 - Feeding and Swallowing Disorders 3 Credit Hours
- SPA 6942 - Foundations of Clinical Practice: Level III 1 Credit Hours
- SPA 6942L - Found Clinic Practice-III APP 1 Credit Hours (X 2)

Semester 6
- SPA 6225 - Fluency Disorders 3 Credit Hours
- SPA 6236 - Motor Speech Disorders in Adults and Children 3 Credit Hours
- SPA 6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia 1 Credit Hours
- SPA 6943C - Clinical Practice 1 Credit Hours
- SPA 6946 - Clinical Practice*
- Elective 3 Credit Hour*

Semester 7
- SPA 6946 - Clinical Practice*
- Elective 3 Credit Hours*

Semester 8
- SPA 6946 - Clinical Practice*
- Elective 3 Credit Hours*

*A total of 14 credit hours of SPA 6946 Clinical Practice is required. Electives are selected in consultation with the clinical and academic advisors and may be completed in the fourth, fifth and/or sixth semester depending on the clinical placement credit hours each semester.

Independent Learning
All students in the Master of Arts in Communication Sciences and Disorders program engage in independent learning through inquiry, dialogue, and practice. Experiences such as client case studies, scholarly reviews, research projects, clinical practica and external rotations provide students independent learning opportunities to attain knowledge, skills, and professional behaviors. In capstone external rotations, students bridge university classroom and clinic lessons to real-world educational and health-related settings.

**Financial Information**

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finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

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gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Kinesiology MS**

**College**

College of Health Professions and Sciences

**Department**

School of Kinesiology and Physical Therapy– Kinesiology

**Program Website**

https://healthprofessions.ucf.edu/kinesiology/

**Program Handbook Link**

Kinesiology Handbook

**Program Contact Information**

**David Fukuda PhD**  
Associate Professor  
Division Chair and Graduate Program Director  
KiNgrad@ucf.edu  
Telephone: 407-823-0442  
ED 320R

**Lana Gidusko**  
KiNgrad@ucf.edu  
Telephone: 407-823-2595  
ED 320

**Is this program available 100% online?**

No
Program Description

The Master of Science in Kinesiology provides an in-depth study of applied human physiology and how it relates to exercise, athletic performance and health and wellness across the lifespan.

The Master of Science in Kinesiology offers two Non-Thesis options, a Thesis option, and an Anatomical Sciences Specialization for students. All options require a minimum of 36 credit hours. All students are automatically placed in the Non-Thesis option. Students wishing to pursue the Thesis option must receive approval from the graduate program director and have a commitment from a faculty member to serve as the thesis committee chair. Due to limited enrollment, students wishing to pursue the Anatomical Sciences Specialization must also receive approval from the graduate program director.

Students in the Non-Thesis option are required to participate in APK 6946 - Graduate Internship in Kinesiology that will serve as their culminating graduate experience or take an independent learning experience (APK 6909 - Problem Analysis - Review of Literature) that involves a detailed literature review specific to a subject area of the student's interest under the supervision of graduate faculty.

The Anatomical Sciences Specialization provides a depth of understanding of the anatomical sciences and substantial hands-on experience in the gross anatomy laboratory. Students interested in pursuing the Anatomical Sciences Graduate Certificate (https://healthprofessions.ucf.edu/physicaltherapy/anatomical-sciences/) must gain admission to the certificate program prior to completing the specified electives, which may be substituted for elective courses listed below.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Applicants who hold an undergraduate degree in an unrelated field are expected to have the equivalent of 8 semester hours of anatomy and physiology.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - APK6116 - Exercise Physiology I (3)
  - APK6127 - Assessment and Evaluation in Kinesiology (3)
  - APK6170 - Exercise Physiology II (3)
  - APK6713 - Research Methods in Kinesiology (3)

Thesis/Nonthesis Option
24 Total Credits

- Complete 1 of the following
  - Nonthesis Route
    - Complete 1 of the following
      - Nonthesis Option 1
        - Complete all of the following
          - Earn at least 3 credits from the following:
            - APK6946 - Graduate Internship in Kinesiology (6)
          - Earn at least 21 credits from the following:
- APK6102 - Functional Anatomy and Kinesiology (3)
- APK6104 - Youth Physical and Athletic Development (3)
- APK6107 - Cardiovascular Exercise Physiology (3)
- APK6124 - Environmental Exercise Physiology (3)
- PHT6161C - Neuroplasticity of Human Movement (3)
- APK6167 - Sport Nutrition and Ergogenic Aids (3)
- APK6171 - Exercise Prescription for Special Populations (3)
- APK6173C - Body Composition and Anthropometrics (3)
- APK6176 - Program Design in Strength and Conditioning (3)
- APK6235 - Kinesiology Instrumentation (3)
- APK6408 - Motivational Aspects in Athletic Performance (3)
- APK6612 - Monitoring Training and Athletic Performance (3)
- APK6703 - Statistical Methods in Kinesiology (3)
- PET6363 - Dietary and Nutritional Supplementation for Athletic Performance (3)
- APK6168 - Exercise, Nutrition and Weight Control (3)
- PET6372 - Physical Activity and Nutritional Epidemiology (3)
- APK6118C - Neuromuscular Physiology of Human Movement (3)
- PET7387 - Exercise Endocrinology (3)

All electives are subject to course availability and selected in conjunction with the student's graduate advisor or the graduate coordinator. Up to 6 credits of APK 6946 - Graduate Internship in Kinesiology may be taken; however, 3 credits will be applied towards the other elective requirements.

Nonthesis Option 2
- Complete all of the following
  - Complete the following:
    - APK6909 - Problem Analysis - Review of Literature (3)
  - Earn at least 21 credits from the following:
    - APK6703 - Statistical Methods in Kinesiology (3)
    - APK6102 - Functional Anatomy and Kinesiology (3)
    - APK6104 - Youth Physical and Athletic Development (3)
    - APK6107 - Cardiovascular Exercise Physiology (3)
    - APK6124 - Environmental Exercise Physiology (3)
    - PHT6161C - Neuroplasticity of Human Movement (3)
    - APK6167 - Sport Nutrition and Ergogenic Aids (3)
    - APK6171 - Exercise Prescription for Special Populations (3)
    - APK6173C - Body Composition and Anthropometrics (3)
    - APK6176 - Program Design in Strength and Conditioning (3)
    - APK6235 - Kinesiology Instrumentation (3)
    - APK6408 - Motivational Aspects in Athletic Performance (3)
    - APK6612 - Monitoring Training and Athletic Performance (3)
    - PET6363 - Dietary and Nutritional Supplementation for Athletic Performance (3)
    - APK6168 - Exercise, Nutrition and Weight Control (3)
    - PET6372 - Physical Activity and Nutritional Epidemiology (3)
    - APK6118C - Neuromuscular Physiology of Human Movement (3)
    - PET7387 - Exercise Endocrinology (3)

Thesis Option
- Complete all of the following
  - Earn at least 6 credits from the following:
    - APK6971 - Thesis (99)
  - Complete the following:
    - APK6703 - Statistical Methods in Kinesiology (3)
  - Earn at least 15 credits from the following:
    - APK6703 - Statistical Methods in Kinesiology (3)
    - APK6102 - Functional Anatomy and Kinesiology (3)
    - APK6104 - Youth Physical and Athletic Development (3)
    - APK6107 - Cardiovascular Exercise Physiology (3)
    - APK6124 - Environmental Exercise Physiology (3)
    - PHT6161C - Neuroplasticity of Human Movement (3)
    - APK6167 - Sport Nutrition and Ergogenic Aids (3)
    - APK6171 - Exercise Prescription for Special Populations (3)
    - APK6176 - Program Design in Strength and Conditioning (3)
    - APK6235 - Kinesiology Instrumentation (3)
    - APK6173C - Body Composition and Anthropometrics (3)
    - APK6408 - Motivational Aspects in Athletic Performance (3)
    - APK6612 - Monitoring Training and Athletic Performance (3)
    - PET6363 - Dietary and Nutritional Supplementation for Athletic Performance (3)
    - APK6168 - Exercise, Nutrition and Weight Control (3)
    - PET6372 - Physical Activity and Nutritional Epidemiology (3)
    - APK6118C - Neuromuscular Physiology of Human Movement (3)
    - PET7387 - Exercise Endocrinology (3)
Anatomical Sciences Specialization

- Complete all of the following:
  - Complete the following:
    - PHT6115C - Gross Anatomy/Neuroscience I (6)
    - PHT6118C - Gross Anatomy/Neuroscience II (6)
    - PHT6119L - Seminar in Anatomical Sciences Techniques (3)
    - PHT6510 - Administration of Anatomical Sciences Laboratory (3)
  - Earn at least 6 credits from the following:
    - APK6102 - Functional Anatomy and Kinesiology (3)
    - APK6104 - Youth Physical and Athletic Development (3)
    - APK6107 - Cardiovascular Exercise Physiology (3)
    - APK6124 - Environmental Exercise Physiology (3)
    - APK6167 - Sport Nutrition and Ergogenic Aids (3)
    - APK6171 - Exercise Prescription for Special Populations (3)
    - APK6176 - Program Design in Strength and Conditioning (3)
    - APK6235 - Kinesiology Instrumentation (3)
    - APK6703 - Statistical Methods in Kinesiology (3)
    - PET6363 - Dietary and Nutritional Supplementation for Athletic Performance (3)
    - APK6168 - Exercise, Nutrition and Weight Control (3)
    - PET6372 - Physical Activity and Nutritional Epidemiology (3)
    - APK6118C - Neuromuscular Physiology of Human Movement (3)
    - PET7387 - Exercise Endocrinology (3)
    - PHT6161C - Neuroplasticity of Human Movement (3)

- All electives are subject to course availability and selected in conjunction with the student's graduate advisor or the graduate coordinator.
- Please review the catalog page for the Anatomical Sciences Graduate Certificate for courses required in that program.

Grand Total Credits: **36**

**Program Details**

**Equipment Fee**

Full-time students in the Kinesiology MS program pay a $28 equipment fee each semester that they are enrolled. Part-time students pay $14 each semester that they are enrolled.

**Independent Learning**

All students are required to complete an internship, literature review, or thesis in conjunction with their coursework.

**Financial Information**

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**Fellowship Information**

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**Grad Fellowships**

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https://funding.graduate.ucf.edu
Kinesiology PhD

College
College of Health Professions and Sciences

Department
School of Kinesiology and Rehabilitation Sciences

Program Website
https://healthprofessions.ucf.edu/kpt/

Program Contact Information
David Fukuda PhD
Associate Professor
Division Chair and Graduate Program Director
David.Fukuda@ucf.edu
Telephone: 407-823-0442
ED 320R

Is this program available 100% online?
No

Program Description
The Kinesiology PhD program provides advanced studies in the area of kinesiology, exercise physiology, and sport science. It is offered by the School of Kinesiology and Physical Therapy, home to the Institute of Exercise Physiology and Rehabilitation Science in the College of Health Professions and Sciences.
The degree program combines state-of-the-art research facilities using cutting-edge technology with high quality and innovative instruction and curriculum. The program welcomes students from a variety of educational backgrounds including the biological and health-related professions, exercise science, physical education, or athletic training.

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses : 48 Credit Hours
48 Total Credits

- Complete all of the following
  Core Courses: 24 Credit Hours
  - Complete all of the following:
    - APK6703 - Statistical Methods in Kinesiology (3)
    - APK6713 - Research Methods in Kinesiology (3)
    - EDF7403 - Quantitative Foundations of Educational Research (3)
    - EDF7405 - Quantitative Methods II (3)
    - IDS7501 - Issues and Research in Education (3)
    - APK7981 - Dissertation Proposal Preparation (3)
  - Earn at least 6 credits from the following:
    - IDS7500 - Seminar in Educational Research (1 - 99)
Specialization Courses: 24 Credit Hours
* Earn at least 24 credits from the following:
  - APK6102 - Functional Anatomy and Kinesiology (3)
  - APK6104 - Youth Physical and Athletic Development (3)
  - APK6107 - Cardiovascular Exercise Physiology (3)
  - APK6124 - Environmental Exercise Physiology (3)
  - APK6127 - Assessment and Evaluation in Kinesiology (3)
  - APK6167 - Sport Nutrition and Ergogenic Aids (3)
  - APK6170 - Exercise Physiology II (3)
  - APK6171 - Exercise Prescription for Special Populations (3)
  - APK6176 - Program Design in Strength and Conditioning (3)
  - APK6235 - Kinesiology Instrumentation (3)
  - APK6909 - Problem Analysis - Review of Literature (3)
  - EDF7406 - Multivariate Statistics in Education (3)
  - EDF7410 - Application of Nonparametric and Categorical Data Analysis in Education (3)
  - EDF7474 - Multilevel Data Analysis In Education (3)
  - EDF7488 - Monte Carlo Simulation Research in Education (3)
  - PET6363 - Dietary and Nutritional Supplementation for Athletic Performance (3)
  - APK6168 - Exercise, Nutrition and Weight Control (3)
  - PET6372 - Physical Activity and Nutritional Epidemiology (3)
  - APK6118C - Neuromuscular Physiology of Human Movement (3)
  - PET7387 - Exercise Endocrinology (3)
  - PHT6115C - Gross Anatomy/Neuroscience I (6)
  - PHT6118C - Gross Anatomy/Neuroscience II (6)

**Dissertation**

15 Total Credits

* Complete all of the following
  * Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee. All students must complete the candidacy examination prior to enrolling in Dissertation.

* Earn at least 15 credits from the following:
  - APK7980 - Dissertation (99)

**Candidacy Requirements**

0 Total Credits

* The following are required to be admitted to candidacy for the Kinesiology Ph.D. and to enroll in dissertation hours:
  - Submission of an approved program of study.
  - Completion of all graduate course work, except for dissertation hours, with an overall 3.0 GPA.
  - Proof of current professional certification(s) demonstrating industry-relevant competencies.
  - Formation of a qualifying examination committee consisting of approved graduate faculty and graduate faculty scholars.
  - Successful completion of the qualifying examination/pre-dissertation project.
  - Formation of a dissertation advisory committee consisting of approved graduate faculty and graduate faculty scholars.
  - Successful defense of the written dissertation proposal which serves as the candidacy examination.

**Qualifying Examination**

0 Total Credits

* The purpose of the Qualifying Examination is to evaluate the student’s depth and breadth of knowledge in the field of study, including theory and research methodology. The Qualifying Examination is intended to be completed near the end of the second year of study and must be completed prior to taking the Candidacy Exam. Students must be enrolled in the university during the semester an examination is taken. Details about the Qualifying Exam can be found in the Kinesiology PhD Student Handbook.

**Candidacy Examination**

0 Total Credits

* The purpose of the Candidacy Examination is to evaluate the student’s proposed research plan for their dissertation. The Candidacy Examination is completed after the Qualifying Examination and includes both a written dissertation proposal and an oral presentation of the proposal. Details about the Qualifying Exam can be found in the Kinesiology PhD Student Handbook.

**Grand Total Credits:** 63

**Program Details**

**Independent Learning**

The dissertation satisfies the independent learning requirement.
Financial Information

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https://funding.graduate.ucf.edu

Medical Speech-Language Pathology Graduate Certificate

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Program Prerequisites
This certificate program has been temporarily suspended effective Summer 2016.

Courses from a previous graduate degree program or certificate program cannot be applied toward the completion of the Certificate in Medical Speech-Language Pathology.

Current students in UCF's Communication Sciences and Disorders MA program may only apply SPA 6565 - Feeding and Swallowing Disorders, toward both the Medical Speech-Language Pathology Certificate and the master's degree in communication sciences and disorders. Nine credit hours will need to be taken in addition to the regular master's program course requirements.

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Orlando, FL 32816-0112

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TOEFL: 5233
ETS PPI: 5233

Military Social Work Graduate Certificate
College of Health Professions and Sciences

School of Social Work

Department

Program Website

https://healthprofessions.ucf.edu/socialwork/

Program Contact Information

Shellene Mazany MSW, LCSW
Associate Instructor, MSW Program Director
maxine.mcgregor@ucf.edu
Telephone: 407-823-1089
HS 1, Suite 204

Is this program available 100% online?
No

Program Description

Students pursuing a Master of Social Work degree may choose a specialization in military social work. The Graduate Certificate in Military Social Work will prepare students to provide behavioral health services, including mental health counseling aimed at building psychological resilience; treatment of post-traumatic stress disorder, depression, anxiety, suicide risk assessment and prevention techniques; and family therapy for strengthening military, veterans, and their families during and after deployment.

The Military Social Work certificate is open to current UCF MSW Traditional and Advanced Standing students and a limited number of Counselor Education students only. Educational standards for all social work programs are established by the Council on Social Work Education (CSWE), the national accreditation body for professional social work education. Curriculum direction and content is regulated by the CSWE through its accreditation standards. The MSW program at UCF is fully accredited through CSWE.

The following courses are required for the certificate but may also be used as electives in the MSW program.

Total Credit Hours Required: 9 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Admission is open to current students in the UCF Master of Social Work program and a limited number of students in the UCF Counselor Education master's program. Students interested in admission to this certificate program should contact the MSW Admissions Specialist or by calling (407) 823-3474 for more information.
Degree Requirements

Required Courses
9 Total Credits

- Complete all of the following
  - Complete the following:
    - SOW6149 - Military Culture and Social Work Practice (3)
    - SOW6608 - Understanding and Managing Combat Related Behavioral and Mental Health Disorders (3)
    - SOW6610 - Clinical Practice with Military and Veteran Families or Groups (3)
  - The listed courses are required for the certificate but may also be used as electives in the MSW program.

Grand Total Credits: 9

Financial Information

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http://finaid.ucf.edu

Physical Therapy DPT

College
College of Health Professions and Sciences

Department
School of Kinesiology and Rehabilitation Sciences

Program Website
https://healthprofessions.ucf.edu/kpt/physicaltherapy/doctorate/

Program Handbook Link
Physical Therapy DPT Handbook

Program Contact Information

Samantha Fraley
samantha.fraley@ucf.edu
Telephone: 407-823-3462
HS 256

William J. Hanney, DPT, PhD, ATC, CSCS, FNCSA
William.Hanney@ucf.edu
Telephone: 407-823-0217
HS1 262

Is this program available 100% online?
No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Doctor-of-Physical-Therapy.pdf.
Program Description

The Doctor of Physical Therapy (DPT) program educates students to become competent, compassionate, and ethical practitioners in a variety of health care settings. Graduates will be highly dedicated professionals with excellent patient care, communication, critical thinking, patient education and advocacy, management and research skills.

The Doctor of Physical Therapy program is a three-year (nine consecutive semesters) professional doctoral curriculum designed to prepare entry-level therapists to practice in a variety of clinical settings. The professional curriculum is a full-time "lock-step" program. The program includes multiple clinical education experiences (internships) ranging from eight weeks to twelve weeks in duration. It also includes focused interprofessional education activities involving students from other professional disciplines as well as research training and activities.

Students who successfully complete the course of study will be granted the Doctor in Physical Therapy degree (DPT), enabling the graduate to take the national board examination leading to state licensure as a Physical Therapist.

The UCF Doctor of Physical Therapy program promotes lifelong learning and professional development, which is attained through active involvement in professional organizations such as the American Physical Therapy Association. UCF's Doctor of Physical Therapy Program is fully accredited by the Commission on Accreditation of Physical Therapy Education.

Mission

The mission of the University of Central Florida's Doctor of Physical Therapy Program is to cultivate excellence in physical therapist practice through comprehensive and focused doctoral education. The program fosters excellence through its dedication to foundational sciences, clinical skill proficiency, research and evidence-based practice, service and professional duty, and lifelong learning. The program is committed to the development of a diverse and inclusive healthcare community in order to optimize patient care in the dynamic healthcare environment.

Vision

The Doctor of Physical Therapy Program at the University of Central Florida will be distinguished for:

- Its breadth, depth, and collaborative approach to physical therapist education
- Clinical excellence and advancement of clinical practice
- Scholarly achievements and professional recognition of students, faculty, and clinical partners
- Dedication to the health and well-being of the Central Florida community
- Professional commitment and advocacy for the advancement of the practice of physical therapy

Program Prerequisites

Each prerequisite course must be completed with a minimum grade of "C". The overall GPA for all prerequisite courses must be a 3.00 or higher to be considered for admission. The program recommends all prerequisite courses be completed at the time of application. Candidates with all prerequisites completed at the time of application may be given preference over those still completing courses. No more than two prerequisite courses may be in progress the fall semester prior to the program's start and no more than one course may be in progress during the spring semester prior to the program's start. Courses older than ten years will not be accepted. Email ptinfo@ucf.edu to request a prerequisite review.

Anatomy and Physiology - Two courses with labs and a minimum of 8 credit hours is required. One of two options must be met:

Option 1: One semester of Human Physiology with lab and one semester of Anatomy with lab.

Option 2: Two semesters of Anatomy/Physiology combined courses with labs.

Biology / Biological Studies - Two courses and a minimum of 6 credit hours is required. Labs are not required. Must be courses for science majors.

Chemistry - Two courses with labs and a minimum of 8 credit hours is required. Introduction and survey courses are NOT accepted.

Physics - Two courses with labs and a minimum of 8 credit hours is required. General Physics and Physics with Calculus are both acceptable courses.

Psychology - One course (3 credit hours) is required. Any psychology course that is taken within the Psychology Department will meet this requirement.

Statistics - One course (3 credit hours) is required.
College of Graduate Studies Contact Information

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Institution Codes
UCF DPT PTCAS
GRE code: 3871
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
114 Total Credits

- Complete all of the following
  Year 1
  - Complete all of the following
    Summer Term 1
    - Complete the following:
      - PHT5003 - Foundations of Physical Therapy (2)
      - PHT5125 - Clinical Kinesiology (2)
      - PHT5125L - Clinical Kinesiology Lab (1)
      - PHT6115C - Gross Anatomy/Neuroscience I (6)
      - PHT6156C - Applied Human Physiology for Health Sciences (3)
    Fall Term 1
    - Complete the following:
      - PHT5240 - Physical Assessment (1)
      - PHT5240L - Physical Assessment Lab (2)
      - PHT5260 - Patient Care Skills (2)
      - PHT5260L - Patient Care Skills Lab (2)
      - PHT6118C - Gross Anatomy/Neuroscience II (6)
      - PHT6153 - Physiologic Assessment in Physical Therapy Practice (2)
      - PHT6606 - Research Methods in Physical Therapy (2)
    Spring Term 1
    - Complete the following:
      - PHT5218C - Therapeutic Modalities in Rehabilitation (3)
      - PHT5241 - Therapeutic Exercises I (2)
      - PHT5241L - Therapeutic Exercise Lab I (2)
      - PHT6242 - Orthopedic Physical Therapy (3)
      - PHT6242L - Orthopedic Physical Therapy Lab (1)
      - PHT6306 - Pathology in Rehabilitation (2)
      - PHT6356 - Pharmacology in Rehabilitation (2)
  Year 2
  - Complete all of the following
    Summer Term 2
    - Complete the following:
      - PHT5718 - Neurological Physical Therapy (3)
      - PHT5718L - Neurological Physical Therapy Lab (1)
      - PHT6219C - Pain Mechanisms and Treatment in Rehabilitation (2)
      - PHT6245 - Therapeutic Exercise II (2)
      - PHT6245L - Therapeutic Exercise II Lab (1)
      - PHT7722C - Integrative Clinical Practice (2)
    Fall Term 2
    - Complete the following:
      - PHT6521 - Management of Physical Therapy Services (2)
      - PHT6322C - Pediatric Physical Therapy (3)
      - PHT6716C - Advanced Orthopedic Physical Therapy (2)
      - PHT6805C - Clinical Education I (4)
      - PHT7742C - Acute Care Physical Therapy (2)
Spring Term 2
- Complete the following:
  - PHT6702C - Orthotics and Prosthetics in Rehabilitation (1)
  - PHT6374C - Geriatric Physical Therapy (2)
  - PHT6381C - Cardiopulmonary Physical Therapy (2)
  - PHT6618 - Research Applications in Physical Therapy (2)
  - PHT6719 - Advanced Neurological Physical Therapy (2)
  - PHT6719L - Advanced Neurological Physical Therapy Lab (1)
  - PHT7134C - Physical Therapy Integration (2)
  - PHT7730C - Primary Care for the Physical Therapist (2)

Year 3
- Complete all of the following
  - Summer Term 3
    - Complete the following:
      - PHT7822C - Clinical Education II (6)
  - Fall Term 3
    - Complete the following:
      - PHT7721C - Integrations in Orthopedic Physical Therapy (1)
      - PHT7772C - Advanced Neurological Physical Therapy II (1)
      - PHT7780C - Advanced Geriatric Physical Therapy (1)
      - PHT7329C - Advanced Pediatric Physical Therapy (1)
      - PHT7521 - Management of Physical Therapy Services II (2)
      - PHT7823C - Clinical Education III (4)
      - PHT6070C - Radiology/Imaging for Physical Therapy (3)

Spring Term 3
- Complete all of the following
  - Complete the following:
    - PHT7021 - Professional Practice in Physical Therapy (2)
    - PHT7900 - Capstone Project in Physical Therapy (3)
    - PHT7829C - Clinical Education IV (4)
  - PHT 7XXXC Elective Course
    - Complete 1 of the following
      - Elective Course Options (student must select at least one of the following courses, pending availability). PHT 6958 Physical Therapy Study Abroad can fulfill the elective requirement and may be offered at any point in the DPT curriculum:
        - Complete at least 1 of the following:
          - PHT7778C - Advanced Manual Therapy (2)
          - PHT7764C - Advanced Neurological Treatment (2)
          - PHT7702C - Advanced Orthotics and Prosthetics (2)
          - PHT7779C - Sports Physical Therapy (2)
      - Earn at least 2 credits from the following types of courses:
        - PHT 6958 - Study Abroad

Examinations
- 0 Total Credits

- The following procedures guide the comprehensive examination for DPT Students. 1. Each student is required to pass a comprehensive examination. 2. The program utilizes the Practice Exam & Assessment Tool (PEAT) from the Federation of State Boards in Physical Therapy as the comprehensive exam. a. A scale score of 600 is deemed a passing score on the PEAT. b. Students will have the opportunity to retake the final comprehensive exam twice if they fail to earn a passing score. 3. If a student does not pass the comprehensive exam (PEAT) after their second attempt, a case-based examination will be given with a focus in areas of deficit as identified in the PEAT exams. a. In order to pass the case-based exam, students must orally defend their decision-making for the patient cases. b. The examining committee will consist of DPT core faculty with expertise in the domains of the patient cases. 4. Students must pass the examination on the third attempt in order to graduate. 5. Students who do not pass the third attempt (case study oral exam) will be assessed by the collective core faculty in accordance with Retention and Advancement proceedings to determine appropriate actions. Students could be required to undergo remediation or be dismissed. 6. Exam outcomes review will take place annually at regularly scheduled DPT faculty meetings.

Grand Total Credits: 114
**Program Details**

The program is designed to enable students to demonstrate in the classroom, and later in the clinic, that they have achieved levels of comprehension and competence expected of entry-level physical therapists. Thus, the curriculum not only involves the didactic and clinical components of professional education, but also co-curricular activities which include integrated patient experiences, interprofessional education activities, and a research curriculum.

Integrated patient experiences are authentic, brief encounters with patients and patient populations through activities that are typically embedded into several DPT courses. In alignment with this requirement, the UCF DPT Program requires full participation from enrolled students. These activities may be directly aligned with DPT courses and assigned a grade, while others may be more programmatic in nature, outside of traditional coursework. All activities are designed to assist student development and understanding of various patient care issues. This will include exposure to various clinical settings and populations that will assist students in becoming more effective and safe practitioners when they enter formal clinical education or upon graduation and eventual licensure.

Interprofessional education (IPE) is an educational model that aligns with professional standards in physical therapy education accreditation. This consists of students learning in collaborative team environments that include the involvement of students from differing professional disciplines. This co-curricular thread that is embedded into the UCF DPT Program and includes participation in a collaborative IPE curriculum with various partners including but not limited to: UCF College of Medicine, UCF College of Nursing, UCF School of Social Work, UCF Counselor Education, and the UF College of Pharmacy.

The research curriculum aligns with professional standards in physical therapy education accreditation, in which the program fosters the understanding of clinical research. Areas of competency include the ability to independently locate reputable information, interpret study findings, and implement research into clinical practice. Thus, students enrolled in the UCF DPT Program will take part in research throughout their curriculum. All students are required to work in small groups and complete a research project under the mentorship of a faculty member who serves as their research advisor. These projects culminate in a written manuscript, poster and oral research presentations at UCF. Students may also have the opportunity to present their research at state, regional, and national conferences. Many UCF DPT students have gone on to have their work published in peer reviewed journals.

**Equipment Fee**

Students in the Doctor of Physical Therapy program pay a $90 equipment fee each semester that they are enrolled.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**  
Telephone: 407-823-0127  
graffellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Social Work MSW**

**College**

College of Health Professions and Sciences

**Department**

School of Social Work

**Program Website**

https://healthprofessions.ucf.edu/socialwork/
Program Contact Information

MSW Admissions:

Campus-Based Track:
mswadmissions@ucf.edu
Telephone: 407-823-3474
HS 1, Suite 236

Online Track:
Minoska Hernandez
Online MSW Admissions Specialist
Minoska.Hernandez@ucf.edu
Telephone: 407-823-4110

Is this program available 100% online?
Yes

UCF Online

Please Note: Social Work (MSW) may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees. Students who apply for admission to the online part-time tracks will not be permitted to switch to the campus-based tracks, and students who apply for admission to the campus-based tracks will not be permitted to switch to the online part-time tracks.

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Social-Work-MSW.pdf.

Program Description

The Master of Social Work (MSW) program prepares students for advanced social work practice. The program educates students for community-based clinical social work practice with individuals, families, and groups. The MSW program is accredited by the Council on Social Work Education (CSWE).

The program offers multiple tracks to allow students to progress through the required MSW curriculum on either a full-time or part-time plan of study. The campus-based full-time and part-time tracks are available for students who do not have a BSW degree. The campus-based advanced standing full-time and the part-time tracks are available for students who have completed a BSW degree from a CSWE-accredited program within the last six years. The program also offers an online part-time Advanced Standing track for students with a BSW degree from a CSWE accredited program within the last six years and an online part-time track for students who have bachelor’s degrees from programs other than the BSW. More information on the plans of study and requirements for each track is given in the individual track descriptions. Please scroll to the bottom of this page for further details on these tracks.

The curriculum draws from a generalist perspective and emphasizes critical thinking skills, empirically based accountable practice, and ethical services for clients experiencing a wide range of problems. Students learn preventive and therapeutic interventions aimed at enhancing human functioning and quality of life. Graduates of the program will have the ability to work with diverse clients in a variety of agency settings.

The MSW program strives to educate students to become successful practitioners in the field of clinical social work. To that end, the National Association of Social Workers (NASW) Code of Ethics is re-enforced throughout the academic curriculum. Students who violate the NASW Code of Ethics may be subject to academic sanctions or dismissed from the program.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Social Work MSW - Social Work MSW, Full-Time Advanced Standing Campus-Based Track

Track Website
https://healthprofessions.ucf.edu/socialwork/

Track Handbook
Social Work MSW, Full-Time Advanced Standing Campus-Based Track

2022-2023 Graduate Catalog
**Track Contact Information**

**Shellene Mazany, MSW, LCSW Associate Instructor, MSW Program Director**

shellene.mazany@ucf.edu

Telephone: 407-823-1089

HS 1, Suite 204

mswadmissions@ucf.edu

Telephone: 407-823-3474

HS 1, Suite 236

**Online Availability**

No

**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit [https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Social-Work-MSW.pdf](https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Social-Work-MSW.pdf).

**Track Description**

The Master of Social Work (MSW) Program, Full-Time Advanced Standing Campus-Based Track allows students with baccalaureate degrees in Social Work from a CSWE-accredited school/program who demonstrate academic potential and professional maturity to complete the MSW in three semesters of graduate study.

To be considered for advanced standing admission, the bachelor's degree must have been completed within six years of the time of initial enrollment in the master's program. The Full-Time Advanced Standing Campus-Based Track is offered at the main campus and may be completed in three semesters (summer, fall, and spring).

The MSW program strives to provide students with the education needed to become successful practitioners in the field of clinical social work. The National Association of Social Workers (NASW) Code of Ethics is enforced throughout the academic curriculum. Students who violate the NASW Code of Ethics may be subject to academic sanctions or dismissed from the program.

The 32-hour MSW program is composed of 18 credit hours of required core and advanced clinical specialization courses. In addition, students complete 6 credit hours of electives and 8 credit hours of field experience. Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students.

**Total Credit Hours Required: 32 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

The Council on Social Work Education (CSWE) require that all applicants have an undergraduate degree from an accredited institution. The School of Social Work requires that applicants have successfully completed (with a grade of C or higher) at least one course in each of the following categories:

- **Humanities** (examples: fine arts, history, languages, literature, philosophy, or religion);
- **Physical and Biological Sciences** (examples: biology, chemistry, anatomy, or physiology);
- **Mathematics** (examples: calculus, college algebra, computer science, or statistics);
- **Social Sciences** (examples: anthropology, economics, ethnic studies, gender studies, human development, international relations, political science, psychology, social work, or sociology).
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Clinical Specialization
18 Total Credits

- Complete the following:
  - SOW6123 - Psychosocial Pathology (3)
  - SOW6433 - Clinical Evaluation in Social Work Practice (3)
  - SOW6324 - Clinical Practice with Groups (3)
  - SOW6348 - Clinical Practice with Individuals (3)
  - SOW6612 - Clinical Practice with Families (3)
  - SOW6424 - Theories for Evidence-Based Clinical Practice in Social Work (3)

Electives
6 Total Credits

- Complete at least 2 of the following:
  - SOW6149 - Military Culture and Social Work Practice (3)
  - SOW6109 - Violence Against Women: A Global Perspective (3)
  - SOW6155 - Human Sexuality in Social Work Practice (3)
  - SOW6603 - Social Work in Health Settings (3)
  - SOW6604 - Medications in Social Work Practice (3)
  - SOW6608 - Understanding and Managing Combat Related Behavioral and Mental Health Disorders (3)
  - SOW6610 - Clinical Practice with Military and Veteran Families or Groups (3)
  - SOW6635 - Social Work Practice in Schools (3)
  - SOW6644 - Interventions with Older Adults and Their Families (3)
  - SOW6652 - Child Welfare Services (3)
  - SOW6655 - Child Abuse: Treatment and Prevention (3)
  - SOW6712 - Clinical Social Work Practice with Substance Addictions (3)
  - SOW6726 - Social Work Practice with Children from Birth to Age Five and their Families (3)
  - SOW6727 - Core Concepts of Child and Adolescent Trauma (3)
  - SOW6735 - Documentation Skills for Helping Professionals (3)
  - SOW6756 - Forensic Social Work (3)
  - SOW6846 - Spirituality in Clinical Social Work Practice (3)
  - SOW6806 - Behavioral Health Skills for Clinical Social Workers (3)

Field Experience
8 Total Credits

- Earn at least 8 credits from the following types of courses:
  Field instruction is an integral part of graduate social work education. It provides the student with an opportunity to test classroom knowledge; to develop and refine both foundation and advanced practice skills. Decisions regarding field assignment are determined by the Field Director. Only agency sites approved by the School of Social Work may be used for field instruction. Clinical MSW students complete a minimum of 600 clock hours in the field. Field education includes a field seminar. Students must complete at least 50% of their field hours during the agency's normal business hours. Evening (after 5 p.m.) and weekend placements are extremely limited. The School of Social Work is under no obligation to provide such placements. Consequently, field placements cannot be guaranteed to students who require evening and weekend placements. Many social work agencies have students complete background checks, including formal background checks, law enforcement finger printing, driving records, and criminal record checks. In most instances, the expense for the background check is the responsibility of the student. We urge students to seek this information prior to entering the field experience if there is sensitive information that may prevent them from being accepted at an agency. Students must also report any background issues on the field application so that an appropriate placement can be made. The UCF School of Social Work cannot guarantee a field placement or subsequent degree completion for students who do not pass background checks.

Grand Total Credits: 32
Track Details

The MSW Advanced Standing track allows no more than one C grade or 3 credit hours (whichever is greater) to be used toward the degree requirements. Exceeding three credit hours or one C grade is grounds for dismissal from the MSW Advanced Standing track.

Previous baccalaureate coursework that received at least a "B-" will be reviewed to ensure content equivalency. In advanced standing admission, a maximum of 30 foundation-level credits may be waived based on the content equivalency to meet foundation year MSW requirements, which consist of courses in human behavior and the social environment, policy, research, social work practice, and social work field placement.

Educational standards for all social work programs are established by the Council on Social Work Education (CSWE), the national accreditation body for professional social work education. Curriculum direction and content is regulated by the CSWE through its accreditation standards. The MSW program at UCF is fully accredited through CSWE.

Required Sequence of Curriculum

First Semester (Summer)
- SOW 6123 - Psychosocial Pathology 3 Credit Hours
- SOW 6424 - Theories for Evidence-Based Clinical Practice in Social Work 3 Credit Hours

Second Semester (Fall)
- SOW 6324 - Clinical Practice with Groups 3 Credit Hours
- SOW 6348 - Clinical Practice with Individuals 3 Credit Hours
- SOW 6612 - Clinical Practice with Families 3 Credit Hours
- SOW 6531 - Full Time MSW Clinical Field Integrative Seminar I 2 Credit Hours
- SOW 6940 - Clinical Field Education 2 Credit Hours

Third Semester (Spring)
- SOW 6433 - Clinical Evaluation in Social Work Practice 3 Credit Hours
- SOW Clinical elective
- SOW Clinical elective
- SOW 6536 - Full Time MSW Clinical Field Education and Seminar II 2 Credit Hours
- SOW 6940 - Clinical Field Education 2 Credit Hours

Transfer Credit

Academic credit for life experience and previous work experience shall not be given, in whole or in part, in lieu of Social Work courses required to fulfill degree requirements.

Students who have completed course work in an accredited MSW program may transfer up to 9 credit hours of non-field coursework toward the 32 credit hours of the degree. Students must have received a grade of "B-" or higher in these courses. Courses will be evaluated on a course-by-course basis by the MSW Director. Field classes are not eligible for transfer.

Students seeking to transfer to the School of Social Work from another CSWE accredited social work program are required to meet the criteria for admission and follow the application procedures.

Additionally, one of the academic references must be from the MSW Program Coordinator or academic adviser in the program from which the applicant is transferring and must address the academic standing in that program. If not currently enrolled, the reference must be from the former MSW Program Coordinator or academic adviser. Syllabi are required for any social work classes being considered for transfer credit.

As per university policy, transfer credits will not be considered for the market based fully online part time tracks.

Equipment Fee

Full-time students in the MSW program pay a $35 equipment fee each semester that they are enrolled.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Social Work MSW - Social Work MSW, Full-Time Campus-Based Track

Track Website
https://healthprofessions.ucf.edu/socialwork/

Track Handbook
Social Work MSW, Full-Time Campus-Based Track

Track Contact Information
Shellene Mazany, MSW, LCSW
Associate Instructor, MSW Program Director
shellene.mazany@ucf.edu
Telephone: 407-823-1089
HS 1, Suite 204

mswadmissions@ucf.edu
Telephone: 407-823-3474
HS 1, Suite 236

Online Availability
No

Licensure Disclosure
This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Social-Work-MSW.pdf.

Track Description
The Master of Social Work (MSW), Full-Time Campus-based Track allows students who do not have a BSW degree to complete the MSW required curriculum in two years of full-time study at the main campus.

The first year of study in the Master of Social Work (MSW) Full-Time Campus-based Track includes 24 credit hours in class work and 6 credit hours in field education. The second year of study includes 24 credit hours in class work and 8 credit hours in the field.

The MSW program strives to provide students with the education needed to become successful practitioners in the field of clinical social work. The National Association of Social Workers (NASW) Code of Ethics is enforced throughout the academic curriculum. Students who violate the NASW Code of Ethics may be subject to academic sanctions or dismissed from the program.

The 62-hour MSW program is composed of 39 credit hours of required core and advanced clinical specialization courses. In addition, students complete 9 credit hours of electives and 14 credit hours of field experience. Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers, and internships also contribute to the self-development of our students. Students in the 62-hour program must include at least 31 hours of course work at the 6000 level in their program of study.

Total Credit Hours Required: 62 Credit Hours Minimum beyond the Bachelor's Degree
Track Prerequisites

The Council on Social Work Education (CSWE) require that all applicants have an undergraduate degree from an accredited institution. The School of Social Work requires that applicants have successfully completed (with a grade of C or higher) at least one course in each of the following categories:

- **Humanities** (examples: fine arts, history, languages, literature, philosophy, or religion);
- **Physical and Biological sciences** (examples: biology, chemistry, anatomy, or physiology);
- **Mathematics** (examples: calculus, college algebra, computer science, or statistics);
- **Social Sciences** (examples: anthropology, economics, ethnic studies, gender studies, human development, international relations, political science, psychology, social work, or sociology).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Core
21 Total Credits

- Complete the following:
  - SOW5107 - Human Behavior in the Social Environment (3)
  - SOW5217 - Foundations of Behavioral Health Policy and Social Work Practice (3)
  - SOW5132 - Diverse Client Populations (3)
  - SOW5235 - Social Welfare Policies and Services (3)
  - SOW5305 - Social Work Practice I: Generalist Practice (3)
  - SOW5306 - Social Work Practice II: Intervention Approaches (3)
  - SOW5404 - Social Work Research (3)

Clinical Specialization
18 Total Credits

- Complete the following:
  - SOW6123 - Psychosocial Pathology (3)
  - SOW6324 - Clinical Practice with Groups (3)
  - SOW6348 - Clinical Practice with Individuals (3)
  - SOW6612 - Clinical Practice with Families (3)
  - SOW6424 - Theories for Evidence-Based Clinical Practice in Social Work (3)
  - SOW6433 - Clinical Evaluation in Social Work Practice (3)

Electives
9 Total Credits

- Complete 1 of the following
  - One elective is required as a component of the foundation curriculum and two clinical electives are required as components of the clinical specialization. Students may choose to take clinical electives for all three required MSW electives. Clinical elective 3 Credit Hours Clinical elective 3 Credit Hours Practice/ Non-Clinical or Clinical elective 3 Credit Hours
  - All Clinical Elective Option
- Complete at least 3 of the following:
  - SOW6149 - Military Culture and Social Work Practice (3)
  - SOW6109 - Violence Against Women: A Global Perspective (3)
  - SOW6155 - Human Sexuality in Social Work Practice (3)
  - SOW6603 - Social Work in Health Settings (3)
  - SOW6604 - Medications in Social Work Practice (3)
  - SOW6608 - Understanding and Managing Combat Related Behavioral and Mental Health Disorders (3)
  - SOW6610 - Clinical Practice with Military and Veteran Families or Groups (3)
  - SOW6635 - Social Work Practice in Schools (3)
- SOW6644 - Interventions with Older Adults and Their Families (3)
- SOW6652 - Child Welfare Services (3)
- SOW6655 - Child Abuse: Treatment and Prevention (3)
- SOW6670 - Clinical Social Work Practice with LGBTQ+ (3)
- SOW6712 - Clinical Social Work Practice with Substance Addictions (3)
- SOW6726 - Social Work Practice with Children from Birth to Age Five and their Families (3)
- SOW6735 - Documentation Skills for Helping Professionals (3)
- SOW6756 - Forensic Social Work (3)
- SOW6806 - Behavioral Health Skills for Clinical Social Workers (3)
- SOW6846 - Spirituality in Clinical Social Work Practice (3)

Practice/ Non-Clinical and Clinical Elective Option

- Complete all of the following
  - Complete the following:
    - SOW6383 - Social Work Administration (3)
  - Earn at least 6 credits from the following types of courses:
    - Clinical Elective Courses listed above

Field Experience
14 Total Credits

- Earn at least 14 credits from the following types of courses:
  - Generalist Field Education and Integrative Seminars 6 Credit Hours Clinical Field Education and Integrative Seminars 8 Credit Hours Field instruction is an integral part of graduate social work education. It provides the student with an opportunity to test classroom knowledge as well as to develop and refine foundation and advanced practice skills. Decisions regarding field assignment are determined by the Field Director. Only agency sites approved by the School of Social Work may be used for field instruction. Generalist MSW students complete a minimum of 400 hours in the field; clinical MSW students complete a minimum of 600 clock hours in the field. Field education includes a field seminar. Students must complete at least 50% of their field hours during the agency's normal business hours. Evening (after 5 p.m.) and weekend placements are extremely limited. The School of Social Work is under no obligation to provide such placements. Consequently, field placements cannot be guaranteed to students who require evening and weekend placements. Many social work agencies have students complete background checks, including formal background checks, law enforcement fingerprinting, driving records, and criminal record checks. In most instances, the expense for the background check is the responsibility of the student. We urge students to seek this information prior to entering the field experience if there is sensitive information that may prevent them from being accepted at an agency. Students must also report any background issues on the field application so that an appropriate placement can be made. The UCF School of Social Work cannot guarantee a field placement or subsequent degree completion for students who do not pass background checks.

Grand Total Credits: 62
Educational standards for all social work programs are established by the Council on Social Work Education (CSWE), the national accreditation body for professional social work education. Curriculum direction and content is regulated by the CSWE through its accreditation standards. The MSW program at UCF is fully accredited through CSWE.

**Required Sequence of Curriculum**

**First Semester (Fall)**
- SOW 5107 - Human Behavior in the Social Environment *3 Credit Hours*
- SOW 5132 - Diverse Client Populations *3 Credit Hours*
- SOW 5235 - Social Welfare Policies and Services *3 Credit Hours*
- SOW 5305 - Social Work Practice I: Generalist Practice *3 Credit Hours*
- SOW 5538 - Full-Time MSW Generalist Field Integrative Seminar I *1 Credit Hours*
- SOW 5940 - Generalist Field Education *2 Credit Hours*

**Second Semester (Spring)**
- SOW 5306 - Social Work Practice II: Intervention Approaches *3 Credit Hours*
- SOW 5404 - Social Work Research *3 Credit Hours*
- SOW 5217 - Foundations of Behavioral Health Policy and Social Work Practice *3 Credit Hours*
- SOW Elective (Clinical or Non-Clinical)
- SOW 5539 - Full-Time MSW Generalist Field Integrative Seminar II *1 Credit Hours*
- SOW 5940 - Generalist Field Education *2 Credit Hours*

**Third Semester (Summer)**
- SOW 6123 - Psychosocial Pathology *3 Credit Hours*
- SOW 6424 - Theories for Evidence-Based Clinical Practice in Social Work *3 Credit Hours*

**Fourth Semester (Fall)**
- SOW 6348 - Clinical Practice with Individuals *3 Credit Hours*
- SOW 6612 - Clinical Practice with Families *3 Credit Hours*
- SOW 6324 - Clinical Practice with Groups *3 Credit Hours*
- SOW 6531 - Full Time MSW Clinical Field Integrative Seminar I *2 Credit Hours*
- SOW 6940 - Clinical Field Education *2 Credit Hours*

**Fifth Semester (Spring)**
- SOW 6433 - Clinical Evaluation in Social Work Practice *3 Credit Hours*
- SOW Clinical elective
- SOW Clinical elective
- SOW 6536 - Full Time MSW Clinical Field Education and Seminar II *2 Credit Hours*
- SOW 6940 - Clinical Field Education *2 Credit Hours*

**Transfer Credit**

Academic credit for life experience and previous work experience shall not be given, in whole or in part, in lieu of Social Work courses required to fulfill degree requirements.

Transfer credits will be evaluated on a case-by-case basis by the MSW Program Director. Students must submit syllabi and have earned a grade of “B-” or better in these courses for them to be evaluated for transfer credit.

**Field courses taken elsewhere cannot be transferred toward satisfying the field component of the degree.**

Students seeking to transfer to the School of Social Work from another CSWE accredited social work program are required to meet the criteria for admission and follow the application procedures. Additionally, one of the academic references must be from the MSW Program Coordinator or academic adviser in the program from which the applicant is transferring and must address the academic standing in that program. If not currently enrolled, the reference must be from the former MSW Program Coordinator or academic adviser.

As per university policy, transfer credits will not be considered for the market based fully online part time tracks.

**Equipment Fee**

Full-time students in the MSW program pay a $35 equipment fee each semester that they are enrolled.

**Independent Learning**

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students.

The field experiences and practice electives provide substantial opportunities for students to learn independently and practically about social work practice.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Social Work MSW - Social Work MSW, Online Part-Time Advanced Standing Track

Track Website
https://www.ucf.edu/online/degree/master-of-social-work-msw/

Track Handbook
Social Work MSW, Online Part-Time Advanced Standing Track

Track Contact Information

Shellene Mazany, MSW, LCSW
Online MSW Director, Associate Instructor
Shellene.Mazany@ucf.edu
Telephone: 407-823-1089

Minoska Hernandez
Online MSW Admissions Specialist
Minoska.Hernandez@ucf.edu
Telephone: 407-823-4110

Online Availability

Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Social-Work-MSW.pdf.
Track Description

The Online Master of Social Work (MSW) Part-Time Advanced Standing Track is offered completely online and allows students with baccalaureate degrees in Social Work from a CSWE-accredited school/program who demonstrate academic potential and professional maturity to complete the MSW degree in four semesters of graduate study.

To be considered for advanced standing admission, the bachelor's degree must have been completed within six years of the time of initial enrollment in the master's program.

The MSW program strives to educate students to become successful practitioners in the field of clinical social work. To that end, the National Association of Social Workers (NASW) Code of Ethics is reinforced throughout the academic curriculum. Students who violate the NASW Code of Ethics may be subject to academic sanctions or dismissed from the program.

Students who apply for admission to the Online Part-time Advanced Standing track will not be permitted to switch to the on-campus track due to the strict cohort model followed by the online track.

This track is completed entirely online and charges an enhanced tuition rate. As such, Online MSW students are not permitted to simultaneously enroll in any graduate or certificate programs through UCF. Please visit UCF Online for additional information about tuition and fees.

The 32-hour MSW program is composed of 18 credit hours of required core and advanced clinical specialization courses. In addition, students complete 6 credit hours of electives and 8 credit hours of field experience. Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students.

Total Credit Hours Required: 32 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

The Council on Social Work Education (CSWE) requires that all applicants have an undergraduate degree from an accredited institution. The School of Social Work requires that applicants have successfully completed (with a grade of C or higher) at least one course in each of the following areas:

- Humanities (examples: fine arts, history, languages, literature, philosophy, or religion)
- Physical and Biological Sciences (examples: biology, chemistry, anatomy, or physiology)
- Mathematics (examples: calculus, college algebra, computer science, or statistics)
- Social Sciences (examples: anthropology, economics, ethnic studies, gender studies, human development, international relations, political science, psychology, social work, or sociology)

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements
Clinical Specialization
18 Total Credits

Complete the following:
- SOW6123 - Psychosocial Pathology (3)
- SOW6433 - Clinical Evaluation in Social Work Practice (3)
- SOW6324 - Clinical Practice with Groups (3)
- SOW6348 - Clinical Practice with Individuals (3)
- SOW6612 - Clinical Practice with Families (3)
- SOW6424 - Theories for Evidence-Based Clinical Practice in Social Work (3)

Electives
6 Total Credits

Complete all of the following
- Complete at least 2 of the following:
  - SOW6644 - Interventions with Older Adults and Their Families (3)
  - SOW6806 - Behavioral Health Skills for Clinical Social Workers (3)
  - SOW6604 - Medications in Social Work Practice (3)
  - SOW6670 - Clinical Social Work Practice with LGBTQ+ (3)
- Two clinical electives are required as components of the clinical specialization. They are selected in consultation with adviser and Online MSW coordinator.

Field Experience
8 Total Credits

Earn at least 8 credits from the following types of courses:
Field instruction is an integral part of graduate social work education. It provides the student with an opportunity to test classroom knowledge as well as to develop and refine foundation and advanced practice skills. Decisions regarding field assignment are determined by the Field Director. Only agency sites approved by the School of Social Work may be used for field instruction. Advanced Standing MSW students complete a minimum of 600 clock hours in the field. Field education includes a field seminar. Students must complete at least 50 percent of their field hours during the agency's normal business hours. Evening (after 5:00 p.m.) and weekend placements are extremely limited. The School of Social Work is under no obligation to provide such placements. Consequently, field placements cannot be guaranteed to students who require evening and weekend placements. Many social work agencies have students complete background checks, including formal background checks, law enforcement fingerprinting, driving records, and criminal record checks. In most instances, the expense for the background check is the responsibility of the student. We urge students to seek this information prior to entering the field experience if there is sensitive information that may prevent them from being accepted at an agency. Students must also report any background issues on the field application so that an appropriate placement can be made. The UCF School of Social Work cannot guarantee a field placement or subsequent degree completion for students who do not pass background checks.

Grand Total Credits: 32

2022-2023 Graduate Catalog
Track Details

The MSW Advanced Standing tracks allow no more than one C grade or 3 credit hours (whichever is greater) to be used toward the degree requirements. Exceeding three credit hours or one C grade is grounds for dismissal from the MSW Advanced Standing track.

Previous baccalaureate coursework that received at least a "B-" will be reviewed to ensure content equivalency. In advanced standing admission, a maximum of 30 foundation-level credits may be waived based on the content equivalency to meet foundation year MSW requirements, which consist of courses in human behavior and the social environment, policy, research, social work practice, and social work field placement.

Educational standards for all social work programs are established by the Council on Social Work Education (CSWE), the national accreditation body for professional social work education. Curriculum direction and content is regulated by the CSWE through its accreditation standards. The MSW program at UCF is fully accredited through CSWE.

Required Sequence of Curriculum

*The Online MSW is primarily an asynchronous program, which means that courses are generally not held during a fixed meeting time. However, there are some courses where synchronous, or "live" sessions are a required component of the course assignments. Because an MSW is a professional degree that allows students to engage directly with clients, synchronous sessions are put in place to support student’s skills and evaluation in this area.

Some of the courses that may have required live components as a part of an assignment include, but are not limited to SOW 6324 Clinical Social Work Practice with Groups and SOW 6433 Clinical Evaluation in Social Work Practice. Dates and times of live sessions will be announced before the course begins, or in some courses, multiple options are provided.

First Semester (Fall)

- SOW 6123 - Psychosocial Pathology **3 Credit Hours**
- SOW 6424 - Theories for Evidence-Based Clinical Practice in Social Work **3 Credit Hours**

Second Semester (Spring)

- SOW 6348 - Clinical Practice with Individuals **3 Credit Hours**
- SOW 6612 - Clinical Practice with Families **3 Credit Hours**
- SOW 6561 - Part-Time MSW Clinical Field Integrative Seminar I **2 Credit Hours**
- SOW 6940 - Clinical Field Education **VAR Credit Hours**
  (2 credit hours)

Third Semester (Summer)

- SOW 6324 - Clinical Practice with Groups **3 Credit Hours**
- Clinical Elective
- SOW 6562 - Part Time MSW Clinical Field Integrative Seminar II **1 Credit Hours**
- SOW 6940 - Clinical Field Education **VAR Credit Hours**
  (1 credit hour)

Fourth Semester (Fall)

- SOW 6433 - Clinical Evaluation in Social Work Practice **3 Credit Hours**
- Clinical Elective
- SOW 6563 - Part-Time MSW Clinical Field Integrative Seminar III **1 Credit Hours**
- SOW 6940 - Clinical Field Education **VAR Credit Hours**
  (1 credit hour)

Transfer Credit

Academic credit for life experience and previous work experience shall not be given, in whole or in part, in lieu of Social Work courses required to fulfill degree requirements.

Due to the cohort nature of the track and university policy, transfer credits will not be considered for the market-based, fully online part-time Advanced Standing track.

Cost Per Credit Hour

For the Online Part-Time Social Work track in the Social Work MSW program, the cost per credit hour is $487.45.*

*Includes all university fees, which may be subject to change.

Tuition waivers are not accepted for the Online MSW.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students. The field experiences and practice electives provide substantial opportunities for students to learn independently and practically about social work practice.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

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Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Social Work MSW - Social Work MSW, Online Part-Time Track

Track Website
https://www.ucf.edu/online/degree/master-of-social-work-msw/

Track Handbook
Social Work MSW, Online Part-Time Track

Track Contact Information

Shellene Mazany, MSW, LCSW
Online MSW Director, Associate Instructor
Shellene.Mazany@ucf.edu
Telephone: 407-823-1089

Minoska Hernandez
Online MSW Admissions Specialist
Minoska.Hernandez@ucf.edu
Telephone: 407-823-4110

Online Availability
Yes

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Social-Work-MSW.pdf.
The Online Master of Social Work (MSW) Part-Time Track is offered completely online and allows students who do not have a BSW degree to complete the MSW required curriculum online over the course of three years.

The first year of study in the Online Master of Social Work (MSW) Part-Time Track includes 18 credit hours in class work. The second year of study includes 18 credit hours in class work and 6 credit hours in the field. The third year of study includes 12 credit hours in class work and 8 credit hours in the field.

The MSW program strives to provide students with the education needed to become successful practitioners in the field of clinical social work. The National Association of Social Workers (NASW) Code of Ethics is enforced throughout the academic curriculum. Students who violate the NASW Code of Ethics may be subject to academic sanctions or dismissed from the program.

Students who apply for admission into the Online Part-Time Track will not be permitted to switch to the on-campus, track due to the strict cohort model the online track follows.

This track is completed entirely online and charges an enhanced tuition rate. As such, Online MSW students are not permitted to simultaneously enroll in any graduate or certificate programs through UCF. Please visit UCF Online for additional information about tuition and fees.

The 62-hour MSW program is composed of 39 credit hours of required core and advanced clinical specialization courses. In addition, students complete 9 credit hours of electives and 14 credit hours of field experience. Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers, and internships also contribute to the self-development of our students.

Total Credit Hours Required: 62 Credit Hours Minimum beyond the Bachelor’s Degree

The Council on Social Work Education (CSWE) requires that all applicants have an undergraduate degree from an accredited institution. The School of Social Work requires that applicants have successfully completed (with a grade of C or higher) at least one course in each of the following areas:

- Humanities (examples: fine arts, history, languages, literature, philosophy, or religion)
- Physical and Biological Sciences (examples: biology, chemistry, anatomy, or physiology)
- Mathematics (examples: calculus, college algebra, computer science, or statistics)
- Social Sciences (examples: anthropology, economics, ethnic studies, gender studies, human development, international relations, political science, psychology, social work, or sociology)

Graduate Admissions Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
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Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core
21 Total Credits

- Complete the following:
  - SOW5107 - Human Behavior in the Social Environment (3)
  - SOW5107 - Human Behavior in the Social Environment (3)
  - SOW5217 - Foundations of Behavioral Health Policy and Social Work Practice (3)
  - SOW5235 - Social Welfare Policies and Services (3)
  - SOW5305 - Social Work Practice I: Generalist Practice (3)
  - SOW5306 - Social Work Practice II: Intervention Approaches (3)
  - SOW5404 - Social Work Research (3)

Clinical Specialization
18 Total Credits

- Complete the following:
  - SOW6123 - Psychosocial Pathology (3)
  - SOW6324 - Clinical Practice with Groups (3)
  - SOW6348 - Clinical Practice with Individuals (3)
  - SOW6612 - Clinical Practice with Families (3)
  - SOW6424 - Theories for Evidence-Based Clinical Practice in Social Work (3)
  - SOW6433 - Clinical Evaluation in Social Work Practice (3)

Electives
9 Total Credits

- Complete at least 3 of the following:
  - SOW6155 - Human Sexuality in Social Work Practice (3)
  - SOW6652 - Child Welfare Services (3)
  - SOW6603 - Social Work in Health Settings (3)
  - SOW6604 - Medications in Social Work Practice (3)
  - SOW6610 - Clinical Practice with Military and Veteran Families or Groups (3)
  - SOW6644 - Theories for Evidence-Based Clinical Practice in Social Work (3)
  - SOW6670 - Clinical Social Work Practice with LGBTQ+ (3)
  - SOW6712 - Clinical Social Work Practice with Substance Addictions (3)
  - SOW6735 - Documentation Skills for Helping Professionals (3)
  - SOW6806 - Behavioral Health Skills for Clinical Social Workers (3)

Field Experience
14 Total Credits

- Earn at least 14 credits from the following types of courses:
  Field instruction is an integral part of graduate social work education. It provides the student with an opportunity to test classroom knowledge as well as to develop and refine foundation and advanced practice skills. Decisions regarding field assignment are determined by the Field Director. Only agency sites approved by the School of Social Work may be used for field instruction. Generalist MSW students complete a minimum of 400 hours in the field; clinical MSW students complete a minimum of 600 clock hours in the field. Field education includes a field seminar. Students must complete at least 50% of their field hours during the agency's normal business hours. Evening (after 5 p.m.) and weekend placements are extremely limited. The School of Social Work is under no obligation to provide such placements. Consequently, field placements cannot be guaranteed to students who require evening and weekend placements. Many social work agencies have students complete background checks, including formal background checks, law enforcement finger printing, driving records, and criminal record checks. In most instances, the expense for the background check is the responsibility of the student. We urge students to seek this information prior to entering the field experience if there is sensitive information that may prevent them from being accepted at an agency. Students must also report any background issues on the field application so that an appropriate placement can be made. The UCF School of Social Work cannot guarantee a field placement or subsequent degree completion for students who do not pass background checks.

Grand Total Credits: 62

Track Details

Students in the 62-hour program must include at least 31 hours of course work at the 6000 level in their program of study.

Educational standards for all social work programs are established by the Council on Social Work Education (CSWE), the national accreditation body for professional social work education. Curriculum direction and content is regulated by the CSWE through its accreditation standards. The MSW program at UCF is fully accredited through CSWE.

Required Sequence of Curriculum

*The Online MSW is primarily an asynchronous program, which means that our courses are generally not held during a fixed meeting time. However, there are some courses where synchronous, or "live" sessions are a required component of the course assignments. Because an MSW is a professional degree that allows students to engage directly with clients, synchronous sessions are put in place to support student's skills and evaluation in this area.
Some of the courses that may have required live components as a part of an assignment include, but are not limited to SOW 5306 Social Work Practice II, SOW 6324 Clinical Social Work Practice with Groups, and SOW 6433 Clinical Evaluation in Social Work Practice. Dates and times of live sessions will be announced before the course begins, or in some courses, multiple options are provided.

+Depending on the term in which you enter the Online MSW, your final year of the program may show classes in a different sequence. A Plan of Study will be provided to you prior to the beginning of classes with the correct sequence for your cohort.

First Semester
- Term 1.1 - SOW 5107 - Human Behavior in the Social Environment 3 Credit Hours
- Term 1.2 - SOW 5132 - Diverse Client Populations 3 Credit Hours

Second Semester
- Term 2.1 - SOW 5235 - Social Welfare Policies and Services 3 Credit Hours
- Term 2.2 - SOW 5404 - Social Work Research 3 Credit Hours

Third Semester
- Term 3.1 - SOW 5305 - Social Work Practice I: Generalist Practice 3 Credit Hours
- Clinical Elective - Term 3.2

Fourth Semester
- Term 4.1 - SOW 5306 - Social Work Practice II: Intervention Approaches 3 Credit Hours *
- Term 4.2 - SOW 6433 - Clinical Evaluation in Social Work Practice 3 Credit Hours *
- SOW 5565 - Part-Time MSW Generalist Field Integrative Seminar I 1 Credit Hours
- SOW 5940 - Generalist Field Education VAR Credit Hours
  Take 1 credit hour

Fifth Semester
- Term 5.1 Clinical Elective
- SOW 5217 - Foundations of Behavioral Health Policy and Social Work Practice 3 Credit Hours Term 5.2 -
- SOW 5566 - Part-Time MSW Generalist Field Integrative Seminar II 1 Credit Hours
- SOW 5940 - Generalist Field Education VAR Credit Hours
  Take 1 credit hour

Sixth Semester
- Term 6.1 - SOW 6123 - Psychosocial Pathology 3 Credit Hours
- Term 6.2 - SOW 6424 - Theories for Evidence-Based Clinical Practice in Social Work 3 Credit Hours *
- SOW 5561 - Part-Time MSW Clinical Field Integrative Seminar I 2 Credit Hours
- SOW 6940 - Clinical Field Education VAR Credit Hours
  Take 1 credit hour

Seventh Semester+
- Term 7.1 - SOW 6348 - Clinical Practice with Individuals 3 Credit Hours
- Term 7.2 - SOW 6612 - Clinical Practice with Families 3 Credit Hours
- SOW 6561 - Part-Time MSW Clinical Field Integrative Seminar II 1 Credit Hours
- SOW 6940 - Clinical Field Education VAR Credit Hours

Eighth Semester+
- Term 8.1 - SOW 6324 - Clinical Practice with Groups 3 Credit Hours
- Term 8.2 Clinical Elective
- SOW 6562 - Part-Time MSW Clinical Field Integrative Seminar II 1 Credit Hours
- SOW 6940 - Clinical Field Education VAR Credit Hours

Ninth Semester+
- SOW 6563 - Part-Time MSW Clinical Field Integrative Seminar III 1 Credit Hours
- SOW 6940 - Clinical Field Education VAR Credit Hours

Transfer Credit
Academic credit for life experience and previous work experience shall not be given, in whole or in part, in lieu of Social Work courses required to fulfill degree requirements.

Due to the cohort nature of the track and university policy, transfer credits will not be considered for the market-based, fully online part-time MSW track.

Cost Per Credit Hour
For the Online Part-Time Social Work track in the Social Work MSW program, the cost per credit hour is $487.45.*
*Includes all university fees, which may be subject to change.

**Tuition waivers are not accepted for the Online MSW.**

**Independent Learning**

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students. The field experiences and practice electives provide substantial opportunities for students to learn independently and practically about social work practice.

**Financial Information**

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Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241

**Fellowship Information**

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**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Social Work MSW - Social Work MSW, Part-Time Advanced Standing Campus-Based Track**

**Track Website**

https://healthprofessions.ucf.edu/socialwork/

**Track Handbook**

Social Work MSW, Part-Time Advanced Standing Campus-Based Track

**Track Contact Information**

**Shellene Mazany, MSW, LCSW**

Associate Instructor, MSW  
Program Director  
shellene.mazany@ucf.edu  
Telephone: 407-823-1089  
HS 1, Suite 204  
mswadmissions@ucf.edu  
Telephone: 407-823-3474  
HS 1, Suite 236

**Online Availability**

No

**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Social-Work-MSW.pdf
**Track Description**

The Master of Social Work (MSW) Program, Part-Time Advanced Standing Campus-Based Track allows students with baccalaureate degrees in Social Work from a CSWE-accredited school/program who demonstrate academic potential and professional maturity to complete the MSW degree at the main campus in four semesters of graduate study.

To be considered for advanced standing admission, the bachelor's degree must have been completed within six years of the time of initial enrollment in the master's program. The Part-Time Advanced Standing Campus-Based Track is offered at the main campus and may be completed in four semesters (summer, fall, spring, and summer).

The MSW program strives to provide students with the education needed to become successful practitioners in the field of clinical social work. The National Association of Social Workers (NASW) Code of Ethics is enforced throughout the academic curriculum. Students who violate the NASW Code of Ethics may be subject to academic sanctions or dismissed from the program.

The 32-hour MSW program is composed of 18 credit hours of required core and advanced clinical specialization courses. In addition, students complete 6 credit hours of electives and 8 credit hours of field experience. Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students.

**Total Credit Hours Required: 32 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

The Council on Social Work Education (CSWE) require that all applicants have an undergraduate degree from an accredited institution. The School of Social Work requires that applicants have successfully completed (with a grade of C or higher) at least one course in each of the following categories:

- **Humanities** (examples: fine arts, history, languages, literature, philosophy, or religion);
- **Physical and Biological sciences** (examples: biology, chemistry, anatomy, or physiology);
- **Mathematics** (examples: calculus, college algebra, computer science, or statistics);
- **Social Sciences** (examples: anthropology, economics, ethnic studies, gender studies, human development, international relations, political science, psychology, social work, or sociology).

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

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PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233
Degree Requirements

Clinical Specialization
18 Total Credits

- Complete the following:
  - SOW6123 - Psychosocial Pathology (3)
  - SOW6433 - Clinical Evaluation in Social Work Practice (3)
  - SOW6324 - Clinical Practice with Groups (3)
  - SOW6348 - Clinical Practice with Individuals (3)
  - SOW6612 - Clinical Practice with Families (3)
  - SOW6424 - Theories for Evidence-Based Clinical Practice in Social Work (3)

Electives
6 Total Credits

- Complete at least 2 of the following:
  - SOW6149 - Military Culture and Social Work Practice (3)
  - SOW6109 - Violence Against Women: A Global Perspective (3)
  - SOW6155 - Human Sexuality in Social Work Practice (3)
  - SOW6383 - Social Work Administration (3)
  - SOW6603 - Social Work in Health Settings (3)
  - SOW6604 - Medications in Social Work Practice (3)
  - SOW6608 - Understanding and Managing Combat Related Behavioral and Mental Health Disorders (3)
  - SOW6610 - Clinical Practice with Military and Veteran Families or Groups (3)
  - SOW6635 - Social Work Practice in Schools (3)
  - SOW6644 - Interventions with Older Adults and Their Families (3)
  - SOW6652 - Child Welfare Services (3)
  - SOW6655 - Child Abuse: Treatment and Prevention (3)
  - SOW6670 - Clinical Social Work Practice with LGBTQ+ (3)
  - SOW6712 - Clinical Social Work Practice with Substance Addictions (3)
  - SOW6726 - Social Work Practice with Children from Birth to Age Five and their Families (3)
  - SOW6727 - Core Concepts of Child and Adolescent Trauma (3)
  - SOW6735 - Documentation Skills for Helping Professionals (3)
  - SOW6756 - Forensic Social Work (3)
  - SOW6806 - Behavioral Health Skills for Clinical Social Workers (3)
  - SOW6846 - Spirituality in Clinical Social Work Practice (3)

Field Experience
8 Total Credits

- Earn at least 8 credits from the following types of courses:
  Clinical Field Education and Integrative Seminars
  8 Credit Hours
  Field instruction is an integral part of graduate social work education. It provides the student with an opportunity to test classroom knowledge as well as to develop and refine foundation and advanced practice skills. Decisions regarding field assignment are determined by the Field Director. Only agency sites approved by the School of Social Work may be used for field instruction. Advanced Standing MSW students complete a minimum of 600 clock hours in the field. Field education includes a field seminar. Students must complete at least 50% of their field hours during the agency's normal business hours. Evening (after 5 p.m.) and weekend placements are extremely limited. The School of Social Work is under no obligation to provide such placements. Consequently, field placements cannot be guaranteed to students who require evening and weekend placements. Many social work agencies have students complete background checks, including formal background checks, law enforcement finger printing, driving records, and criminal record checks. In most instances, the expense for the background check is the responsibility of the student. We urge students to seek this information prior to entering the field experience if there is sensitive information that may prevent them from being accepted at an agency. Students must also report any background issues on the field application so that an appropriate placement can be made. The UCF School of Social Work cannot guarantee a field placement or subsequent degree completion for students who do not pass background checks.

Grand Total Credits: 32
Track Details

The MSW Advanced Standing tracks allow no more than one C grade or 3 credit hours (whichever is greater) to be used toward the degree requirements. Exceeding three credit hours or one C grade is grounds for dismissal from the MSW Advanced Standing tracks.

Previous baccalaureate coursework that received at least a "B-" will be reviewed to ensure content equivalency. In advanced standing admission, a maximum of 30 foundation-level credits may be waived based on the content equivalency to meet foundation year MSW requirements, which consist of courses in human behavior and the social environment, policy, research, social work practice, and social work field placement.

Educational standards for all social work programs are established by the Council on Social Work Education (CSWE), the national accreditation body for professional social work education. Curriculum direction and content is regulated by the CSWE through its accreditation standards. The MSW program at UCF is fully accredited through CSWE.

Required Sequence of Curriculum

First Semester (Summer)
- SOW 6123 - Psychosocial Pathology 3 Credit Hours
- SOW 6424 - Theories for Evidence-Based Clinical Practice in Social Work 3 Credit Hours

Second Semester (Fall)
- SOW 6348 - Clinical Practice with Individuals 3 Credit Hours
- SOW 6612 - Clinical Practice with Families 3 Credit Hours
- SOW 6561 - Part-Time MSW Clinical Field Integrative Seminar I 2 Credit Hours
- SOW 6940 - Clinical Field Education 2 Credit Hours

Third Semester (Spring)
- SOW 6433 - Clinical Evaluation in Social Work Practice 3 Credit Hours
- SOW 6562 - Part Time MSW Clinical Field Integrative Seminar II 1 Credit Hours
- SOW 6940 - Clinical Field Education 1 Credit Hour
- SOW 6XXX Clinical Elective

Fourth Semester (Summer)
- SOW 6324 - Clinical Practice with Groups 3 Credit Hours
- SOW 6563 - Part-Time MSW Clinical Field Integrative Seminar III 1 Credit Hours
- SOW 6940 - Clinical Field Education 1 Credit Hours
- SOW 6XXX Clinical Elective

Transfer Credit

Academic credit for life experience and previous work experience shall not be given, in whole or in part, in lieu of Social Work courses required to fulfill degree requirements.

Students who have completed coursework in an accredited MSW program may transfer up to 9 credit hours of non-field coursework toward the 32 credit hours of the degree. Students must have received a grade of "B-" or higher in these courses. Courses will be evaluated on a course-by-course basis by the MSW Director. Field classes are not eligible for transfer. Students seeking to transfer to the School of Social Work from another CSWE accredited social work program are required to meet the criteria for admission and follow the application procedures. Additionally, one of the academic references must be from the MSW Program Coordinator or academic adviser in the program from which the applicant is transferring and must address the academic standing in that program. If not currently enrolled, the reference must be from the former MSW Program Director or academic adviser. Syllabi are required for any social work classes being considered for transfer credit.

As per university policy, transfer credits will not be considered for the market based fully online part time tracks.

Equipment Fee

Full-time students in the MSW program pay a $35 equipment fee each semester that they are enrolled.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students. The field experiences and practice electives provide substantial opportunities for students to learn independently and practically about social work practice.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Social Work MSW - Social Work MSW, Part-Time Campus-Based Track

Track Website
https://healthprofessions.ucf.edu/socialwork/

Track Handbook
Social Work MSW, Part-Time Campus-Based Track

Track Contact Information

Shellene Mazany, MSW, LCSW
Associate Instructor, MSW
Program Director
shellene.mazany@ucf.edu
Telephone: 407-823-1089
HS 1, Suite 204

mswadmissions@ucf.edu
Telephone: 407-823-3474
HS 1, Suite 236

Online Availability
No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-CHPS-Social-Work-MSW.pdf.
Track Description

The Master of Social Work (MSW), Part-Time Campus-based Track allows students who do not have a BSW degree to complete the MSW required curriculum at the main campus.

The first year of study in the Master of Social Work (MSW), Part-Time Campus-based Track includes 18 credit hours in classwork. The second year of study includes 18 credit hours in classwork and 6 credit hours in the field. The third year of study includes 12 credit hours in classwork and 8 credit hours in the field.

The MSW program strives to provide students with the education needed to become successful practitioners in the field of clinical social work. The National Association of Social Workers (NASW) Code of Ethics is enforced throughout the academic curriculum. Students who violate the NASW Code of Ethics may be subject to academic sanctions or dismissed from the program.

The 62-hour MSW program is composed of 39 credit hours of required core and advanced clinical specialization courses. In addition, students complete 9 credit hours of electives and 14 credit hours of field experience. Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students. Students in the 62-hour program must include at least 31 hours of course work at the 6000 level in their program of study.

Total Credit Hours Required: 62 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

The Council on Social Work Education (CSWE) require that all applicants have an undergraduate degree from an accredited institution. The School of Social Work requires that applicants have successfully completed (with a grade of C or higher) at least one course in each of the following categories:

- Humanities (examples: fine arts, history, languages, literature, philosophy, or religion);
- Physical and Biological sciences (examples: biology, chemistry, anatomy, or physiology);
- Mathematics (examples: calculus, college algebra, computer science, or statistics);
- Social Sciences (examples: anthropology, economics, ethnic studies, gender studies, human development, international relations, political science, psychology, social work, or sociology).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Core
21 Total Credits
- Complete the following:
  - SOW5107 - Human Behavior in the Social Environment (3)
  - SOW5217 - Foundations of Behavioral Health Policy and Social Work Practice (3)
  - SOW5132 - Diverse Client Populations (3)
  - SOW5235 - Social Welfare Policies and Services (3)
  - SOW5305 - Social Work Practice I: Generalist Practice (3)
  - SOW5306 - Social Work Practice II: Intervention Approaches (3)
  - SOW5404 - Social Work Research (3)

Clinical Specialization
18 Total Credits
- Complete the following:
  - SOW6123 - Psychosocial Pathology (3)
  - SOW6324 - Clinical Practice with Groups (3)
  - SOW6324 - Clinical Practice with Groups (3)
  - SOW6612 - Clinical Practice with Families (3)
  - SOW6424 - Theories for Evidence-Based Clinical Practice in Social Work (3)
  - SOW6433 - Clinical Evaluation in Social Work Practice (3)
Electives
9 Total Credits

- Complete 1 of the following
  - One elective is required as a component of the foundation curriculum and two clinical electives are required as components of the clinical specialization. Students may choose to take clinical electives for all three required MSW electives. Clinical elective 3 Credit Hours Clinical elective 3 Credit Hours Practice/ Non-Clinical or Clinical elective 3 Credit Hours
- All Clinical Elective Options (electives are rotated and not offered every semester)
  - Complete at least 3 of the following:
    - SOW6149 - Military Culture and Social Work Practice (3)
    - SOW6109 - Violence Against Women: A Global Perspective (3)
    - SOW6149 - Military Culture and Social Work Practice (3)
    - SOW6603 - Social Work in Health Settings (3)
    - SOW6604 - Medications in Social Work Practice (3)
    - SOW6608 - Understanding and Managing Combat Related Behavioral and Mental Health Disorders (3)
    - SOW6610 - Clinical Practice with Military and Veteran Families or Groups (3)
    - SOW6635 - Social Work Practice in Schools (3)
    - SOW6644 - Interventions with Older Adults and Their Families (3)
    - SOW6652 - Child Welfare Services (3)
    - SOW6655 - Child Abuse: Treatment and Prevention (3)
    - SOW6670 - Clinical Social Work Practice with LGBTQ+ (3)
    - SOW6712 - Clinical Social Work Practice with Substance Addictions (3)
    - SOW6726 - Social Work Practice with Children from Birth to Age Five and their Families (3)
    - SOW6727 - Core Concepts of Child and Adolescent Trauma (3)
    - SOW6735 - Documentation Skills for Helping Professionals (3)
    - SOW6756 - Forensic Social Work (3)
    - SOW6806 - Behavioral Health Skills for Clinical Social Workers (3)
    - SOW6846 - Spirituality in Clinical Social Work Practice (3)

Practice/ Non-Clinical and Clinical Elective Option
- Complete all of the following
  - Complete the following:
    - SOW6383 - Social Work Administration (3)
  - Earn at least 6 credits from the following types of courses:
    - Clinical Elective Courses listed above

Field Experience
14 Total Credits

- Earn at least 14 credits from the following types of courses:
  Generalist Field Education and Integrative Seminars 6 Credit Hours Clinical Field Education and Integrative Seminars 8 Credit Hours Field instruction is an integral part of graduate social work education. It provides the student with an opportunity to test classroom knowledge as well as to develop and refine foundation and advanced practice skills. Decisions regarding field assignment are determined by the Field Director. Only agency sites approved by the School of Social Work may be used for field instruction. Generalist MSW students complete a minimum of 400 hours in the field; clinical MSW students complete a minimum of 600 clock hours in the field. Field education includes a field seminar. Students must complete at least 50% of their field hours during the agency's normal business hours. Evening (after 5 p.m.) and weekend placements are extremely limited. The School of Social Work is under no obligation to provide such placements. Consequently, field placements cannot be guaranteed to students who require evening and weekend placements. Many social work agencies have students complete background checks, including formal background checks, law enforcement fingerprinting, driving records, and criminal record checks. In most instances, the expense for the background check is the responsibility of the student. We urge students to seek this information prior to entering the field experience if there is sensitive information that may prevent them from being accepted at an agency. Students must also report any background issues on the field application so that an appropriate placement can be made. The UCF School of Social Work cannot guarantee a field placement or subsequent degree completion for students who do not pass background checks.

Grand Total Credits: 62

Track Details
Educational standards for all social work programs are established by the Council on Social Work Education (CSWE), the national accreditation body for professional social work education. Curriculum direction and content is regulated by the CSWE through its accreditation standards. The MSW program at UCF is fully accredited through CSWE.

Required Sequence of Curriculum

First Semester (Fall)
- SOW 5107 - Human Behavior in the Social Environment 3 Credit Hours
- SOW 5132 - Diverse Client Populations 3 Credit Hours

Second Semester (Spring)
- SOW 5404 - Social Work Research 3 Credit Hours
- SOW 5217 - Foundations of Behavioral Health Policy and Social Work Practice 3 Credit Hours

**Third Semester (Summer)**

- SOW 5305 - Social Work Practice I: Generalist Practice 3 Credit Hours
- SOW Elective (Clinical or Non-Clinical)

**Fourth Semester (Fall)**

- SOW 5306 - Social Work Practice II: Intervention Approaches 3 Credit Hours
- SOW 5235 - Social Welfare Policies and Services 3 Credit Hours
- SOW 5565 - Part-Time MSW Generalist Field Integrative Seminar I 1 Credit Hour
- SOW 5940 - MSW Generalist Field Education 1 Credit Hour

**Fifth Semester (Spring)**

- SOW 5566 - Part-Time MSW Generalist Field Integrative Seminar II 1 Credit Hour
- SOW 5940 - MSW Generalist Field Education 1 Credit Hour
- SOW Clinical Elective

** Sixth Semester (Summer)**

- SOW 5567 - Part-Time MSW Generalist Field Integrative Seminar III 1 Credit Hour
- SOW 5940 - Generalist Field Education 1 Credit Hour
  
  Take 1 credit hour

- SOW 6424 - Theories for Evidence-Based Clinical Practice in Social Work 3 Credit Hours
- SOW 6123 - Psychosocial Pathology 3 Credit Hours

**Seventh Semester (Fall)**

- SOW 6348 - Clinical Practice with Individuals 3 Credit Hours
- SOW 6612 - Clinical Practice with Families 3 Credit Hours
- SOW 6561 - Part-Time MSW Clinical Field Integrative Seminar I 2 Credit Hours
- SOW 6940 - Clinical Field Education 2 Credit Hours

**Eighth Semester (Spring)**

- SOW Clinical Elective
- SOW 6433 - Clinical Evaluation in Social Work Practice 3 Credit Hours
- SOW 6562 - Part-Time MSW Clinical Field Integrative Seminar II 1 Credit Hour
- SOW 6940 - Clinical Field Education 1 Credit Hour

**Ninth Semester (Summer)**

- SOW 6324 - Clinical Practice with Groups 3 Credit Hours
- SOW 6563 - Part-Time MSW Clinical Field Integrative Seminar III 1 Credit Hour
- SOW 6940 - Clinical Field Education 1 Credit Hour

**Transfer Credit**

Academic credit for life experience and previous work experience shall not be given, in whole or in part, in lieu of Social Work courses required to fulfill degree requirements.

Transfer credits will be evaluated on a case-by-case basis by the MSW Program Director. Students must submit syllabi and have earned a grade of "B-" or better in these courses for them to be evaluated for transfer credit.

**Field courses taken elsewhere cannot be transferred toward satisfying the field component of the degree.**

Students seeking to transfer to the School of Social Work from another CSWE accredited social work program are required to meet the criteria for admission and follow the application procedures. Additionally, one of the academic references must be from the MSW Program Coordinator or academic adviser in the program from which the applicant is transferring and must address the academic standing in that program. If not currently enrolled, the reference must be from the former MSW Program Director or academic adviser.

**Equipment Fee**

Full-time students in the MSW program pay a $35 equipment fee each semester that they are enrolled.

**Independent Learning**

Independent learning is demonstrated throughout the curriculum through the process of inquiry and dialogue. Projects such as research studies, clinical assessments and treatment plans, papers and internships also contribute to the self-development of our students.

The field experiences and practice electives provide substantial opportunities for students to learn independently and practically about social work practice.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

College of Medicine

Biomedical Sciences MS

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Program Website
https://med.ucf.edu/biomed/graduate-programs/

Program Handbook Link
Biomedical Sciences MS

Program Contact Information
For questions related to degree requirements, admission decisions, academic advising, plans of study, or other program specific requests, please contact:

Saleh Naser PhD
Professor
saleh.naser@ucf.edu
UCF College of Medicine

Is this program available 100% online?
No

Program Description

The Master of Science in Biomedical Sciences program is a nonthesis program for students who wish to further their knowledge in the field and prepare for professional careers in medical fields, higher education, and research. Students interested in research and thesis work should apply to the Master of Science in Biotechnology program.

This degree has 5 tracks: Cancer Biology Track, Infectious Disease Track, Integrated Medical Sciences Track, Metabolic and Cardiovascular Sciences Track, and Neuroscience Track. Please scroll to the bottom of this page for further details on these Tracks.

While many students discover that they have interests in varied disciplines at the University of Central Florida, they are not permitted to pursue two majors within the College of Medicine. College of Medicine students may declare a major and a minor within the college, or pursue a second major or minor in another academic college at UCF. Students are encouraged to meet with an academic advisor to discuss these opportunities.

2022-2023 Graduate Catalog
**Program Prerequisites**

A bachelor's degree in Biological Sciences or related area.

Applicants who hold a BS degree in unrelated fields are expected to have the equivalent of 16 semester hours in biological sciences including a course in general microbiology, biochemistry or molecular biology or cell biology, plus one year of organic chemistry, one year of physics, basic university mathematics and statistics, and laboratory skills equivalent to the minimum required of our own undergraduates. Minor deficiencies may be remedied after acceptance by enrollment at the first opportunity in an appropriate course.

**College of Graduate Studies Contact Information**

For questions regarding the submission of your application, payment of your application fee, application supporting documents, deadlines, or other processing related questions, please contact:

**College of Graduate Studies**
Graduate Admissions
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application

**Mailing Address**
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

**Required Courses**
18 Total Credits

- Complete all of the following
  - Complete the following:
    - ZOO6737 - Clinically Oriented Human Anatomy (4)
    - MCB6226 - Molecular Diagnostics (3)
    - PCB595 - Regulation of Gene Expression (3)
    - PHI5634 - Medical Ethics (3)
  - Complete at least 1 of the following:
    - BSC6407C - Laboratory Methods in Molecular Biology (3)
    - BSC5418 - Tissue Engineering (3)
  - Complete 1 of the following
    - Earn at least 2 credits from the following types of courses:
      - MCB 6938 - Seminar 1 Credit Hour (to be repeated)
    - Earn at least 2 credits from the following types of courses:
      - MCB 6938 - Seminar 1 Credit Hour MCB 6314 - Industrial Perspectives Seminar 1 Credit Hours

**Elective Courses**
12 Total Credits

- Complete all of the following
  - Biomedical Specialization
  - Complete all of the following
    - Earn at least 6 credits from the following:
      - BSC5418 - Tissue Engineering (3)
      - BSC5418 - Tissue Engineering (3)
      - MCB6226 - Molecular Diagnostics (3)
      - PCB5238 - Immunobiology (3)
      - PCB5236 - Cancer Biology (3)
      - PCB5275 - Signal Transduction Mechanics (3)
      - PCB5527 - Genetic Engineering and Biotechnology (3)
      - PCB5709C - Laboratory Virtual Simulations in Physiology (3)
      - PCB5815 - Molecular Aspects of Obesity, Diabetes and Metabolism (3)
      - PCB5834C - Advanced Human Physiology (4)
      - IDS5127 - Foundation of Bio-Imaging Science (3)
      - PCB5265 - Stem Cell Biology (3)
      - GEB5516 - Technological Entrepreneurship (3)
  - Others: If approved by Graduate Committee
Microbiology Specialization

- Complete all of the following:
  - Earn at least 6 credits from the following:
    - MCB5205 - Infectious Processes (3)
    - MCB5505 - Molecular Virology (3)
    - MCB5208 - Cellular Microbiology: Host-Pathogen Interactions (3)
    - MCB6417C - Microbial Metabolism (3)
    - MCB5932 - Current Topics in Molecular Biology (1 - 99)
    - MCB5415 - Cellular Metabolism (3)
    - MCB5209 - Microbial Stress Response (3)
    - PCB6595 - Regulation of Gene Expression (3)
    - PCB5235 - Molecular Immunology (3)
  - Others: If approved by Graduate Committee

Capstone
3 Total Credits

- Complete all of the following
  - Complete the following:
    - MCB6026 - Molecular Biology and Microbiology Capstone (3)
  - An in-depth current literature research report on a relevant subject will be required for each student. The student will select a faculty adviser to chair a faculty committee of two members for the evaluation of the report. An oral presentation on the written capstone report will be used as a final examination.

Capstone Process

- Students are encouraged to contact faculty as early as possible to identify a faculty whose research focus complements the student's interest. The student and the mentor should select one additional faculty members to serve on the capstone evaluation committee. Students must submit a signed Capstone Committee and Capstone Topic form to the Program Coordinator for approval as soon as the registration for the course is complete. These forms must be submitted to the Program Office. When the student is ready to defend the Capstone project, the student must register for the capstone course (MCB 6026) for three credit hours. It is important that the student register for the capstone course with the intention of completing the project at the end of the semester.

Capstone Report

- Evaluation of the capstone project requires a written report (in the format of a mini-review manuscript) and a presentation (project defense) in front of the capstone committee. Students may ask for advice and guidance from the project mentor/chair. The average capstone report ranges from 10 to 15 single-spaced pages in a manuscript format with proper citations. The student's Committee Chair will be responsible for checking the report for plagiarism using iThenticate before the report is shared with the committee. The committee must receive the report at least one week before the time of presentation.

Capstone Defense

- Note: The defense (presentation) must be held no later than one week before the final exam week. The capstone defense and comprehensive exam evaluation is designed to assess the student's knowledge and understanding of the project and other relevant subjects in the field. Questions asked by the capstone committee to evaluate the student as competent in the field will satisfy the requirement of the comprehensive exam. The oral presentation will take place in the form of a 30-40 minute seminar and will be followed by questions and discussion. The student will be evaluated on performance in all three sections (written report, oral presentation, and ability to answer questions). Should the student fail, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in an Unsatisfactory (U) grade in the course and dismissal from the program.

Comprehensive Exam
0 Total Credits

- Students must pass an oral comprehensive exam to qualify for the Master of Science. The oral comprehensive exam tests the student's understanding of the basic concepts in the field and relevant applications. The comprehensive exam will be conducted during the capstone defense and will be administered by the capstone committee. Should the student fail this exam, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in dismissal from the program.

Teaching Requirement
0 Total Credits

- Students without significant prior teaching experience, such as but not limited to, a minimum of a year in secondary schools or colleges, are required to serve as Classroom Laboratory Teaching Assistants for a minimum of one semester (one semester in at least one lab section).

Research Shadowing (Optional)
0 Total Credits

- Students are encouraged to discuss with their capstone mentor the possibility of joining the lab for research shadowing of other graduate students. Acquired lab skills should assist students with the capstone project and with future endeavors.

Independent Learning
0 Total Credits

- In the final semester of study, nonthesis students will complete a capstone course that requires an in-depth current literature
research report on a relevant subject, which will serve as the independent learning experience. The student will select a faculty adviser to chair a faculty committee of two members for evaluation of the report.

Grand Total Credits: 33

Financial Information

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Nonthesis students are not considered for departmental graduate assistantships or tuition assistance.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Biomedical Sciences MS - Biomedical Sciences MS, Cancer Biology Track

Track Website
https://med.ucf.edu/biomed/graduate-programs/

Track Handbook
Biomedical Sciences MS - Cancer Biology Track

Track Contact Information

Saleh Naser PhD
Professor
saleh.naser@ucf.edu

Online Availability
No

Track Description

The Cancer Biology Track in the Master of Science in Biomedical Sciences Program is a nonthesis plan of study for students who want to further their knowledge in the cancer biology field and who may pursue doctoral training or professional education focused on medicine and cancer biology. Students interested in research and thesis work should apply to the Master of Science in Biotechnology Program.

Track Prerequisites
A bachelor's degree in Biological Sciences or related area.

Applicants who hold a BS degree in unrelated fields are expected to have the equivalent of 16 semester hours in biological sciences including a course in general microbiology, biochemistry or molecular biology or cell biology, plus one year of organic chemistry, one year of physics, basic university mathematics and statistics, and laboratory skills equivalent to the minimum required of our own undergraduates. Minor deficiencies may be remedied after acceptance by enrollment at the first opportunity in an appropriate course.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
18 Total Credits

- Complete all of the following
  - Complete the following:
    - ZOO6737 - Clinically Oriented Human Anatomy (4)
    - MCB6226 - Molecular Diagnostics (3)
    - PCB6595 - Regulation of Gene Expression (3)
    - PCB5236 - Cancer Biology (3)
  - Complete at least 1 of the following:
    - BSC6407C - Laboratory Methods in Molecular Biology (3)
    - BSC5418 - Tissue Engineering (3)
  - Complete 1 of the following
    - Earn at least 2 credits from the following types of courses:
      MCB 6938 - Seminar 1 Credit Hour (to be repeated)
    - Earn at least 2 credits from the following types of courses:
      MCB 6938 - Seminar 1 Credit Hour AND MCB 6314 - Industrial Perspectives Seminar 1 Credit Hours

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following:
  - PCB5025 - Molecular and Cellular Pharmacology (3)
  - MCB5415 - Cellular Metabolism (3)
  - PCB5235 - Molecular Immunology (3)
  - MCB5225 - Molecular Biology of Disease (3)
  - PCB6595 - Regulation of Gene Expression (3)
  - MCB5505 - Molecular Virology (3)
  - PCB5275 - Signal Transduction Mechanics (3)
  - MCB6226 - Molecular Diagnostics (3)
  - IDS5127 - Foundation of Bio-Imaging Science (3)
  - BSC5418 - Tissue Engineering (3)
  - BSC5436 - Biomedical Informatics: Structure Analysis (3)
  - PCB5265 - Stem Cell Biology (3)

Capstone
3 Total Credits

- Complete all of the following
  - Complete the following:
    - MCB6026 - Molecular Biology and Microbiology Capstone (3)
- An in-depth current literature research report in the area of Cancer Biology will be required for each student. The student will select a faculty adviser to chair a faculty committee of two members for evaluation of the report. An oral presentation on the written capstone report will be used as a final examination.

Capstone Process
- Students are encouraged to contact faculty as early as possible to identify a faculty whose research focus complements the student's interest. The student and the mentor should select one additional faculty members to serve on the capstone evaluation committee. Students must submit a signed Capstone Committee and Capstone Topic form to the Program Coordinator for approval as soon as the registration for the course is complete. These forms must be submitted to the Program Office. When the student is ready to defend the Capstone project, the student must
register for the capstone course (MCB 6026) for three credit hours. It is important that the student register for the capstone course with the intention of completing the project at the end of the semester.

Capstone Report
- Evaluation of the capstone project requires a written report (in the format of a mini-review manuscript) and a presentation (project defense) in front of the capstone committee. Students may ask for advice and guidance from the project mentor/chair. The average capstone report ranges from 10 to 15 single-spaced pages in a manuscript format with proper citations. The student's Committee Chair will be responsible for checking the report for plagiarism using iThenticate before the report is shared with the committee. The committee must receive the report at least one week before the time of presentation.

Capstone Defense
- Note: The defense (presentation) must be held no later than one week before the final exam week. The capstone defense and comprehensive exam evaluation is designed to assess the student's knowledge and understanding of the project and other relevant subjects in the field. Questions asked by the capstone committee to evaluate the student as competent in the field will satisfy the requirement of the comprehensive exam. The oral presentation will take place in the format of a 30-40 minute seminar and will be followed by questions and discussion. The student will be evaluated on performance in all three sections (written report, oral presentation, and ability to answer questions). Should the student fail, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in an Unsatisfactory (U) grade in the course and dismissal from the program.

Comprehensive Examination
0 Total Credits
- Students must pass an oral comprehensive exam to qualify for the Master of Science. The oral comprehensive exam tests the student's understanding of the basic concepts in the field and relevant applications. The comprehensive exam will be conducted during the capstone defense and will be administered by the capstone committee. Should the student fail this exam, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in dismissal from the program.

Teaching Requirement
0 Total Credits
- Students without significant prior teaching experience, such as, but not limited to, a minimum of a year in secondary schools or colleges, are required to serve as Classroom Laboratory Teaching Assistants for a minimum of one semester (one semester in at least one lab section).

Research Shadowing (Optional)
0 Total Credits
- Students are encouraged to discuss with their capstone mentor the possibility of joining the lab for research shadowing of other graduate students. Acquired lab skills should assist students with the capstone project and with future endeavors.

Independent Learning
0 Total Credits
- In the final semester of study, students will complete a capstone course that requires an in-depth current literature research report on a relevant subject, which will serve as the independent learning experience. The student will select a faculty adviser to chair a faculty committee of two members for evaluation of the report.

Grand Total Credits: 33

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Biomedical Sciences MS - Biomedical Sciences MS, Infectious Disease Track

Track Website
https://med.ucf.edu/biomed/graduate-programs/

Track Handbook
Biomedical Sciences MS, Infectious Disease Track

Track Contact Information
Saleh Naser PhD
Professor
saleh.naser@ucf.edu

Online Availability
No

Track Description
The Infectious Disease Track in the Master of Science in Biomedical Sciences Program is a nonthesis plan of study for students who want to further their knowledge in the infectious disease field and who may pursue doctoral training or professional education focused on medicine and infectious disease. Students interested in research and thesis work should apply to the Master of Science in Biotechnology Program.

Track Prerequisites
A bachelor’s degree in Biological Sciences or related area.

Applicants who hold a BS degree in unrelated fields are expected to have the equivalent of 16 semester hours in biological sciences including a course in general microbiology, biochemistry or molecular biology or cell biology, plus one year of organic chemistry, one year of physics, basic university mathematics and statistics, and laboratory skills equivalent to the minimum required of our own undergraduates. Minor deficiencies may be remedied after acceptance by enrollment at the first opportunity in an appropriate course.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
18 Total Credits

- Complete all of the following
- Complete the following:
- ZOO6737 - Clinically Oriented Human Anatomy (4)
- PCB6595 - Regulation of Gene Expression (3)
- MCB6226 - Molecular Diagnostics (3)
- MCB5208 - Cellular Microbiology: Host-Pathogen Interactions (3)

Complete at least 1 of the following:
- BSC6407C - Laboratory Methods in Molecular Biology (3)
- BSC5418 - Tissue Engineering (3)

Complete 1 of the following
- Earn at least 2 credits from the following types of courses:
  - MCB 6938 - Seminar 1 Credit Hour (to be repeated)
- Earn at least 2 credits from the following types of courses:
  - MCB 6938 - Seminar 1 Credit Hour
  - PCB 6314 - Industrial Perspectives Seminar 1 Credit Hours

Elective Courses
12 Total Credits

- Complete all of the following
- Earn at least 12 credits from the following:
  - PCB5527 - Genetic Engineering and Biotechnology (3)
  - MCB5205 - Infectious Processes (3)
  - MCB5505 - Molecular Virology (3)
  - MCB6417C - Microbial Metabolism (3)
  - MCB5932 - Current Topics in Molecular Biology (1 - 99)
  - MCB5415 - Cellular Metabolism (3)
  - MCB5209 - Microbial Stress Response (3)
  - PCB6595 - Regulation of Gene Expression (3)
  - PCB5235 - Molecular Immunology (3)
  - MCB5225 - Molecular Biology of Disease (3)
  - MCB5225 - Molecular Biology of Disease (3)
  - PCB5275 - Signal Transduction Mechanics (3)

- Other elective courses must be approved by the Program Coordinator.

Capstone
3 Total Credits

- Complete all of the following
  - Complete the following:
    - MCB6026 - Molecular Biology and Microbiology Capstone (3)
  - An in-depth current literature research report on a relevant subject will be required for each student. The student will select a faculty adviser to chair a faculty committee of two members for the evaluation of the report. An oral presentation on the written capstone report will be used as a final examination.

Capstone Process
- Students are encouraged to contact faculty as early as possible to identify a faculty whose research focus complements the student's interest. The student and the mentor should select one additional faculty members to serve on the capstone evaluation committee. Students must submit a signed Capstone Committee and Capstone Topic form to the Program Coordinator for approval as soon as the registration for the course is complete. These forms must be submitted to the Program Office. When the student is ready to defend the Capstone project, the student must register for the capstone course (MCB 6026) for three credit hours. It is important that the student register for the capstone course with the intention of completing the project at the end of the semester.

Capstone Report
- Evaluation of the capstone project requires a written report (in the format of a mini-review manuscript) and a presentation (project defense) in front of the capstone committee. Students may ask for advice and guidance from the project mentor/chair. The average capstone report ranges from 10 to 15 single-spaced pages in a manuscript format with proper citations. The student's Committee Chair will be responsible for checking the report for plagiarism using iThenticate before the report is shared with the committee. The committee must receive the report at least one week before the time of presentation.

Capstone Defense
- Note: The defense (presentation) must be held no later than one week before the final exam week. The capstone defense and comprehensive exam evaluation is designed to assess the student's knowledge and understanding of the project and other relevant subjects in the field. Questions asked by the capstone committee to evaluate the student as competent in the field will satisfy the requirement of the comprehensive exam. The oral presentation will take place in the form of a 30-40 minute seminar and will be followed by questions and discussion. The student will be evaluated on performance in all three sections (written report, oral presentation, and ability to answer questions). Should the student fail, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in an Unsatisfactory (U) grade in the course and dismissal from the program.

Comprehensive Examination
0 Total Credits

- Students must pass an oral comprehensive exam to qualify for the Master of Science. The oral comprehensive exam tests the student's understanding of the basic concepts in the field and relevant applications. The comprehensive exam will be conducted during the capstone defense and will be administered by the capstone committee. Should the student fail this
exam, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in dismissal from the program.

Teaching Requirement
0 Total Credits

- Students without significant prior teaching experience, such as, but not limited to, a minimum of a year in secondary schools or colleges, are required to serve as Classroom Laboratory Teaching Assistants for a minimum of one semester (one semester in at least one lab section).

Research Shadowing (Optional)
0 Total Credits

- Students are encouraged to discuss with their capstone mentor the possibility of joining the lab for research shadowing of other graduate students. Acquired lab skills should assist students with the capstone project and with future endeavors.

Independent Learning
0 Total Credits

- In the final semester of study, students will complete a capstone course that requires an in-depth current literature research report on a relevant subject, which will serve as the independent learning experience. The student will select a faculty adviser to chair a faculty committee of two members for evaluation of the report.

Grand Total Credits: **33**

Financial Information

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http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Biomedical Sciences MS - Biomedical Sciences MS, Integrated Medical Sciences Track

**Track Website**
https://med.ucf.edu/biomed/graduate-programs/

**Track Handbook**
Biomedical Sciences MS, Integrated Medical Sciences Track

**Track Contact Information**

**Steven Ebert PhD**
Associate Professor
steven.ebert@ucf.edu
BBS 421

**Online Availability**
No
**Track Description**

The non-thesis Integrated Medical Sciences Track in the Biomedical Sciences MS program is designed to prepare students for acceptance into medical, dental, osteopathic, and/or other related professional schools of their choice by providing them with an opportunity to take two first-year medical school courses with the medical students in combination with graduate courses in biomedical sciences.

**Track Prerequisites**

A bachelor's degree in Biological Sciences or related area.

Applicants who hold a BS degree in unrelated fields are expected to have the equivalent of 16 semester hours in biological sciences including a course in general microbiology, biochemistry or molecular biology or cell biology, plus one year of organic chemistry, one year of physics, basic university mathematics and statistics, and laboratory skills equivalent to the minimum required of our own undergraduates. Minor deficiencies may be remedied after acceptance by enrollment at the first opportunity in an appropriate course.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

**Required Courses**

18 Total Credits

- Complete all of the following
  - Complete the following:
    - BMS6001 - Cellular Function and Medical Genetics (5)
    - BMS6006 - Health and Disease (5)

  Student take one of the following three options

- Complete 1 of the following
  - Option 1
    - Complete all of the following
      - Complete the following:
        - PCB5834C - Advanced Human Physiology (4)
        - PCB5709C - Laboratory Virtual Simulations in Physiology (3)

    - Earn at least 1 credits from the following types of courses:
      - MCB 6938 - Seminar 1 Credit Hour or IDS 7680 - Seminar 1 Credit Hour

  - Option 2
    - Complete all of the following
      - Complete the following:
        - PHT6115C - Gross Anatomy/Neuroscience I (6)

    - Earn at least 2 credits from the following types of courses:
      - MCB 6938 - Seminar 1 Credit Hour (can be repeated by all students) or IDS 7680 - Seminar 1 Credit Hour (can be repeated by all students)

  - Option 3
    - Complete all of the following
      - Complete the following:
        - BSC5665 - Clinical Embryology and Congenital Malformations (3)
        - ZOO5758C - Vertebrate Histology (4)

    - Earn at least 1 credits from the following types of courses:
      - MCB 6938 - Seminar 1 Credit Hour or IDS 7680 - Seminar 1 Credit Hour

**Elective Courses**

12 Total Credits

- Complete all of the following
Biomedical Specialization

- Complete all of the following
  - Earn at least 6 credits from the following:
    - MCB5225 - Molecular Biology of Disease (3)
    - MCB6226 - Molecular Diagnostics (3)
    - PCBS238 - Immunobiology (3)
    - PCBS238 - Immunobiology (3)
    - PCBS265 - Stem Cell Biology (3)
    - PCBS275 - Signal Transduction Mechanisms (3)
    - PCBS277 - Genetic Engineering and Biotechnology (3)
    - PCBS709C - Laboratory Virtual Simulations in Physiology (3)
    - PCBS815 - Molecular Aspects of Obesity, Diabetes and Metabolism (3)
    - PCBS834C - Advanced Human Physiology (4)
    - IDS5127 - Foundation of Bio-Imaging Science (3)
    - BSCS418 - Tissue Engineering (3)
    - GEB5516 - Technological Entrepreneurship (3)
    - ZOO5748C - Clinical Neuroanatomy (5)
    - ZOO5749C - Clinical Neuroscience (5)

- Other courses may be substituted with approval by the graduate committee.

Microbiology Specialization

- Complete all of the following
  - Earn at least 6 credits from the following:
    - MCB5205 - Infectious Processes (3)
    - MCB5505 - Molecular Virology (3)
    - MCB5208 - Cellular Microbiology: Host-Pathogen Interactions (3)
    - MCB5654 - Applied Microbiology (3)
    - MCB6417C - Microbial Metabolism (3)
    - MCB5932 - Current Topics in Molecular Biology (1 - 99)
    - MCB5415 - Cellular Metabolism (3)
    - MCB5209 - Microbial Stress Response (3)
    - PCB5235 - Molecular Immunology (3)

- Other courses may be substituted with approval by the graduate committee.

Capstone

3 Total Credits

- Complete all of the following
  - Complete the following:
    - MCB6026 - Molecular Biology and Microbiology Capstone (3)

- The Capstone Project for the IMS Track is customizable based on student needs. Options include the following:
  - Scholarly in-depth literature review in biomedical and/or clinical sciences (report required)
  - Physician-Shadowing Experience (report required)
  - Service-Learning/Volunteer Work Experience (report required)
  - Laboratory Research (report required)
  - Other (must be pre-approved by the program coordinator/director) (report required)

The Capstone Process

- Students are encouraged to contact faculty as early as possible to identify a faculty whose research focus complements the student's interest. The student and the mentor should select one additional faculty member to serve on the capstone evaluation committee. Students must submit a signed Capstone Committee and Capstone Topic form to the Program Coordinator for approval as soon as the registration for the course is complete. These forms must be submitted to the Program Office. When the student is ready to defend the Capstone project the student must register for the capstone course (MCB 6026) for three credit hours. It is important that the student register for the capstone course with the intention of completing the project at the end of the semester.

The Capstone Report

- Evaluation of the capstone project requires a written report (in the format of a mini-review manuscript) and a presentation (project defense) in front of the capstone committee. Students may ask for advice and guidance from the project mentor/chair. The average capstone report ranges from 10 to 15 single-spaced pages in a manuscript format with proper citations. The student's Committee Chair will be responsible for checking the report for plagiarism using iThenticate before the report is shared with the committee. The committee must receive the report at least one week before the time of presentation.

The Capstone Defense

- Note: The defense (presentation) must be held no later than one week before the final exam week. The capstone defense and comprehensive exam evaluation is designed to assess the student's knowledge and understanding of the project and other relevant subjects in the field. Questions asked by the capstone committee to evaluate the student as competent in the field will satisfy the requirement of the comprehensive exam. The oral presentation will take place in the form of a 30-40 minute seminar and will be followed by questions and discussion. The student will be evaluated on performance in all three sections (written report, oral presentation, and ability to answer questions). Should the student fail, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in an Unsatisfactory (U) grade in the course and dismissal from the program.

Comprehensive Exam

0 Total Credits

- Students must pass an oral comprehensive exam to qualify for the Master of Science. The oral comprehensive exam tests the
student's understanding of the basic concepts in the field and relevant applications. The comprehensive exam will be conducted during the capstone defense and will be administered by the capstone committee. Should the student fail this exam, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in dismissal from the program.

Teaching Requirement
0 Total Credits

- Students without significant prior teaching experience, such as, but not limited to, a minimum of a year in secondary schools or colleges, are required to serve as Classroom Laboratory Teaching Assistants for a minimum of one semester (one semester in at least one lab section).

Research Shadowing (Optional)
0 Total Credits

- Students are encouraged to discuss with their capstone mentor the possibility of joining the lab for research shadowing of other graduate students. Acquired lab skills should assist students with the capstone project and with future endeavors.

Independent Learning
0 Total Credits

- In the final semester of study, students will complete a capstone course that requires an in-depth current literature research report on a relevant subject, which will serve as the independent learning experience. The student will select a faculty adviser to chair a faculty committee of two members for evaluation of the report.

Grand Total Credits: 33

Financial Information

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Grad Fellowships
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gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Biomedical Sciences MS - Biomedical Sciences MS, Metabolic and Cardiovascular Sciences Track

Track Website
https://med.ucf.edu/biomed/graduate-programs/

Track Handbook
Biomedical Sciences MS, Metabolic and Cardiovascular Sciences Track

Track Contact Information
Saleh Naser PhD
Professor
saleh.naser@ucf.edu

Online Availability
No
Track Description

The Metabolic and Cardiovascular Sciences Track in the Master of Science in Biomedical Sciences Program is a nonthesis plan of study for students who want to further their knowledge in the metabolic and cardiovascular sciences field and who may pursue doctoral training or professional education focused on medicine and metabolic and cardiovascular sciences. Students interested in research and thesis work should apply to the Master of Science in Biotechnology Program.

Track Prerequisites

A bachelor's degree in Biological Sciences or related area.

Applicants who hold a BS degree in unrelated fields are expected to have the equivalent of 16 semester hours in biological sciences including a course in general microbiology, biochemistry or molecular biology or cell biology, plus one year of organic chemistry, one year of physics, basic university mathematics and statistics, and laboratory skills equivalent to the minimum required of our own undergraduates. Minor deficiencies may be remedied after acceptance by enrollment at the first opportunity in an appropriate course.

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Mailing Address

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Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
18 Total Credits

- Complete all of the following
- Complete the following:
  - ZOO6737 - Clinically Oriented Human Anatomy (4)
  - MCB6226 - Molecular Diagnostics (3)
  - PCB5815 - Molecular Aspects of Obesity, Diabetes and Metabolism (3)
  - PCB6595 - Regulation of Gene Expression (3)
- Complete at least 1 of the following:
  - BSC6407C - Laboratory Methods in Molecular Biology (3)
  - BSC5418 - Tissue Engineering (3)
- Complete 1 of the following
  - Earn at least 2 credits from the following types of courses:
    MCB 6938 - Seminar 1 Credit Hour (to be repeated)
  - Earn at least 2 credits from the following types of courses:
    MCB 6938 - Seminar 1 Credit Hour AND MCB 6314 - Industrial Perspectives Seminar 1 Credit Hours

Elective Courses
12 Total Credits

- Complete all of the following
- Earn at least 12 credits from the following:
  - MCB5415 - Cellular Metabolism (3)
  - PCB5834C - Advanced Human Physiology (4)
  - PCB5265 - Stem Cell Biology (3)
  - CHM5305 - Bioconjugate Chemistry (3)
  - BSC5436 - Biomedical Informatics: Structure Analysis (3)
  - BSC5418 - Tissue Engineering (3)
  - PCB5709C - Laboratory Virtual Simulations in Physiology (3)
  - MCB5225 - Molecular Biology of Disease (3)
  - APK6168 - Exercise, Nutrition and Weight Control (3)
  - APK6107 - Cardiovascular Exercise Physiology (3)

- Other elective courses must be approved by the Program Coordinator.

Capstone
Complete all of the following

- Complete the following:
  - MCB6026 - Molecular Biology and Microbiology Capstone (3)

- An in-depth current literature research report on a relevant subject will be required for each student. The student will select a faculty adviser to chair a faculty committee of two members for the evaluation of the report. An oral presentation on the written capstone report will be used as a final examination.

Capstone Process

- Students are encouraged to contact faculty as early as possible to identify a faculty whose research focus complements the student’s interest. The student and the mentor should select one additional faculty members to serve on the capstone evaluation committee. Students must submit a signed Capstone Committee and Capstone Topic form to the Program Coordinator for approval as soon as the registration for the course is complete. These forms must be submitted to the Program Office. When the student is ready to defend the Capstone project, the student must register for the capstone course (MCB 6026) for three credit hours. It is important that the student register for the capstone course with the intention of completing the project at the end of the semester.

Capstone Report

- Evaluation of the capstone project requires a written report (in the format of a mini-review manuscript) and a presentation (project defense) in front of the capstone committee. Students may ask for advice and guidance from the project mentor/chair. The average capstone report ranges from 10 to 15 single-spaced pages in a manuscript format with proper citations. The student’s Committee Chair will be responsible for checking the report for plagiarism using iThenticate before the report is shared with the committee. The committee must receive the report at least one week before the time of presentation.

Capstone Defense

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Comprehensive Examination

0 Total Credits

- Students must pass an oral comprehensive exam to qualify for the Master of Science. The oral comprehensive exam tests the student's understanding of the basic concepts in the field and relevant applications. The comprehensive exam will be conducted during the capstone defense and will be administered by the capstone committee. Should the student fail this exam, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in dismissal from the program.

Teaching Requirement

0 Total Credits

- Students without significant prior teaching experience, such as, but not limited to, a minimum of a year in secondary schools or colleges, are required to serve as Classroom Laboratory Teaching Assistants for a minimum of one semester (one semester in at least one lab section).

Research Shadowing (Optional)

0 Total Credits

- Students are encouraged to discuss with their capstone mentor the possibility of joining the lab for research shadowing of other graduate students. Acquired lab skills should assist students with the capstone project and with future endeavors.

Independent Learning

0 Total Credits

- In the final semester of study, students will complete a capstone course that requires an in-depth current literature research report on a relevant subject, which will serve as the independent learning experience. The student will select a faculty adviser to chair a faculty committee of two members for evaluation of the report.

Grand Total Credits: 33
Financial Information

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Biomedical Sciences MS - Biomedical Sciences MS, Neuroscience Track

Track Website
https://med.ucf.edu/biomed/graduate-programs/

Track Handbook
Biomedical Sciences MS, Neuroscience Track

Track Contact Information

Saleh Naser PhD
Professor
saleh.naser@ucf.edu

Online Availability

No

Track Description

The Neuroscience Track in the Master of Science in Biomedical Sciences Program is a nonthesis plan of study for students who want to further their knowledge in the neuroscience field and who may pursue doctoral training or professional education focused on medicine and neuroscience. Students interested in research and thesis work should apply to the Master of Science in Biotechnology Program.

Track Prerequisites

A bachelor's degree in Biological Sciences or related area.

Applicants who hold a BS degree in unrelated fields are expected to have the equivalent of 16 semester hours in biological sciences including a course in general microbiology, biochemistry or molecular biology or cell biology, plus one year of organic chemistry, one year of physics, basic university mathematics and statistics, and laboratory skills equivalent to the minimum required of our own undergraduates. Minor deficiencies may be remedied after acceptance by enrollment at the first opportunity in an appropriate course.
Degree Requirements

Required Courses
18 Total Credits

- Complete all of the following
  - Complete the following:
    - ZOO6737 - Clinically Oriented Human Anatomy (4)
    - PCB6595 - Regulation of Gene Expression (3)
    - PCB6595 - Regulation of Gene Expression (3)
    - PCB5837 - Cellular and Molecular Neuroscience (3)
  - Complete at least 1 of the following:
    - BSC6407C - Laboratory Methods in Molecular Biology (3)
    - BSC5418 - Tissue Engineering (3)
  - Complete 1 of the following
    - Earn at least 2 credits from the following types of courses:
      MCB 6938 - Seminar 1 Credit Hour (to be repeated)
    - Earn at least 2 credits from the following types of courses:
      MCB 6938 - Seminar 1 Credit Hour AND MCB 6314 - Industrial Perspectives Seminar 1 Credit Hours

Elective Courses
12 Total Credits

- Complete all of the following
  - Earn at least 12 credits from the following:
    - SPA6417 - Management of Acquired Cognitive/Communication Disorders Across the Lifespan (3)
    - PCB5275 - Signal Transduction Mechanics (3)
    - ZOO5748C - Clinical Neuroanatomy (5)
    - ZOO5749C - Clinical Neuroscience (5)
    - CAP6616 - Neuroevolution and Generative and Developmental Systems (3)
    - PCB5838 - Cellular and Molecular Basis of Brain Functions (3)
    - BSC5418 - Tissue Engineering (3)
    - PCB5709C - Laboratory Virtual Simulations in Physiology (3)
    - MCB5225 - Molecular Biology of Disease (3)
    - PCB5834C - Advanced Human Physiology (4)
    - EXP5254 - Human Factors and Aging (3)
    - IDS6916 - Simulation Research Methods and Practicum (3)
    - EXP5208 - Sensation and Perception (3)
    - PSB5005 - Physiological Psychology (3)
    - EXP6116 - Visual Performance (3)
    - EXP6506 - Human Cognition and Learning (3)
    - PSB6348 - The Neuroanatomical Basis of Psychological Function (3)
    - PSB6348 - The Neuroanatomical Basis of Psychological Function (3)
    - PSB6328 - Psychophysiology (3)
    - PSB6352 - Neuroimaging Design and Analysis Methods (3)
  - Other elective courses must be approved by the Program Coordinator.

Capstone
3 Total Credits

- Complete all of the following
  - Complete the following:
    - MCB6026 - Molecular Biology and Microbiology Capstone (3)
An in-depth current literature research report on a relevant subject will be required for each student. The student will select a faculty adviser to chair a faculty committee of two members for the evaluation of the report. An oral presentation on the written capstone report will be used as a final examination.

**Capstone Process**

Students are encouraged to contact faculty as early as possible to identify a faculty whose research focus complements the student’s interest. The student and the mentor should select one additional faculty member to serve on the capstone evaluation committee. Students must submit a signed Capstone Committee and Capstone Topic form to the Program Coordinator for approval as soon as the registration for the course is complete. These forms must be submitted to the Program Office. When the student is ready to defend the Capstone project, the student must register for the capstone course (MCB 6026) for three credit hours. It is important that the student register for the capstone course with the intention of completing the project at the end of the semester.

**Capstone Report**

Evaluation of the capstone project requires a written report (in the format of a mini-review manuscript) and a presentation (project defense) in front of the capstone committee. Students may ask for advice and guidance from the project mentor/chair. The average capstone report ranges from 10 to 15 single-spaced pages in a manuscript format with proper citations. The student's Committee Chair will be responsible for checking the report for plagiarism using iThenticate before the report is shared with the committee. The committee must receive the report at least one week before the time of presentation.

**Capstone Defense**

Note: The defense (presentation) must be held no later than one week before the final exam week. The capstone defense and comprehensive exam evaluation is designed to assess the student’s knowledge and understanding of the project and other relevant subjects in the field. Questions asked by the capstone committee to evaluate the student as competent in the field will satisfy the requirement of the comprehensive exam. The oral presentation will take place in the form of a 30-40 minute seminar and will be followed by questions and discussion. The student will be evaluated on performance in all three sections (written report, oral presentation, and ability to answer questions). Should the student fail, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in an Unsatisfactory (U) grade in the course and dismissal from the program.

**Comprehensive Examination**

0 Total Credits

- Students must pass an oral comprehensive exam to qualify for the Master of Science. The oral comprehensive exam tests the student's understanding of the basic concepts in the field and relevant applications. The comprehensive exam will be conducted during the capstone defense and will be administered by the capstone committee. Should the student fail this exam, a second opportunity will be provided within two weeks of the first attempt. A second failure will result in dismissal from the program.

**Teaching Requirement**

0 Total Credits

- Students without significant prior teaching experience, such as, but not limited to, a minimum of a year in secondary schools or colleges, are required to serve as Classroom Laboratory Teaching Assistants for a minimum of one semester (one semester in at least one lab section).

**Research Shadowing (Optional)**

0 Total Credits

- Students are encouraged to discuss with their capstone mentor the possibility of joining the lab for research shadowing of other graduate students. Acquired lab skills should assist students with the capstone project and with future endeavors.

**Independent Learning**

0 Total Credits

- In the final semester of study students will complete a capstone course that requires an in-depth current literature research report on a relevant subject, which will serve as the independent learning experience. The student will select a faculty adviser to chair a faculty committee of two members for evaluation of the report.

Grand Total Credits: **33**

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Nonthesis students are not considered for departmental graduate assistantships or tuition assistance.

**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

2022-2023 Graduate Catalog
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Biomedical Sciences PhD

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Program Website
https://med.ucf.edu/biomed/graduate-programs/

Program Handbook Link
Biomedical Sciences PhD

Program Contact Information
Saleh Naser PhD
Professor
saleh.naser@ucf.edu
Telephone: 407-823-0955
UCF College of Medicine

Jihe Zhao PhD
Associate Professor
jihe.zhao@ucf.edu
Telephone: 407-266-7099
BBS 316

Is this program available 100% online?
No

Program Description
The Biomedical Sciences PhD program is an interdisciplinary program that combines biological and physical science. This program is intended to educate students in independent research and team collaboration within the field.

Program Prerequisites
Applicants entering the program with regular status are expected to have completed course work required for a bachelor's degree in chemistry, cell biology, biochemistry, biophysics, genetics, molecular biology or microbiology.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
24 Total Credits

- Complete all of the following
  - Complete the following:
    - BSC6432 - Biomedical Sciences I (5)
    - BSC6431 - Practice of Biomedical Sciences (3)
    - IDS6694 - Experimental Design and Analysis in Biomedical Sciences (2)
    - GMS6860 - Statistics for Biomedical Scientists (3)
  - Rule Not Selected

- Earn at least 3 credits from the following:
  - PCB5815 - Molecular Aspects of Obesity, Diabetes and Metabolism (3)
  - PCB5837 - Cellular and Molecular Neuroscience (3)
  - PCB5236 - Cancer Biology (3)
  - MCB6273 - Advanced Topics in Infectious Processes (3)
  - Rule Not Selected

- Earn at least 4 credits from the following types of courses:
  - IDS 7690 - Frontiers in Biomedical Sciences 1 Credit Hours (four semesters, 1 credit hour each semester)
  - IDS 7692L - Experiments in Biomedical Sciences (Lab Rotation: 3 credits/first semester, 1 credit/2nd semester)

Elective Courses
9 Total Credits

- Complete all of the following
  - Earn at least 9 credits from the following:
    - BSC5418 - Tissue Engineering (3)
    - BSC5436 - Biomedical Informatics: Structure Analysis (3)
    - BSC6407C - Laboratory Methods in Molecular Biology (3)
    - CAP5510 - Bioinformatics (3)
    - CHM5305 - Bioconjugate Chemistry (3)
    - CHM5450 - Polymer Chemistry (3)
    - CHM5451C - Techniques in Polymer Science (3)
    - CHS6251 - Applied Organic Synthesis (3)
    - CHS6535 - Forensic Molecular Biology (3)
    - CHS6535L - Forensic Analysis of Biological Materials (3)
    - CHS6536 - Population Genetics and Genetic Data (3)
    - CHS6536 - Population Genetics and Genetic Data (3)
    - IDS5127 - Foundation of Bio-Imaging Science (3)
    - MCB5205 - Infectious Processes (3)
    - MCB5208 - Cellular Microbiology: Host-Pathogen Interactions (3)
    - MCB5209 - Microbial Stress Response (3)
    - MCB5225 - Molecular Biology of Disease (3)
    - MCB5505 - Molecular Virology (3)
    - MCB5722C - Methods in Biotechnology (4)
    - MCB5932 - Current Topics in Molecular Biology (1 - 99)
    - MCB5415 - Cellular Metabolism (3)
    - MCB6226 - Molecular Diagnostics (3)
    - MCB6417C - Microbial Metabolism (3)
    - PCB5025 - Molecular and Cellular Pharmacology (3)
    - PCB5235 - Molecular Immunology (3)
- PCB5236 - Cancer Biology (3)
- PCB5238 - Immunobiology (3)
- PCB5265 - Stem Cell Biology (3)
- PCB5275 - Signal Transduction Mechanics (3)
- PCB5527 - Genetic Engineering and Biotechnology (3)
- PCB5596 - Biomedical Informatics: Sequence Analysis (3)
- PCB5815 - Molecular Aspects of Obesity, Diabetes and Metabolism (3)
- PCB5838 - Cellular and Molecular Basis of Brain Functions (3)
- PCB6528 - Plant Molecular Biology (3)
- PCB6595 - Regulation of Gene Expression (3)
- PCB6677 - Molecular Evolution and Phylogenetics (3)
- ZOO5748C - Clinical Neuroanatomy (5)

- Rule Not Selected
- Rule Not Selected
- At least 9 hours of electives must be taken from the above list. Any electives not on this list must be approved by the Graduate Committee before being counted toward degree credit requirements. Directed research, doctoral research, and dissertation research may be used to satisfy requirements beyond the first 12 hours, with approval from the program director.
- Rule Not Selected

Unrestricted Electives
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  Students should take a minimum of 13 credit hours of electives, directed research, or doctoral research in consultation with their adviser.

Dissertation
24 Total Credits

- Complete all of the following
  - Earn at least 24 credits from the following types of courses:
    - IDS 7980 - Dissertation Research
  - Up to 24 credit hours can be taken. A minimum of 15 credit hours is required for students with additional unrestricted electives due to the transfer of credits.

Cumulative/Qualifying Examinations
0 Total Credits

- Cumulative examinations taken during the second year will determine if students should continue with their doctoral studies. Exams will be overseen by a cumulative exam committee. Each exam will consist of questions set by different faculty members. Questions will deal with data interpretation from the current literature and the design of experiments to test a hypothesis. A student must satisfactorily answer cumulative examination questions, displaying a knowledge base consistent with continuation in the PhD program.

Candidacy Examination
0 Total Credits

- Candidacy will consist of writing and orally defending a proposal outlining a novel research idea to the dissertation committee. The written proposal will be prepared independently, following NIH-style grant format, and must be approved by the dissertation committee (see Biomedical Sciences PhD Program Handbook for full description of Candidacy Exam requirements and procedures). After passing the candidacy examination and meeting other requirements as specified, the student can register for dissertation hours.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: Successful completion of all coursework, except for dissertation hours. Successful completion of candidacy examination. Successful defense of the written dissertation proposal. Successful completion of Academic Integrity requirements. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study.

Dissertation Defense
0 Total Credits

- The dissertation should be of significant scope and depth such that the work has made significant advances in the area of biomedical science. The Ph.D. dissertation research must generate sufficient quantity and quality data to support a minimum of two original manuscripts (first-authored by the student) in a mainstream journal in the field. One first-author original research article published or accepted for publication is required for pre-defense. In addition to meeting the pre-defense requirement for publication, a second manuscript must have been submitted and subjected to peer review before the defense. Upon completion and approval of the doctoral dissertation by all designated faculty and university offices, the student will make a formal presentation of the research findings in a seminar format to the dissertation committee and other university faculty and students. The candidate will answer questions and defend conclusions about the subject matter.

Independent Learning
0 Total Credits
The dissertation serves as the independent learning experience.

Grand Total Credits: 72

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Telephone: 407-823-2827
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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Biomedical Sciences PhD - Biomedical Sciences MD/PhD Track

Track Website
https://med.ucf.edu/biomed/graduate-programs/

Track Handbook
Biomedical Science MD/PhD Track

Track Contact Information

Steven Ebert PhD
Associate Professor
steven.ebert@ucf.edu
BBS 421

Online Availability

No
**Track Description**

The College of Medicine offers an integrated MD/PhD curriculum that enables students to fulfill all requirements and earn the Doctor of Medicine and the Doctor of Philosophy.

This program provides opportunity for MD students to obtain advanced research and training experience and for PhD students to obtain medical training. The program develops physician-scientists with preparation for both academic research and teaching careers. Physician-scientists are in an excellent position to facilitate bench-to-bedside translation of applicable research findings.

Students must fulfill all requirements for both programs to earn both the MD and PhD degrees. As indicated in the curriculum description, some medical modules can be substituted for certain graduate courses and vice versa to help reduce redundancy and streamline time to completion of this integrated program. Students will be able to complete the MD/PhD program in as few as 6 years, although most students will likely require 7-8 years to fulfill all of the requirements. An MD/PhD program committee consisting of faculty from both the medical and graduate programs will serve as the oversight committee responsible for tracking and evaluating student progress in this program.

Students in the integrated MD/PhD Track in Biomedical Sciences must be accepted in the College of Medicine MD program and begin working on their PhD research project during the first two years of medical school. Students take medical courses during the first two years and must successfully pass the USMLE Step 1 exam at the end of year 2 prior to beginning full-time graduate studies in the Biomedical Sciences PhD Program. Required and elective graduate courses for the PhD program are completed in years 3-4 while the student is continuing research. Clinical clerkships that are typically completed in years 3-4 of medical school will in most cases be deferred until the student has completed the PhD program requirements, though some minimum level of ongoing clinical training will continue throughout the entire duration of the program. This ensures that the student remains connected with clinical education and training even while primarily focused on the graduate portion of the MD/PhD program.

The Biomedical Sciences PhD program requires a minimum of 72 credit hours beyond the bachelor's degree, including a minimum total of 27 hours of formal course work exclusive of independent study that are required. The 72 credit hours in the PhD program consists of 23 credit hours of core courses, 12 credit hours of electives, and a minimum of 35 credit hours of dissertation research. The remaining 22 credit hours may consist of additional electives, doctoral research and/or dissertation research. Students entering with a master's degree may request that up to 30 semester credit hours of previous course work be waived as degree requirements with approval from the dissertation committee.

The MD curriculum can be found here: [http://med.ucf.edu/academics/md-program/integrated-curriculum/](http://med.ucf.edu/academics/md-program/integrated-curriculum/).

Programmatic deficiencies expected of applicants from diverse settings will be addressed early in the program by completion of appropriate course work. Students may register for doctoral research until they have been admitted to candidacy, after which they must register for dissertation research.

New students will rotate through at least two different laboratories to identify a faculty mentor/sponsor and research area of interest for their dissertation. Finally, a sequence of required seminars will familiarize students with field-related literature and introduce them to the conceptual and technical frameworks in which they will work. All students receiving assistantships must enroll full time.

MD/PhD students are required to maintain good academic standing in both the MD and PhD components of the curriculum. Students must first satisfactorily complete the first two years of the medical school curriculum and pass the USMLE Step 1 exam before they can begin full-time PhD enrollment.

**Track Prerequisites**

Applicants entering the program with regular status are expected to have completed course work required for a bachelor's degree in chemistry, cell biology, biochemistry, biophysics, genetics, molecular biology or microbiology.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

Required Courses  
21 Total Credits

- Complete all of the following
- Complete the following:
- BMS6001 - Cellular Function and Medical Genetics (5)
- BSC6433 - Biomedical Sciences II (5)
- BSC6431 - Practice of Biomedical Sciences (3)
- IDS6694 - Experimental Design and Analysis in Biomedical Sciences (2)

- Earn at least 2 credits from the following types of courses:
  - IDS 7690 - Frontiers in Biomedical Sciences 1 Credit Hours (two semesters, 1 credit hour each semester)
- Earn at least 4 credits from the following types of courses:
  - IDS 7692L - Experiments in Biomedical Sciences (Lab Rotation: 3 credits/first semester, 1 credit/2nd semester)

**Elective Courses**  
**12 Total Credits**

- Complete all of the following
  - At least 12 hours of electives must be taken from the following list. Any electives not on this list must be approved by the Graduate Committee before being counted toward degree credit requirements. Directed research, doctoral research and dissertation research may be used to satisfy requirements beyond the first 12 hours, with approval from the program director. Students successfully completing the first year of medical school at UCF may substitute the following medical modules to fulfill the elective course requirement: BMS 6006 - Health and Disease 5 Credit Hours  
  BMS 6050 - Psychosocial Issues in Healthcare 4 Credit Hours  
  BMS 6631 - Hematology and Oncology 4 Credit Hours  
  Others: If approved by the Graduate Committee.

  - Earn at least 12 credits from the following:
    - BSC5418 - Tissue Engineering (3)
    - BSC5436 - Biomedical Informatics : Structure Analysis (3)
    - BSC6407C - Laboratory Methods in Molecular Biology (3)
    - CAP5510 - Bioinformatics (3)
    - CHM5305 - Bioconjugate Chemistry (3)
    - CHM5450 - Polymer Chemistry (3)
    - CHM5451C - Techniques in Polymer Science (3)
    - CHS6251 - Applied Organic Synthesis (3)
    - CHS6535 - Forensic Molecular Biology (3)
    - CHS6535L - Forensic Analysis of Biological Materials (3)
    - CHS6536 - Population Genetics and Genetic Data (3)
    - EGB5516 - Technological Entrepreneurship (3)
    - IDS5127 - Foundation of Bio-Imaging Science (3)
    - MCB5205 - Infectious Processes (3)
    - MCB5208 - Cellular Microbiology: Host-Pathogen Interactions (3)
    - MCB5225 - Molecular Biology of Disease (3)
    - MCB5505 - Molecular Virology (3)
    - MCB5722C - Methods in Biotechnology (4)
    - MCB5932 - Current Topics in Molecular Biology (1 - 99)
    - MCB5937 - Special Topics (1 - 99)
    - MCB6226 - Molecular Diagnostics (3)
    - MCB6417C - Microbial Metabolism (3)
    - PCB5025 - Molecular and Cellular Pharmacology (3)
    - PCB5236 - Cancer Biology (3)
    - PCB5238 - Immunobiology (3)
    - PCB5265 - Stem Cell Biology (3)
    - PCB5275 - Signal Transduction Mechanics (3)
    - PCB5527 - Genetic Engineering and Biotechnology (3)
    - PCB5596 - Biomedical Informatics: Sequence Analysis (3)
    - PCB5815 - Molecular Aspects of Obesity, Diabetes and Metabolism (3)
    - PCB5838 - Cellular and Molecular Basis of Brain Functions (3)
    - PCB6528 - Plant Molecular Biology (3)
    - PCB6595 - Regulation of Gene Expression (3)
    - PCB6677 - Molecular Evolution and Phylogenetics (3)
    - ZOO5748C - Clinical Neuroanatomy (5)

**Unrestricted Electives**  
**24 Total Credits**

- Earn at least 24 credits from the following types of courses:
  - Students should take 24 credit hours of electives, directed research, doctoral research or dissertation research, in consultation with their adviser.

**Dissertation**  
**15 Total Credits**

- Earn at least 15 credits from the following types of courses:
  - IDS 7980 - Dissertation Research 15 Credit Hours

**Cumulative/Qualifying Examinations**  
**0 Total Credits**

- Cumulative examinations will determine if students should continue with their doctoral studies. Four exams will be given by program faculty members during the second year. Each exam will consist of four questions set by different faculty members to
evaluate the student's ability to interpret data, formulate a hypothesis based on the data presented, and effectively design a series of experiments using biomedical science approaches to test their hypothesis. Performance will be evaluated by the graduate exam committee. A student must satisfactorily answer 10 cumulative questions out of 16 to be eligible to continue in the PhD program.

Candidacy Examination
0 Total Credits

- Candidacy will consist of writing and orally defending a proposal outlining a novel research idea to the dissertation committee. The written proposal will be prepared independently, following NIH-style grant format, and must be approved by the dissertation committee (see Biomedical Sciences PhD Program description for full description of Candidacy Exam requirements and procedures). After passing the candidacy examination and meeting other requirements as specified, the student can register for dissertation hours.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: Successfully complete a minimum of 48 credit hours. Successful completion of Academic Integrity requirements. Successful completion of all coursework, except for dissertation hours. Successful completion of candidacy. Successful defense of the written dissertation proposal. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submission of an approved program of study.

Dissertation Defense
0 Total Credits

- The dissertation should be of significant scope and depth such that the work has made significant advances in the area of biomedical science. The Ph.D. dissertation research must generate sufficient quantity and quality data to support a minimum of two original manuscripts (first-authored by the student) in a mainstream journal in the field. One first-author original research article published or accepted for publication is required for pre-defense. In addition to meeting the pre-defense requirement for publication, a second manuscript must have been submitted and subjected to peer review before the defense. Upon completion and approval of the doctoral dissertation by all designated faculty and university offices, the student will make a formal presentation of the research findings in a seminar format to the dissertation committee and other university faculty and students. The candidate will answer questions and defend conclusions about the subject matter.

Independent Learning
0 Total Credits

- The dissertation serves as the independent learning experience.

Grand Total Credits: 72

Financial Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Biotechnology MS

College

College of Medicine
Program Website

https://med.ucf.edu/biomed/graduate-programs/

Program Handbook Link

Biotechnology MS

Program Contact Information

Saleh Naser PhD
Professor
saleh.naser@ucf.edu
UCF College of Medicine

Is this program available 100% online?

No

Program Description

The Master of Science in Biotechnology program in the College of Medicine will prepare students to function in the industrial biotechnology environment. This program is designed to give students broad knowledge and training in the scientific and practical aspects of biotechnology.

It involves innovative, hands-on and multidisciplinary learning approaches to educate and train students in scientific aspects of biotechnology. The courses and research training required of all students in this program are designed to develop independent thinking, teamwork and communication skills, which are highly desirable in the biotechnology industry. Students will be provided an industrial perspective and an understanding of product development at the same time as they are trained in the biotechnology techniques required for such development.

What makes this program unique is the focus on practical training offered to graduate students through master's thesis research in molecular biotechnology to perform jobs in a laboratory environment that require scientific talent.

Program Prerequisites

A bachelor's degree in Biological Sciences or related area.

Applicants who hold a BS degree in unrelated fields are expected to have the equivalent of 16 semester hours in biological sciences including a course in general microbiology, biochemistry or molecular biology or cell biology, plus one year of organic chemistry, one year of physics, basic university mathematics and statistics, and laboratory skills equivalent to the minimum required of our own undergraduates. Minor deficiencies may be remedied after acceptance by enrollment at the first opportunity in an appropriate course.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
21 - 22 Total Credits

• Complete all of the following
  Core
  • Complete all of the following
    ■ Complete at least 1 of the following:
      ■ MCB5722C - Methods in Biotechnology (4)
      ■ BSC6407C - Laboratory Methods in Molecular Biology (3)
Complete the following:
  - BSC6432 - Biomedical Sciences I (5)
  - BSC6433 - Biomedical Sciences II (5)
  - BSC6431 - Practice of Biomedical Sciences (3)

Complete at least 1 of the following:
  - PCB5527 - Genetic Engineering and Biotechnology (3)
  - BSC5418 - Tissue Engineering (3)
  - MCB6417C - Microbial Metabolism (3)
  - PCB5025 - Molecular and Cellular Pharmacology (3)

Graduate Seminars
  - Earn at least 2 credits from the following types of courses:
    Students will participate in at least two graduate seminar courses that will prepare them for making professional presentations with an emphasis in biotechnology. The courses will involve the participation of speakers from the biotechnology industry with emphasis on an industrial perspective on biotechnology applications and product development. MCB 6314 - Industrial Perspectives Seminar 1 Credit Hours OR MCB 6938 1 Credit Hour (1 semester only)

Elective Courses
  3 - 4 Total Credits
  - Complete all of the following
    - Complete at least 1 of the following:
      - BSC5418 - Tissue Engineering (3)
      - BSC5436 - Biomedical Informatics : Structure Analysis (3)
      - BSC6407C - Laboratory Methods in Molecular Biology (3)
      - IDSS127 - Foundation of Bio-Imaging Science (3)
      - MCB5205 - Infectious Processes (3)
      - MCB5208 - Cellular Microbiology: Host-Pathogen Interactions (3)
      - MCB5209 - Microbial Stress Response (3)
      - MCB5225 - Molecular Biology of Disease (3)
      - MCB5415 - Cellular Metabolism (3)
      - MCB5505 - Molecular Virology (3)
      - MCB5722C - Methods in Biotechnology (4)
      - MCB6226 - Molecular Diagnostics (3)
      - MCB6417C - Microbial Metabolism (3)
      - PCB5527 - Genetic Engineering and Biotechnology (3)
      - PCB5025 - Molecular and Cellular Pharmacology (3)
      - PCB5236 - Cancer Biology (3)
      - PCB5238 - Immunobiology (3)
      - PCB5596 - Biomedical Informatics: Sequence Analysis (3)
      - PCB5709C - Laboratory Virtual Simulations in Physiology (3)
      - PCB5834C - Advanced Human Physiology (4)
      - PCB6528 - Plant Molecular Biology (3)
      - PCB6595 - Regulation of Gene Expression (3)
      - PCB5838 - Cellular and Molecular Basis of Brain Functions (3)
      - PCB5265 - Stem Cell Biology (3)
      - PCB5815 - Molecular Aspects of Obesity, Diabetes and Metabolism (3)
      - ZOO5745C - Neuroanatomical Pathways and their Neurotransmitters (4)
      - ZOO5745C - Neuroanatomical Pathways and their Neurotransmitters (4)
      - GEB5516 - Technological Entrepreneurship (3)
  - Student may choose: MCB 5932 - Current Topics in Molecular Biology VAR Credit Hours PCB 5937 - Special Topics: Human Endocrinology 3 Credit Hours Others: If approved by the Graduate Committee

Thesis
  6 Total Credits
  - Earn at least 6 credits from the following types of courses:
    MCB 6971 Students will take a minimum of six credits of thesis research (MCB 6971) to complete their research and submit their thesis specializing in biotechnology research. Students are expected to have an in-depth discussion with at least three faculty members before choosing a laboratory for thesis research. The student and the Thesis Adviser/Major Professor will jointly recommend an advisory committee comprised of at least three members. The committee composition must reflect expertise relevant to the student's thesis research and must be approved by the Graduate Committee. Students switching to change the composition of the Thesis Advisory Committee must also obtain approval from the Graduate Committee.

Thesis Proposal
  0 Total Credits
  - The thesis proposal defense requirement should be met and passed successfully no later than the end of the summer of the first year in the program. Students will not be allowed to register for courses for the Fall semester of their second year until this requirement is fulfilled. The Thesis Proposal requirement includes: a written 5-page thesis proposal, a thesis proposal defense in front of the thesis committee, and questions by the thesis committee to test the student's understanding of the basic concepts in the field and relevant applications. The student will be evaluated on performance in all three sections. Should the student fail, a second opportunity will be provided within 2 weeks of the first attempt. A second failure will result in
An oral thesis defense is required. The defense will be in the format of: A 50-minute presentation of the thesis work, including a 5-minute introduction A 10-minute free period for the general audience to ask questions A 1-hour closed-door examination by the Thesis Advisory Committee and the program faculty present. The thesis should be of significant scope and depth such that the work has made advances in the area of biotechnology. The MS thesis research must generate sufficient quantity and quality data to support the submission of a minimum of one manuscript. Approval of the final thesis will require consent from the majority of the Program Faculty who choose to review the thesis, inclusive of the Thesis Advisory Committee. Faculty members with dissenting vote on the thesis must provide written justification. Scientific journal review criteria will be used as guidelines by the faculty to evaluate the final thesis for its appropriateness for publication in the target journal. Students will be evaluated on the progress in thesis research by the thesis advisory committee for fall and spring. Two consecutive unsatisfactory evaluations will result in dismissal from the program.

Comprehensive Examination

0 Total Credits

- Students must pass a comprehensive exam to qualify for the Master of Science degree. Students must successfully pass an oral comprehensive examination to test the understanding of the basic concepts in the field and relevant applications. The Comprehensive Examination will be conducted during the thesis proposal defense. The exam will be administered by the thesis committee. Should the student fail this exam, a second opportunity will be provided within 2 weeks of the first attempt. A second failure will result in dismissal from the program.

Independent Learning

0 Total Credits

- The required thesis allows the student to engage in independent learning.

Grand Total Credits: **30 - 32**

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

All students receiving assistantships must enroll full time.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://graduate.ucf.edu/funding/
Doctor of Medicine MD

College
College of Medicine

Department
College of Medicine MD Program

Program Website
https://med.ucf.edu/academics/md-program/

Program Contact Information
UCF College of Medicine Admissions
mdadmissions@ucf.edu
Telephone: 407-266-1350
Health Science Campus

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-COM-Medical-Doctor-MD.pdf.

Program Description
UCF’s M.D. Program allows students to prepare for careers in every discipline of medicine and to focus on an individualized area of study or research. The M.D. Program learning experience is a unique and exciting blend of state-of-the-art technology, interactions with virtual patients, clinical and laboratory experiences, research, facilitator-directed small group sessions, and interactive didactic lectures. The UCF College of Medicine is fully accredited by LCME.

Program highlights include:

Clinical experiences are embedded throughout the first two years in P-1 and P-2 Community of Practice modules. Students will work with community preceptors in a variety of settings to practice skills and to apply the concepts mastered in the integrated basic science curriculum to real patients.

As part of approach described by the Dean as "Keep the Dream Alive!", each student will complete a focused inquiry and research project in the I-1 and I-2 modules. The scope of the project is limited only by the student's imagination and may include bench or clinical research as well as studies of quality of care, hospitality in medicine, quality of life, legal aspects of medicine, and more. Students will work with a mentor to develop a project or area of study that focuses on the student’s unique interest and career plans.

Innovative simulation and animation experiences have been designed explicitly to integrate into and reinforce the curriculum. From basic science concepts to clinical diagnoses and treatment, the human patient mannequin simulators and online interactive virtual patients enhance and complement learning.

UCF offers these joint degrees:

MD/MBA, a joint medical and business degree program focusing on developing effective problem-solving and decision-making skills.

MD/MS in Hospitality and Tourism Management, a specialized degree program for individuals interested in enhancing their management skills through studying hospitality and service-oriented business models.

MD/PhD, a College of Medicine program that prepares clinician-scientists for a career in academic medicine to become leaders in the international academic medical community.

College of Nursing

Adult-Gerontology Acute Care Nurse Practitioner Graduate Certificate

College
College of Nursing

Department
Department of Nursing Practice
Is this program available 100% online?

No

Licensure Disclosure

The curriculum prepares students for both the AGACNP board certification examination administered through the American Nurses Credentialing Center and the Acute Care Nurse Practitioner-Adult-Gerontology certification examination administered through the American Association of Critical Care Nurses. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Adult-Gerontology-Acute-Care-GC.pdf.

Program Description

The Adult-Gerontology Acute Care Nurse Practitioner post-master's certificate prepares the advanced practice nurse to care for patients with medically complex stable and unstable acute, critical, and chronic illnesses across care settings ranging from hospitals to subacute, ambulatory care, clinic and home care environments. The certificate provides a spectrum of care from disease prevention to acute and critical care management. The Adult-Gerontology Acute Care Nurse Practitioner graduate certificate prepares nurses who have already completed their graduate education for entry-level advanced practice in acute care. The program prepares graduates to enter the current healthcare system based on a strong scientific foundation for practice. The curriculum offers flexibility and emphasis on evidence-based practice, leadership, and organizational analysis, and provides analytic, critical thinking, and diagnostic reasoning skills to examine practice innovations. The certificate requires 23 credit hours beyond the master's or doctor of nursing practice (DNP) degree.

Total Credit Hours Required: 23 Credit Hours Minimum beyond the Master's Degree

Program Prerequisites

- NGR 5003 – Advanced Health Assessment and Diagnostic Reasoning 2 Credit Hours
- NGR 5003L – Advanced Health Assessment and Diagnostic Reasoning Lab 1 Credit Hours
- NGR 5141 – Pathophysiological Bases for Advanced Nursing Practice 3 Credit Hours
- NGR 6172 – Pharmacology for Advanced Nursing Practice 3 Credit Hours
- NGR 5638 – Health Promotion 3 Credit Hours

Admission is open to those with MSN Degrees and are licensed and nationally certified as an advanced practice registered nurse, but who are not prepared as Adult-Gerontology Acute Care Nurse Practitioners.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
23 Total Credits

- Complete all of the following
  - Complete the following:
    - NGR6210 - Adult-Gerontology Acute Care Nurse Practitioner I (3)
    - NGR6230L - Diagnostics and Skills for the Critically Ill (2)
    - NGR6211 - Adult-Gerontology Acute Care Nurse Practitioner II (3)
    - NGR6211L - Adult-Gerontology Acute Care Nurse Practitioner II Clinical (3)
    - NGR6175 - Critical Care Pharmacology (3)
    - NGR6212 - Adult-Gerontology Acute Care Nurse Practitioner III (3)
    - NGR6212L - Adult-Gerontology Acute Care Nurse Practitioner III Clinical (3)
  - Earn at least 3 credits from the following:
    - NGR6215L - Adult-Gerontology Acute Care Nurse Practitioner Practicum (3 - 4)
- The following courses include clinical hours: NGR 6230L - Diagnostics and Skills for the Critically Ill (120 clinical hours) NGR 6211L - Adult-Gerontology Acute Care Nurse Practitioner II Clinical (180 clinical hours) NGR 6212L - Adult-Gerontology Acute Care Nurse Practitioner III Clinical 3 Credit Hours (180 clinical hours) NGR 6215L - Adult-Gerontology Acute Care Nurse Practitioner Practicum 3 Credit Hours (180 clinical hours)

Grand Total Credits: 23

Adult-Gerontology Clinical Nurse Specialist Graduate Certificate

College
College of Nursing

Department
Department of Nursing

Program Website
http://www.nursing.ucf.edu

Program Contact Information
Mary Lou Sole PhD
Professor
gradnurse@ucf.edu
Telephone: 407-823-5496
UTWR 300

Is this program available 100% online?
No

Program Description
This program has been temporarily suspended effective Spring 2014.
The post-master's Clinical Nurse Specialist Adult-Gerontology Certificate prepares nurses who already have received a master's degree in nursing for positions as Clinical Nurse Specialists.

Program Prerequisites
Students must demonstrate successful completion of the following courses:

- NGR 5003 - Advanced Health Assessment and Diagnostic Reasoning 2 Credit Hours
- NGR 5003L - Advanced Health Assessment and Diagnostic Reasoning Lab 1 Credit Hours
- NGR 5141 - Pathophysiological Bases for Advanced Nursing Practice 3 Credit Hours
- NGR 5720 - Organizational Dynamics 3 Credit Hours
- NGR 6172 - Pharmacology for Advanced Nursing Practice 3 Credit Hours
- NGR 6874 - Nursing Environment Management 3 Credit Hours

BSN and MSN degree from an accredited institution.

Undergraduate Statistics course.

Licensure as a registered nurse in the State of Florida. (Out of state applicants must be eligible for licensure in Florida and must achieve RN licensure to begin clinical courses.)
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
18 Total Credits

- Complete the following:
  - NGR6265 - Adult/Gerontology CNS I (3)
  - NGR6265L - Adult/Gerontology CNS I Clinical (3)
  - NGR6266 - Adult/Gerontology CNS II (3)
  - NGR6266L - Adult/Gerontology CNS II Clinical (3)
  - NGR6267 - Adult/Gerontology CNS III (3)
  - NGR6267L - Adult/Gerontology CNS III Clinical (3)

Grand Total Credits: 18

Adult-Gerontology Primary Care Nurse Practitioner Graduate Certificate

College
College of Nursing

Department
Department of Nursing Practice

Program Website
http://www.nursing.ucf.edu

Program Handbook Link
Adult-Gerontology Primary Care Nurse Practitioner Graduate Certificate

Program Contact Information
Valerie Martinez, DNP, APRN, CPNP-PC, PMHS
Clinical Assistant Professor
valerie.martinez@ucf.edu
Telephone: 407-823-5024
UTWR 459

Is this program available 100% online?
No

Licensure Disclosure
For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Adult-Gerontology-Primary-Care-GC.pdf.
**Program Description**

The post-master's Adult/Gerontology Primary Care Nurse Practitioner Graduate Certificate prepares nurses who already have received a master's degree in nursing for positions as Adult/Gerontology Primary Care Nurse Practitioners. Graduates of this program are eligible to sit for the Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP) National Board Certification Examination offered by the American Academy of Nurse Practitioners Certification Board or the American Nurses Credentialing Center.

**Program Objectives**

- Analyze social, economic, ethical, cultural, legal and political issues influencing nursing practice and health care in a global context.
- Collaborate with leaders in nursing and other disciplines to improve the quality of professional nursing practice and the healthcare system.
- Develop and implement leadership, management and teaching strategies for the improvement of health and healthcare.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy to improve the health of communities.
- Participate in lifelong learning activities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities and nursing theories to support advanced nursing practice.
- Plan, evaluate and implement the delivery of health care using critical thinking skills.
- Practice in an advanced nursing role.

The program is 18 credit hours and includes up to 660 hours of clinical practice. There are 12 credit hours of prerequisite requirements.

**Total Credit Hours Required: 18 Credit Hours Minimum beyond the Master's Degree**

**Program Prerequisites**

- BSN and MSN degree from an accredited institution.
- Undergraduate Statistics course.
- Licensure as an advanced practice registered nurse (APRN) in the State of Florida. (Out of state applicants must be eligible for licensure in Florida and must achieve licensure to begin clinical courses.)

Students must demonstrate successful completion of the following courses:

- NGR 5003 - Advanced Health Assessment and Diagnostic Reasoning **2 Credit Hours**
- NGR 5003L - Advanced Health Assessment and Diagnostic Reasoning Lab **1 Credit Hours** (60 clinical hours)
- NGR 5141 - Pathophysiological Bases for Advanced Nursing Practice **3 Credit Hours**
- NGR 6172 - Pharmacology for Advanced Nursing Practice **3 Credit Hours**
- NGR 5638 - Health Promotion **3 Credit Hours**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
19 Total Credits

- Complete all of the following
  - Complete the following:
    - NGR6334 - Women's Health for APNs (2)
    - NGR6201 - Adult I Primary Care (3)
    - NGR6240L - Adult I Clinical for APNs (3)
    - NGR6263 - Gerontologic Care for APNs (3)
    - NGR6263L - Gerontologic Care Clinical for NPs (2)
    - NGR6202L - Adult II Primary Care Clinical (3)
    - NGR6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum (3)

- The following courses include clinical hours: NGR 6240L - Adult I Clinical for APNs (180 clinical hours) NGR 6263L - Gerontologic Care Clinical for NPs (120 clinical hours) NGR 6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum (180 clinical hours)

Grand Total Credits: 19

Family Nurse Practitioner Graduate Certificate

College
College of Nursing

Department
Department of Nursing Practice

Program Website
http://www.nursing.ucf.edu

Program Handbook Link
Family Nurse Practitioner Graduate Certificate

Program Contact Information
Valerie Martinez, DNP, APRN, CPNP-PC, PMHS
Clinical Assistant Professor
Valerie.Martinez@ucf.edu
Telephone: 407-823-5024
UTWR 459

Is this program available 100% online?
No

Licensure Disclosure
For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Family-Nurse-Practitioner-GC.pdf.
Program Description

The post-master's Family Nurse Practitioner Graduate Certificate prepares nurses who already have received a master's degree in nursing for positions as Family Nurse Practitioners. Graduates of this program are eligible to sit for the Family Nurse Practitioner (FNP) National Board Certification Examination offered by the American Academy of Nurse Practitioners Certification Board or the American Nurses Credentialing Center.

Program Objectives

- Analyze social, economic, ethical, cultural, legal and political issues influencing nursing practice and health care in a global context.
- Collaborate with leaders in nursing and other disciplines to improve the quality of professional nursing practice and the healthcare system.
- Develop and implement leadership, management and teaching strategies for the improvement of health and healthcare.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy to improve the health of communities.
- Participate in lifelong learning activities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities and nursing theories to support advanced nursing practice.
- Plan, evaluate and implement the delivery of health care using critical thinking skills.
- Practice in an advanced nursing role.

For information on how this program may prepare you for professional licensure, please visit: https://apq.ucf.edu/files/Licensure-Disclosure-Family-Nurse-Practitioner-GC.pdf.

The certificate program is 22 credit hours and includes up to 720 hours of clinical practice. There are 12 credit hours of prerequisite requirements.

Total Credit Hours Required: 22 Credit Hours Minimum beyond the Master’s Degree

Program Prerequisites

- BSN and MSN degree from an accredited institution.
- Undergraduate Statistics course.
- Licensure as an advanced practice registered nurse (APRN) in the State of Florida. (Out of state applicants must be eligible for licensure in Florida and must achieve licensure to begin clinical courses.)

- Students must demonstrate successful completion of the following courses:
  - NGR 5003 - Advanced Health Assessment and Diagnostic Reasoning 2 Credit Hours
  - NGR 5003L - Advanced Health Assessment and Diagnostic Reasoning Lab 1 Credit Hours (60 clinical hours)
  - NGR 5141 - Pathophysiological Bases for Advanced Nursing Practice 3 Credit Hours
  - NGR 5638 - Health Promotion 3 Credit Hours
  - NGR 6172 - Pharmacology for Advanced Nursing Practice 3 Credit Hours

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses
22 Total Credits

- Complete all of the following
  - Complete the following:
    - NGR6334 - Women's Health for APNs (2)
    - NGR6201 - Adult I Primary Care (3)
    - NGR6240L - Adult I Clinical for APNs (3)
    - NGR6263 - Gerontologic Care for APNs (3)
    - NGR6263L - Gerontologic Care Clinical for NPs (2)
    - NGR6305 - Pediatric Primary Care (3)
    - NGR6305L - Pediatric Primary Care Clinical (2)
    - NGR6342L - Women's Health for APNs Clinical (1)
    - NGR6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum (3)

- The following courses include clinical hours: NGR 6240L - Adult I Clinical for APNs (180 clinical hours) NGR 6263L - Gerontologic Care Clinical for NPs (120 clinical hours) NGR 6305L - Pediatric Primary Care Clinical (120 clinical hours) NGR 6342L - Women’s Health for APNs Clinical (60 clinical hours) NGR 6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum (180 clinical hours)

Grand Total Credits: 22

Health Care Simulation Graduate Certificate

College
College of Nursing

Department
Department of Nursing Practice

Program Website
http://www.nursing.ucf.edu/

Program Handbook Link
Health Care Simulation Graduate Certificate Handbook

Program Contact Information
Mindi Anderson PhD, APRN, CPNP-PC, CNE, CHSE-A, ANEF, FSSH, FAAN
Program Director of Nursing and Health Care Simulation
mindi.anderson@ucf.edu
Telephone: 407-823-1956
UTWR 455

Is this program available 100% online?
Yes

UCF Online

Please note: Health Care Simulation Graduate Certificate may be completed fully online with some required campus activities. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

Out-of-state instructional limitations apply to this degree program. For more information on this and how this program may prepare you in that regard, please visit

**Program Description**

The Graduate Certificate in Health Care Simulation prepares faculty, nurses, members of other healthcare disciplines, administrators and simulation and technology professionals to design, manage, evaluate healthcare simulations for basic education and improvement of team healthcare delivery.

**Program Objectives**

The program prepares students to:

- Analyze social, economic, ethical cultural legal and political issues influence nursing and health practice in a global context
- Collaborate with leaders in nursing and other disciplines to improve the quality of professional healthcare practice and the outcomes of care
- Develop and implement innovative applications for simulation experiences in health care
- Evaluate models of delivery of simulation in education and healthcare settings in terms of effectiveness
- Evaluate the cost-benefit of the use of simulation in healthcare and education

The certificate program requires three courses, for a total of 9 credit hours.

**Total Credit Hours Required: 9 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

Required Courses  
9 Total Credits

- Complete the following:
  - NGR6717 - Introduction to Healthcare Simulation (3)  
  - NGR6794 - Organizational Leadership and Operations in Healthcare Simulation (3)  
  - NGR6978 - Healthcare Simulation Capstone Project (3)

Optional Courses (Optional)  
0 Total Credits

- Students may take the following course as an additional, optional course: NGR 6771L - Healthcare Simulation Practicum VAR Credit Hours

Grand Total Credits: 9

**Hispanic Serving Healthcare Professionals Graduate Certificate**

**College**

College of Nursing

**Department**

Department of Nursing Practice

**Program Handbook Link**

Hispanic Serving Healthcare Professionals Graduate Certificate Handbook
Program Contact Information
For questions related to degree requirements, admission decisions, academic advising, plans of study, or other program specific requests, please contact:

Dr. Desiree Diaz
desiree.diaz@ucf.edu
Department of Nursing Practice, College of Nursing

Dr. Humberto Lopez Castillo
humberto.lopezcastillo@ucf.edu
College of Health Professions and Sciences

Is this program available 100% online?
No

Program Description
This program’s effective start date is Fall 2023.

The Hispanic Serving Healthcare Professionals certificate explores the healthcare needs of, and barriers to, the Hispanic community. It will prepare interdisciplinary learners to recognize the community’s unique needs in professional allied health practices, influence change in both practice and policy to eliminate disparities and improve patient outcomes, and provide culturally congruent care through linguistically and culturally supportive resources. Qualified completing students may seek national medical translator certification.

Program Prerequisites
- An earned bachelor’s degree.
- Current or future role as an allied health care provider.

College of Graduate Studies Contact Information
For questions regarding the submission of your application, payment of your application fee, application supporting documents, deadlines, or other processing related questions, please contact:

College of Graduate Studies
Graduate Admissions
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
9 Total Credits
- Complete all of the following
  - Take the following:
    - NGR5131 - Exploring Transcultural and Culturally Congruent Care for the Hispanic Population (3)
    - HSC6626 - Healthcare Delivery for Hispanic Populations (3)
  - Earn at least 3 credits from the following:
    - NGR6771L - Healthcare Simulation Practicum (1 - 99)

Grand Total Credits: 9

Nursing Education Graduate Certificate
College of Nursing

Department of Nursing Systems

Program Website
http://www.nursing.ucf.edu/

Program Handbook Link
Nursing Education Graduate Certificate Handbook

Program Contact Information
Susan Quelly PhD, RN, CNE
Associate Professor
susan.quelly@ucf.edu
Telephone: 407.823.0645
UTWR 428

Is this program available 100% online?
Yes

UCF Online

Please note: Nursing Education Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

You may pursue this UCF College of Nursing online program as long as you will be physically located in a Nurse Licensure Compact (NLC) state for the duration of your education.

UCF College of Nursing faculty are authorized to teach in Nurse Licensure Compact (NLC) states. Due to nursing education restrictions imposed by non-NLC states, UCF is unable to offer courses, clinicals, or other educational services regardless of modality within non-NLC states. Should you be physically located within a non-NLC state for more than a vacation or brief visit, regardless of your legal state of residence or the type of license you have, you will be unable to apply or continue your nursing degree program at the UCF College of Nursing. This includes, but is not limited to, students accepting traveling nurse positions in a non-NLC state. Although Colorado is a NLC state, the UCF College of Nursing cannot enroll students who will complete clinical practice hours there due to Colorado statute requirements for worker's compensation insurance coverage.

Applicants may contact the College of Nursing’s Assistant Dean of Students with any questions regarding non-NLC states.

UCF is also an approved institution of the National Council for State Authorization Reciprocity Agreement (NC-SARA). Membership in NC-SARA requires the university to disclose information regarding state licensing and certification requirements for the selected program of study when licensing and/or certification are a requirement to practice in the profession after graduation.

Licensure Disclosure

For information on how this program may prepare you for professional licensure, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Online-Nursing-Education-GC.pdf.

UCF College of Nursing faculty are authorized to teach in NLC states. Due to nursing education restrictions imposed by non-NLC states, UCF is unable to offer courses, clinicals, or other educational services regardless of modality within non-NLC states. Should you be physically located within a non-NLC state for more than a vacation or brief visit, regardless of your legal state of residence or the type of license you have, you will be unable to apply or continue your nursing degree program at the UCF College of Nursing. This includes, but is not limited to, students accepting traveling nurse positions in a non-Nurse Licensure Compact state.

UCF is also an approved institution of the National Council for State Authorization Reciprocity Agreement (NC-SARA). Membership in NC-SARA requires the university to disclose information regarding state licensing and certification requirements for the selected program of study when licensing and/or certification are a requirement to practice in the profession after graduation.

While licensure or certification may be available in this field of study, this program does not lead to such licensure or certification upon graduation. The professional preparation you receive in our program may still assist you in such pursuits; however, we are unable to confirm the specific licensure and certification requirements of each state, territory, or foreign entity in which professional credentialing may be possible. If you intend to pursue such credentialing in your state or elsewhere, we advise you to contact the applicable state credentialing authority to familiarize yourself with its specific requirements and determine if our program meets its academic criteria.

You are welcome to contact the College of Nursing’s Assistant Dean of Students with questions in this regard, and we will do our best to assist you in your career planning.

2022-2023 Graduate Catalog
**Program Description**

The Graduate Certificate in Nursing Education is designed to prepare nurses and other healthcare professionals to teach in professional health care education programs, health care agencies, and the community. The certificate program can be completed entirely online.

**Program Objectives**

The program prepares students to:

- Analyze social, economic, ethical, cultural, legal and political issues influencing nursing practice and health care in a global context.
- Collaborate with leaders in nursing and other disciplines to improve the quality of professional nursing practice and the healthcare system.
- Develop and implement leadership, management and teaching strategies for the improvement of health and healthcare.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy to improve the health of communities.
- Participate in lifelong learning activities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities and nursing theories to support an advanced nursing practice.
- Plan, evaluate and implement the delivery of health care using critical thinking skills.
- Practice in an advanced nursing role.

The certificate program requires three courses, for a total of 9 credit hours.

**Total Credit Hours Required: 9 Credit Hours Minimum beyond the Master's Degree**

**Program Prerequisites**

MSN degree earned or in progress from an accredited institution.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

**Online Application**

Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Required Courses
9 Total Credits

- Complete the following:
  - NGR6718 - Evaluation in Nursing Education (3)
  - NGR6791 - Teaching Strategies for Nurse Educators (3)
  - NGR6713 - Curriculum Development in Nursing Education (3)

Grand Total Credits: 9

**Nursing MSN**

**College**

College of Nursing

**Department**

Department of Nursing

2022-2023 Graduate Catalog
Program Website
http://www.nursing.ucf.edu/

Program Handbook Link
Nursing MSN

Program Contact Information
Mona Shattell, PhD, RN, FAAN
Chair and Professor, Department of Nursing Systems
Hugh F. and Jeannette G. McKean Endowed Chair
Mona.Shattell@ucf.edu
Telephone: 407-823-2744
UTWR 326

Is this program available 100% online?
Yes

UCF Online

Please Note: The Nursing MSN may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

You may pursue this UCF College of Nursing online program as long as you will be physically located in a Nurse Licensure Compact (NLC) state for the duration of your education.

UCF College of Nursing faculty are authorized to teach in NLC states. Due to nursing education restrictions imposed by non-NLC states, UCF is unable to offer courses, clinicals, or other educational services regardless of modality within non-NLC states. Should you be physically located within a non-NLC state for more than a vacation or brief visit, regardless of your legal state of residence or the type of license you have, you will be unable to apply or continue your nursing degree program at the UCF College of Nursing. This includes, but is not limited to, students accepting traveling nurse positions in a non-Nurse Licensure Compact state.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

The Master of Science in Nursing (MSN) programs build upon the student’s baccalaureate nursing education and professional experience. The Master of Science in Nursing program is accredited by the Commission on Collegiate Nursing Education (CCNE).

The College of Nursing also offers admission to its master's degree programs in nursing to Registered Nurses who have completed an AS in Nursing or diploma nursing program and have bachelor's degrees in fields other than nursing. These students will need to take 9 credits of undergraduate upper-division course work as the prerequisite for graduate study in nursing. Please contact gradnurse@ucf.edu for more information.

The goal of the Master of Science in Nursing program is to prepare advanced practice nurses, nurse educators, and nursing leaders and managers to assume leadership positions in a variety of healthcare settings. Graduates of these programs are eligible to sit for national certification examinations in their respective specialties.

Program Objectives

The programs prepare students to:

- Analyze social, economic, ethical, cultural, legal, and political issues influencing nursing practice and health care in a global context.
- Develop and implement leadership, management, and teaching strategies for the improvement of health and health care quality and safety.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy in collaboration with other disciplines to improve systems of care and health of communities.
- Synthesize advanced knowledge from the sciences, humanities, and theory to support advanced nursing practice.
- Plan, evaluate, and implement the delivery of health care using critical thinking skills in an advanced nursing role.

This degree has 6 tracks: Adult-Gerontology Acute Care Nurse Practitioner Track, Adult-Gerontology Primary Care Nurse Practitioner Track, Family Nurse Practitioner Track, Leadership and Management Track, Nurse Educator Track, and Nursing and Health Care Simulation Track. Please scroll to the bottom of this page for further details on these Tracks.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Nursing MSN - Nursing MSN, Adult-Gerontology Acute Care Nurse Practitioner Track

Track Website

http://www.nursing.ucf.edu/

Track Contact Information

Christopher Blackwell PhD
Associate Professor
christopher.blackwell@ucf.edu
Telephone: 407-823-2744
UTWR 453

Online Availability

No

2022-2023 Graduate Catalog
Track Description

This track will not be accepting applications or enrolling new students effective Fall 2018.

The Adult-Gerontology Acute Care Nurse Practitioner (AGACNP) Track in the Master of Science in Nursing (MSN) program prepares the advanced practice nurse to care for patients with medically complex stable and unstable acute, critical and chronic illnesses across care settings ranging from hospitals to subacute, ambulatory care, clinic and home care environments. The program provides a spectrum of care from disease prevention to acute and critical care management.

The track provides a spectrum of care from disease prevention to acute and critical care management. The curriculum prepares students for both the AGACNP board certification examination administered through the American Nurses Credentialing Center and the Acute Care Nurse Practitioner—Adult-Gerontology certification examination administered through the American Association of Critical Care Nurses.

Program Objectives

The program prepares students to:

- Analyze social, economic, ethical, cultural, legal, and political issues influencing nursing practice and health care in a global context.
- Develop and implement leadership, management, and teaching strategies for the improvement of health and health care quality and safety.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy in collaboration with other disciplines to improve systems of care and health of communities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities, and theory to support the advanced nursing practice.
- Plan, evaluate and implement the delivery of health care using critical thinking skill in an advanced nursing role.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Core Courses**
24 Total Credits

- Complete the following:
  - NGR5003 - Advanced Health Assessment and Diagnostic Reasoning (2)
  - NGR5003L - Advanced Health Assessment and Diagnostic Reasoning Lab (1)
  - NGR5141 - Pathophysiological Bases for Advanced Nursing Practice (3)
  - NGR5638 - Health Promotion (3)
  - NGR5800 - Theory for Advanced Practice Nursing (3)
  - NGR6172 - Pharmacology for Advanced Nursing Practice (3)
  - NGR6801 - Research Methods (3)
  - NGR6813 - Evidence Based Nursing Practice (3)
  - NGR7913 - Doctoral Project 3 (3)

**Specialty Courses**
23 - 24 Total Credits

- Complete the following:
  - NGR6210 - Adult-Gerontology Acute Care Nurse Practitioner I (3)
  - NGR6230L - Diagnostics and Skills for the Critically Ill (2)
  - NGR6211 - Adult-Gerontology Acute Care Nurse Practitioner II (3)
  - NGR6211L - Adult-Gerontology Acute Care Nurse Practitioner II Clinical (3)
  - NGR6175 - Critical Care Pharmacology (3)
  - NGR6212 - Adult-Gerontology Acute Care Nurse Practitioner III (3)
  - NGR6212L - Adult-Gerontology Acute Care Nurse Practitioner III Clinical (3)
  - NGR6215L - Adult-Gerontology Acute Care Nurse Practitioner Practicum (3 - 4)

Grand Total Credits: **47 - 48**

**Track Details**

**Progress to Degree**

Students are required to maintain a 3.0 grade point average. Students who receive a grade of below "B" in any course will be reviewed by the MSN/DNP Admissions, Progression and Graduation Committee for continuation in the program. Grades of below "B" are not acceptable in the doctoral program in the College of Nursing. Students who do not maintain a 3.0 GPA will be put on probation or dismissed from the program.

**Graduation Requirements**

- All course work completed with a minimum grade of "B"
- Clinical performance evaluated at a satisfactory level

**College of Nursing Master's Program Handbook**

All master's students are required to read the College of Nursing Master’s Program Handbook regarding policies for each program and for academic progression. Information about each program, particularly clinical placements and forms for appeals to the Master’s APG Committee, are located in the Nursing MSN Handbook.

**Equipment Fee**

Full-time students in all Master of Science in Nursing Programs pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 each semester.

**Independent Learning**

An independent scholarly work is a requirement for the Master of Science in Nursing degree. The scholarly work consists of an evidence-based nursing project. The scholarly project that is required in NGR 6813 (completed in the final semester of study) is an evidence-based scholarly clinical paper. The evidence-based project should reflect the latest evidence for the student's MSN track. This is a formal paper that must adhere to published guidelines in the syllabus and must be presented in a public forum.

**Nursing MSN - Nursing MSN, Adult-Gerontology Primary Care Nurse Practitioner Track**

**Track Website**

http://www.nursing.ucf.edu/

**Track Contact Information**

TBD
Online Availability
No

Track Description

This track will not be accepting applications or enrolling new students effective Fall 2018.

The Master of Science in Nursing (MSN) program in the Adult/Gerontology Primary Care Nurse Practitioner Track prepares nurses for advanced primary care practice in the current healthcare environment based on a strong scientific foundation for practice; flexibility and emphasis on evidence-based practice, and leadership.

The MSN Adult/Gerontology Primary Care Nurse Practitioner Track allows students to sit for certification examinations when they have completed the list of courses required. Certification authorizes them to function in the advanced role. Enrolling in the DNP program is an option after completion of the MSN.

Program Objectives

The program prepares students to:

- Analyze social, economic, ethical, cultural, legal, and political issues influencing nursing practice and health care in a global context.
- Develop and implement leadership, management, and teaching strategies for the improvement of health and health care quality and safety.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy in collaboration with other disciplines to improve systems of care and health of communities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities, and theory to support the advanced nursing practice.
- Plan, evaluate and implement the delivery of health care using critical thinking skill in an advanced nursing role.

The College of Nursing also offers admission to its master degree programs in nursing to Registered Nurses who have bachelor degrees in fields other than nursing. These students will need to take 8 credits of undergraduate upper division course work as the prerequisite for graduate study in nursing. Please contact gradnurse@ucf.edu for more information.

The College also offers an RN to MSN plan of study that provides an accelerated program for RNs who do not hold a baccalaureate degree but have met general education requirements. Students admitted under this plan of study will complete requirements for both the BSN and MSN programs. See RN to MSN program below for more information. A separate application to the graduate program will be required upon completion of the BSN degree. Admission to the MSN program is competitive and not guaranteed.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core Courses
24 Total Credits

- Complete the following:
  - NGR5003 - Advanced Health Assessment and Diagnostic Reasoning (2)
  - NGR5003L - Advanced Health Assessment and Diagnostic Reasoning Lab (1)
  - NGR5141 - Pathophysiological Bases for Advanced Nursing Practice (3)
  - NGR5638 - Health Promotion (3)
  - NGR5800 - Theory for Advanced Practice Nursing (3)
  - NGR6172 - Pharmacology for Advanced Nursing Practice (3)
  - NGR6801 - Research Methods (3)
  - NGR6813 - Evidence Based Nursing Practice (3)
  - NGR7913 - Doctoral Project 3 (3)

Specialty Courses
19 Total Credits

- Complete the following:
  - NGR6334 - Women's Health for APNs (2)
  - NGR6201 - Adult I Primary Care (3)
  - NGR6240L - Adult I Clinical for APNs (3)
  - NGR6202L - Adult II Primary Care Clinical (3)
  - NGR6263 - Gerontologic Care for APNs (3)
  - NGR6263L - Gerontologic Care Clinical for NPs (2)
  - NGR6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum (3)

Grand Total Credits: 43

Track Details

Progress to Degree

Students are required to maintain a 3.0 grade point average. Students who receive a grade of below B in any course will be reviewed by the MSN/DNP Admissions, Progression and Graduation Committee for continuation in the program. Grades of below B are not acceptable in the doctoral program in the College of Nursing. Students who do not maintain a 3.0 GPA will be put on probation or dismissed from the program.

Graduation Requirements

- All course work completed with a minimum grade of "B"
- Clinical performance evaluated at a satisfactory level

College of Nursing Master's Program Handbook

All master's students are required to read the College of Nursing Master's Program Handbook regarding policies for each program and for academic progression. Information about each program, particularly clinical placements and forms for appeals to the Master's APG Committee, are located in the Nursing MSN Handbook.

Equipment Fee

Full-time students in all Master of Science in Nursing Programs pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 each semester.

Independent Learning

An independent scholarly work is a requirement for the Master of Science in Nursing degree. The scholarly work consists of an evidence-based nursing project. The scholarly project that is required in NGR 6813 (completed in the final semester of study) is an evidence-based scholarly clinical paper. The evidence-based project should reflect the latest evidence for the student's MSN track. This is a formal paper that must adhere to published guidelines in the syllabus and must be presented in a public forum.

Nursing MSN - Nursing MSN, Family Nurse Practitioner Track

Track Website

http://www.nursing.ucf.edu/

Online Availability

No
**Track Description**

This track will not be accepting applications or enrolling new students effective Fall 2018.

The Master of Science in Nursing (MSN) program in the Family Nurse Practitioner Track prepares nurses for advanced primary care practice in the current healthcare environment based on a strong scientific foundation for practice, flexibility, and emphasis on evidence-based practice and leadership.

The MSN Family Nurse Practitioner Track allows students to sit for certification examinations when they have completed the list of courses required. Certification authorizes them to function in the advanced role. Enrolling in the DNP program is an option after completion of the MSN. The program can be completed in 6 semesters as a full-time student or 8 semesters as a part-time student.

**Program Objectives**

The program prepares students to:

- Analyze social, economic, ethical, cultural, legal, and political issues influencing nursing practice and health care in a global context.
- Develop and implement leadership, management, and teaching strategies for the improvement of health and health care quality and safety.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy in collaboration with other disciplines to improve systems of care and health of communities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities, and theory to support the advanced nursing practice.
- Plan, evaluate and implement the delivery of health care using critical thinking skill in an advanced nursing role.

The College of Nursing also offers admission to its master degree programs in nursing to Registered Nurses who have bachelor degrees in fields other than nursing. These students will need to take 8 credits of undergraduate upper-division coursework as a prerequisite for graduate study in nursing. Please contact gradnurse@ucf.edu for more information.

The College also offers an RN to MSN plan of study that provides an accelerated program for RNs who do not hold a baccalaureate degree but have met general education requirements. Students admitted under this plan of study will complete requirements for both the BSN and MSN programs. See RN to MSN program below for more information. A separate application to the graduate program will be required upon completion of the BSN degree. Admission to the MSN program is competitive and not guaranteed.

**College of Graduate Studies Contact Information**

TBD
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Core Courses
24 Total Credits

- Complete the following:
  - NGR5003 - Advanced Health Assessment and Diagnostic Reasoning (2)
  - NGR5003L - Advanced Health Assessment and Diagnostic Reasoning Lab (1)
  - NGR5141 - Pathophysiological Bases for Advanced Nursing Practice (3)
  - NGR5638 - Health Promotion (3)
  - NGR5800 - Theory for Advanced Practice Nursing (3)
  - NGR5884 - Legal and Professional Behavior in Advanced Practice Nursing (3)
  - NGR6172 - Pharmacology for Advanced Nursing Practice (3)
  - NGR6801 - Research Methods (3)
  - NGR6813 - Evidence Based Nursing Practice (3)

Specialty Courses
22 Total Credits

- Complete the following:
  - NGR6334 - Women's Health for APNs (2)
  - NGR6201 - Adult I Primary Care (3)
  - NGR6240L - Adult I Clinical for APNs (3)
  - NGR6263 - Gerontologic Care for APNs (3)
  - NGR6263L - Gerontologic Care Clinical for NPs (2)
  - NGR6305 - Pediatric Primary Care (3)
  - NGR6305L - Pediatric Primary Care Clinical (2)
  - NGR6342L - Women's Health for APNs Clinical (1)
  - NGR6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum (3)

Grand Total Credits: 46

Track Details

Progress to Degree

Students are required to maintain a 3.0 grade point average. Students who receive a grade of below B in any course will be reviewed by the MSN/DNP Admissions, Profession and Graduation Committee for continuation in the program. Grades of below B are not acceptable in the doctoral program in the College of Nursing. Students who do not maintain a 3.0 GPA will be put on probation or dismissed from the program.

Graduation Requirements

- All course work completed with a minimum grade of "B"
- Clinical performance evaluated at a satisfactory level

College of Nursing Master's Program Handbook

All students completing the master's along the way are required to read the College of Nursing Master's Program Handbook regarding policies for each program and for academic progression. Information about each program, particularly clinical placements and forms for appeals to the Master's APG Committee are located in the Nursing MSN Handbook.

Equipment Fee

Full-time students in all Master of Science in Nursing Programs pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 each semester.

Independent Learning

An independent scholarly work is a requirement for the Master of Science in Nursing degree. The scholarly work consists of an evidence-based nursing project. The scholarly project that is required in NGR 6813 (completed in the final semester of study) is an evidence-based scholarly clinical paper. The evidence-based project should reflect the latest evidence for the students MSN track. This is a formal paper that must adhere to published guidelines in the syllabus and must be presented in a public forum.

Nursing MSN - Nursing MSN, Leadership and Management Track

Track Website

https://nursing.ucf.edu/academics/masters-degrees/online-nlm

Track Handbook

Nursing MSN
Track Contact Information

Sandra Galura PhD, RN
Assistant Professor
sandra.galura@ucf.edu
Telephone: 407-823-5458
UTWR 489

Online Availability
Yes

Licensure Disclosure
Out-of-state instructional limitations apply to this degree program. This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Nursing-MSN-Online-Leadership-and-Management.pdf.

Track Description
The Master of Science in Nursing (MSN) programs build upon the student's baccalaureate nursing education and professional experience. The Master of Science in Nursing program is accredited by the Commission on Collegiate Nursing Education (CCNE).

Program Objectives
The program prepares students to:

- Analyze social, economic, ethical, cultural, legal, and political issues influencing nursing practice and health care in a global context.
- Develop and implement leadership, management, and teaching strategies for the improvement of health and health care quality and safety.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy in collaboration with other disciplines to improve systems of care and health of communities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities, and nursing theory to support advanced nursing practice.
- Plan, evaluate, and implement the delivery of health care using critical thinking skill in an advanced nursing role.

The Leadership and Management track of the MSN is designed to equip nurses with the managerial and leadership skills necessary to become administrative leaders in the health care industry. The program requires 36 credit hours of coursework and includes leadership practicum experiences.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

- BSN degree from an accredited institution.*
- Undergraduate Statistics course.
- RN license the state in which you practice.

*Licensed RNs who have completed an accredited AS in Nursing or diploma nursing program and Bachelor's degree in a discipline other than nursing, please contact the College of Nursing Graduate Office at gradnurseadvisor@ucf.edu for additional options.

Students who are Registered Nurses and have completed an AS in Nursing or diploma nursing program and have a bachelor's degree in a discipline other than nursing will be required to take the following courses prior to taking required program courses. Consistent with graduate nursing program policies, courses must be completed with a grade of 'B' or better.

- NUR 3805 - Dimensions of Professional Practice 3 Credit Hours
- NUR 4637 - Public Health Nursing 3 Credit Hours
- NUR 3165 - Nursing Research 3 Credit Hours
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
36 Total Credits

- Complete all of the following
  - Complete the following:
    - NGR5800 - Theory for Advanced Practice Nursing (3)
    - NGR5884 - Legal and Professional Behavior in Advanced Practice Nursing (3)
    - NGR5720 - Organizational Dynamics (3)
    - NGR5871 - Health Care Informatics (3)
    - NGR6722 - Financial Management and Resource Development (3)
    - NGR6723 - Nursing Leadership and Management (3)
    - NGR6723L - Nursing Leadership Role Specialization Practicum (3)
    - NGR6801 - Research Methods (3)
    - NGR6813 - Evidence Based Nursing Practice (3)
    - NGR6874 - Nursing Environment Management (3)
    - NGR6772L - Nurse Leadership and Management Internship (3)
- Earn at least 3 credits from the following types of courses:
  - Graduate Electives

Grand Total Credits: 36

Track Details

College of Nursing Master’s Program Handbook

All master's students are required to read the College of Nursing Master’s Program Handbook regarding policies for each program and for academic progression. Information about each program, particularly clinical placements and forms for appeals to the Master's APG Committee, are located in the Nursing MSN Handbook.

Equipment Fee

Full-time students in all Master of Science in Nursing programs pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 each semester.

Independent Learning

An independent scholarly work is a requirement for the Master of Science in Nursing degree. The scholarly work consists of an evidence-based nursing project. The scholarly project that is required in NGR 6813 (completed in the final semester of study) is an evidence-based scholarly clinical paper. The evidence-based project should reflect the latest evidence for the students MSN track. This is a formal paper that must adhere to published guidelines in the syllabus.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Nursing MSN - Nursing MSN, Nurse Educator Track

Track Website
http://www.nursing.ucf.edu/

Track Handbook
Nursing MSN

Track Contact Information

Susan Quelly PhD, RN, CNE
Associate Professor
susan.quelly@ucf.edu
Telephone: 407.823.0645
UTWR 428

Online Availability
Yes

Licensure Disclosure
Out-of-state instructional limitations apply to this degree program. This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Online-Nurse-Educator-MSN.pdf.
Track Description

The Master of Science in Nursing (MSN) programs build upon the student's baccalaureate nursing education and professional experience. The Master of Science in Nursing program is accredited by the Commission on Collegiate Nursing Education (CCNE). The Nurse Educator track is delivered fully online. It prepares nurse educators for teaching positions in colleges and universities, as well as practice settings.

Program Objectives

The program prepares students to:

- Analyze social, economic, ethical, cultural, legal, and political issues influencing nursing practice and health care in a global context.
- Develop and implement leadership, management, and teaching strategies for the improvement of health and health care quality and safety.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy in collaboration with other disciplines to improve systems of care and health of communities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities, and theory to support advanced nursing practice.
- Plan, evaluate and implement the delivery of health care using critical thinking skill in an advanced nursing role.

The Nurse Educator Track in the Nursing MSN program requires 18 credit hours of nursing courses and 17 credit hours of education courses for a total of 35 credit hours of graduate coursework.

Total Credit Hours Required: 35 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

- BSN degree from an accredited institution.*
- Undergraduate Statistics course.
- RN license the state in which you practice.

*Licensed RNs who have completed an AS in Nursing or diploma nursing program and Bachelor’s degree in a discipline other than nursing, please contact the College of Nursing Graduate Office at gradnurseadvisor@ucf.edu for additional options.

Students who are licensed RNs who have completed an accredited AS in Nursing or diploma nursing program and have a bachelor’s degree in a discipline other than nursing will be required to take the following courses prior to taking required program courses. Consistent with graduate nursing program policies, courses must be completed with a grade of 'B' or better.

- NUR 3805 - Dimensions of Professional Practice 3 Credit Hours
- NUR 4637 - Public Health Nursing 3 Credit Hours
- NUR 3165 - Nursing Research 3 Credit Hours

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
**Degree Requirements**

**Required Nursing Courses**
18 Total Credits

- Complete the following:
  - NGR5638 - Health Promotion (3)
  - NGR5141 - Pathophysiological Bases for Advanced Nursing Practice (3)
  - NGR5800 - Theory for Advanced Practice Nursing (3)
  - NGR5884 - Legal and Professional Behavior in Advanced Practice Nursing (3)
  - NGR6801 - Research Methods (3)
  - NGR6813 - Evidence Based Nursing Practice (3)

**Required Education Courses**
17 Total Credits

- Complete the following:
  - NGR6713 - Curriculum Development in Nursing Education (3)
  - NGR6791 - Teaching Strategies for Nurse Educators (3)
  - NGR6718 - Evaluation in Nursing Education (3)
  - NGR6942C - Internship in Nursing Education (4)
  - NGR6945L - Clinical Specialty Practicum (1)
  - NGR5190 - Core Clinical Concepts for Nurse Educators (3)

Grand Total Credits: **35**

**Track Details**

**College of Nursing Master’s Program Handbook**

All master's students are required to read the College of Nursing Master’s Program Handbook regarding policies for each program and for academic progression. Information about each program, particularly clinical placements and forms for appeals to the Master's APG Committee, are located in the Nursing MSN Handbook.

**Equipment Fee**

Full-time students in all Master of Science in Nursing programs pay a $90 equipment fee each semester that they are enrolled. part-time students pay $45 each semester.

**Independent Learning**

An independent scholarly work is a requirement for the Master of Science in Nursing degree. The scholarly work consists of an evidence-based nursing project. The scholarly project that is required in Evidence Based Practice, NGR 6813 (completed in the last or next to last semester of study) is an evidence-based scholarly clinical paper. The evidence-based project should reflect the latest evidence for the students MSN track. This is a formal paper that must adhere to published guidelines in the syllabus and must be presented.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

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Nursing MSN - Nursing MSN, Nursing and Health Care Simulation Track

2022-2023 Graduate Catalog
Track Website
http://www.nursing.ucf.edu/

Track Handbook
Nursing MSN

Track Contact Information
Mindi Anderson, PhD, APRN, CPNP-PC, CNE, CHSE-A, ANEF, FSSH, FAAN
Professor
Healthcare Simulation Program Director
Simulation Research Coordinator
Mindi.Anderson@ucf.edu

Online Availability
Yes

Licensure Disclosure
Out-of-state instructional limitations apply to this degree program. This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Nursing-MSN-Online-Nursing-and-Health-Care-Simulation.pdf.

Track Description
The Master of Science in Nursing (MSN) program builds upon the student's baccalaureate nursing education and professional experience.

The MSN program is accredited by the Commission on Collegiate Nursing Education (CCNE). The Nursing and Health Care Simulation Track is delivered online with some required campus activities. It prepares graduates for developing and leading nursing and healthcare simulation programs in academic and practice settings.

Program Objectives
The program prepares students to:

- Analyze social, economic, ethical, cultural, legal, and political issues influencing nursing practice and health care in a global context.
- Develop and implement leadership, management, and teaching strategies for the improvement of health and health care quality and safety.
- Develop practice models of evidence-based nursing practice incorporating nursing research.
- Influence health and public policy in collaboration with other disciplines to improve systems of care and health of communities.
- Participate in research and disseminate research findings through presentation and publication.
- Synthesize advanced knowledge from the sciences, humanities, and theory to support advanced nursing practice.
- Plan, evaluate and implement the delivery of health care using critical thinking skill in an advanced nursing role.

Track Prerequisites
- BSN degree from an accredited institution.*
- RN license the state in which you practice.
- Undergraduate Statistics Course

Students with a bachelor's degree in a discipline other than nursing will be required to take the following courses prior to taking required program courses. Consistent with graduate nursing program policies, courses must be completed with a grade of 'B' or better.

- NUR 3805 - Dimensions of Professional Practice 3 Credit Hours
- NUR 4637 - Public Health Nursing 3 Credit Hours
- NUR 3165 - Nursing Research 3 Credit Hours

*Licensed RNs who have completed an accredited AS in Nursing or diploma nursing program and Bachelor's degree in a discipline other than nursing, please contact the College of Nursing Graduate Office at gradnurseadvisor@ucf.edu for additional options.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230

Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
28 Total Credits

- Complete all of the following
  Core Courses
  - Take the following:
    - NGR5141 - Pathophysiological Bases for Advanced Nursing Practice (3)
    - NGR5190 - Core Clinical Concepts for Nurse Educators (3)
    - NGR5800 - Theory for Advanced Practice Nursing (3)
    - NGR5884 - Legal and Professional Behavior in Advanced Practice Nursing (3)
    - NGR6801 - Research Methods (3)
    - NGR6813 - Evidence Based Nursing Practice (3)
    - NGR6945L - Clinical Specialty Practicum (1)

Required Simulation Courses
- Take the following:
  - NGR6717 - Introduction to Healthcare Simulation (3)
  - NGR6794 - Organizational Leadership and Operations in Healthcare Simulation (3)
  - NGR6978 - Healthcare Simulation Capstone Project (3)

Elective Courses
3 Total Credits

- Complete all of the following
  - May be taken in other colleges with permission of adviser and faculty presenting the course.
  - Earn at least 3 credits from the following:
    - NGR5003 - Advanced Health Assessment and Diagnostic Reasoning (2)
    - NGR5003L - Advanced Health Assessment and Diagnostic Reasoning Lab (1)
    - NGR5638 - Health Promotion (3)
    - NGR5720 - Organizational Dynamics (3)
    - NGR6722 - Financial Management and Resource Development (3)
    - NGR6713 - Curriculum Development in Nursing Education (3)
    - NGR6718 - Evaluation in Nursing Education (3)
    - NGR6791 - Teaching Strategies for Nurse Educators (3)
    - IDS6147 - Perspectives on Modeling and Simulation (3)
    - CAP6671 - Intelligent Systems: Robots, Agents, and Humans (3)
    - NGR6771L - Healthcare Simulation Practicum (1 - 99)

Grand Total Credits: 31
Track Details

College of Nursing Master's Program Handbook

All master's students are required to read the College of Nursing Master's Program Handbook regarding policies for each program and for academic progression. Information about each program, particularly clinical placements, and forms for appeals to the Master's APG Committee, are located in the Nursing MSN Handbook.

Equipment Fee

Full-time students in all Master of Science in Nursing programs pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 each semester.

Independent Learning

An independent scholarly work is a requirement for the Master of Science in Nursing degree. The scholarly work consists of an evidence-based nursing project. The scholarly project that is required in Evidence Based Practice NGR 6813 (completed in the final semester of study) is an evidence-based scholarly clinical paper. The evidence-based project should reflect the latest evidence for the student's MSN track. This is a formal paper that must adhere to published guidelines in the syllabus and must be presented.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Nursing Nondegree

**College**
College of Nursing

**Department**
Department of Nursing

**Program Website**
http://www.nursing.ucf.edu/

**Program Contact Information**
gradnurseadvisor@ucf.edu
Telephone: 407-823-2744
UTWR 326

**Is this program available 100% online?**
No

**Program Description**
Nursing Nondegree students may take nursing graduate courses as a nondegree-seeking post-baccalaureate student on a space-available basis. See the Policies section of this Catalog for details on the possible use of these courses toward a degree. Completion of post-baccalaureate courses does not guarantee admission to the graduate program or their use in a degree program.

Students should choose the Nursing Nondegree option on the application to facilitate processing of files. Students may take nursing graduate classes as a nondegree-seeking post-baccalaureate student on a space-available basis. It is possible that no courses will have space available in a given semester as students in the graduate nursing programs receive priority for enrollment. Please contact the College of Nursing Graduate Office for registration assistance at gradnurseadvisor@ucf.edu.

International students are not eligible for this status unless they hold an eligible visa. International students taking online courses from their home country are eligible to be nondegree seeking since they do not require a visa.

**Please Note:** In general, Nursing Nondegree students are not eligible for financial aid, assistantships, or fellowships, although it is best to check with the Office of Student Financial Assistance for specific details. Nondegree-seeking students must be enrolled in 9 credit hours or more to be considered in full-time status.

**Program Prerequisites**
Nursing Nondegree applicants will need to have a Bachelor's Degree from an accredited institution recognized by UCF and evidence of completion of a professional nurse education program (RN).

**College of Graduate Studies Contact Information**
gradamissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Nursing PhD

**College**
College of Nursing
**Department**
Department of Nursing

**Program Website**
http://www.nursing.ucf.edu/

**Program Handbook Link**
Nursing PhD

**Program Contact Information**
Steven Talbert PhD, RN  
Clinical Assistant Professor  
steven.talbert@ucf.edu  
Telephone: 407-823-2888  
UTWR 431

**Is this program available 100% online?**
Yes

**UCF Online**
**Please note:** Nursing (PhD) may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

**Program Description**
The Doctor of Philosophy program in Nursing is designed to prepare students for positions as nursing faculty members, leaders in the application of innovative technologies to nursing education and clinical care, executive leaders in healthcare systems, and scientists who contribute to the body of nursing knowledge through their research.

The PhD in Nursing program prepares nurse scholars to possess a body of knowledge about theory, processes, and methods of inquiry in the discipline of nursing. The program allows students to contribute to disciplinary and interdisciplinary knowledge in nursing and healthcare on the basis of sound conceptual, methodological, and ethical decision-making.

**Program Outcomes**
At the completion of the PhD in Nursing Program, graduates will be able to:

- Conduct research to generate a body of knowledge and test theories that advance nursing science.
- Develop a program of scholarship that integrates research, teaching, leadership, and service to the profession.
- Contribute to interdisciplinary solutions that advance health care in a global society.

This degree has one track: BSN to PhD Track. Please scroll to the bottom of this page for further details on this Track.

For the Nursing PhD, total graduate credit must equal or exceed 72 credit hours. Students take 39 credit hours of required courses that focus on foundation knowledge development and research methods, 15 dissertation credit hours, and 9 credit hours of electives allowing students to gain additional expertise in the area chosen for their dissertation. Details about this program are located in the Nursing PhD Handbook.

**Total Credit Hours Required: 63 Credit Hours Minimum beyond the Bachelor’s Degree**

**Program Prerequisites**
- BSN and either MSN or Master's degree in a related field from an accredited institution or the equivalent.
- Licensure as a Registered Nurse in the state of Florida.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Foundation Areas
9 Total Credits

- Complete the following:
  - NGR7115 - Philosophical and Ethical Foundations of Nursing Science (3)
  - NGR7123 - Theory in Nursing Science (3)
  - NGR7952 - Scientific Writing for Nurses and Healthcare Professionals (3)

Research Methods
30 Total Credits

- Complete all of the following
  - Complete the following:
    - NGR7815 - Qualitative Methods in Nursing Research and Healthcare I (3)
    - NGR7916 - Research Grants Process and Proposal Writing (3)
    - NGR7817 - Quantitative Methods for Nursing and Healthcare I (3)
    - NGR7818 - Quantitative Methods for Nursing and Healthcare II (3)
    - NGR7932 - Nursing Research Grants Process and Proposal Writing (3)
    - NGR7807 - Research Approaches and Designs for Nursing and Healthcare (3)
    - NGR7812 - Advanced Study Design and Methods (3)
    - NGR7823 - Psychometrics and Measurement for Nursing Research (3)
  - Earn at least 6 credits from the following:
    - NGR7919 - Doctoral Research (1 - 99)

Elective Courses
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  The supporting course work is designed to permit students to gain additional expertise and knowledge in the area chosen for the dissertation. These courses may vary from student to student depending upon individual needs or objectives. Course selection should be influenced by the following criteria: Increase in understanding of the phenomenon of interest Increase in understanding of specific methodologies or analytical techniques relevant to the student's dissertation. Exposure to experiences relevant to the phenomenon of interest or methodological elements relevant to the student's dissertation. The UCF College of Nursing strongly encourages all PhD students to actively seek out interdisciplinary supporting courses including those offered by other disciplines. All supporting courses must be approved by the student's faculty adviser or dissertation committee chairperson.

Dissertation Research
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  NGR 7980 - Dissertation Research The dissertation research addresses the design and conduct of research that advances nursing science. Students conduct the dissertation in areas of faculty interest and expertise. Students are required to complete at least 15 credit hours of dissertation and are required to register for 3 credit hours of dissertation each semester until they complete the degree requirements.

Doctoral Research
0 Total Credits

- The course NGR 7919 Doctoral Research is designed for students to gain research experience with a faculty researcher. Students must obtain permission from the faculty member before registering for this course and complete the College of Nursing doctoral research form. The purpose of this course is for students to have an experience with research in addition to that of the dissertation. This course is not to be used as a pilot study for the student's dissertation.

Admission to Candidacy and Examinations
0 Total Credits

- The process for candidacy will start with the appointment of the full dissertation advisory committee including the external member. The Candidacy Examination has both written and oral components. When these are completed successfully, the student becomes a doctoral candidate and is eligible to enroll in dissertation credits. When candidacy status is obtained, the student must enroll in at least three-semester credits of dissertation credit each semester until successful oral defense of the dissertation is made and all graduation requirements are completed. The university requires a minimum of 15 dissertation credits. Post-candidacy status is subject to the rules and regulations of the University of Central Florida Graduate Catalog. The following are required to enroll in dissertation hours. Evidence that items have been completed must be received by the UCF Graduate College on the Friday before the first day of classes for those who wish to enroll in dissertation hours in that semester: - Completion of all coursework, except for dissertation hours. - Successful completion of the candidacy examination. - The dissertation advisory committee is formed, consisting of approved graduate faculty, graduate faculty scholars, and the approved external member. - Submittal of an approved program of study (should be finalized by the student's third semester).

Grand Total Credits: 63
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding

Nursing PhD - Nursing PhD, BSN to PhD Track

Track Website
http://www.nursing.ucf.edu/

Track Handbook
Nursing PhD

Track Contact Information

Steven Talbert PhD, RN
Clinical Assistant Professor
steven.talbert@ucf.com
Telephone: 407-823-2888
UTWR 431

Online Availability
No
Track Description

The Doctor of Philosophy program in Nursing is designed to prepare students for positions as nursing faculty members, leaders in the application of innovative technologies to nursing education and clinical care, executive leaders in healthcare systems, and scientists who contribute to the body of nursing knowledge through their research. The BSN to PhD track is designed to support students in completing the PhD in a timely fashion to provide for a longer research career.

The PhD in Nursing program prepares nurse scholars to possess a body of knowledge about theory, processes, and methods of inquiry in the discipline of nursing. The program allows students to contribute to disciplinary and interdisciplinary knowledge in nursing and healthcare on the basis of sound conceptual, methodological, and ethical decision-making. Students in the BSN to PhD track will have focused support in grant writing for programs such as the National Research Service Award (NRSA). Although courses will be offered online, students are expected to actively engage in research activities with faculty, which may require on-campus time.

Program Outcomes

At the completion of the PhD in Nursing Program, graduates will be able to:

- Conduct research to generate a body of knowledge and test theories that advance nursing science.
- Develop a program of scholarship that integrates research, teaching, leadership, and service to the profession.
- Contribute to interdisciplinary solutions that advance health care in a global society.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Track Prerequisites

- A Bachelor’s Degree in nursing from an accredited institution or the equivalent.
- Licensure as a Registered Nurse in the state of Florida. (Does not apply to international applicants).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Foundation Areas
9 Total Credits

- Complete the following:
  - NGR7952 - Scientific Writing for Nurses and Healthcare Professionals (3)
  - NGR7115 - Philosophical and Ethical Foundations of Nursing Science (3)
  - NGR7123 - Theory in Nursing Science (3)

Research Methods
33 Total Credits

- Complete all of the following
  - Complete the following:
    - NGR7807 - Research Approaches and Designs for Nursing and Healthcare (3)
    - NGR7815 - Qualitative Methods in Nursing Research and Healthcare I (3)
    - NGR7817 - Quantitative Methods for Nursing and Healthcare I (3)
    - NGR7818 - Quantitative Methods for Nursing and Healthcare II (3)
    - NGR7812 - Advanced Study Design and Methods (3)
    - NGR7823 - Psychometrics and Measurement for Nursing Research (3)
    - NGR7916 - Research Grants Process and Proposal Writing (3)
    - NGR7932 - Nursing Research Grants Process and Proposal Writing (3)
  - Earn at least 9 credits from the following:
    - NGR7919 - Doctoral Research (1 - 99)

Elective Courses
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  Students must take three courses (9 credit hours) of supporting course work. The supporting course work is designed to permit students to gain additional expertise and knowledge in the area chosen for the dissertation. These courses may vary from student to student depending upon individual needs or objectives. Course selection should be influenced by the following criteria: Increase in understanding of the phenomenon of interest Increase in understanding of specific methodologies or analytical techniques relevant to the student's dissertation. Exposure to experiences relevant to the phenomenon of interest or methodological elements relevant to the student's dissertation. The UCF College of Nursing strongly encourages all PhD students to actively seek out interdisciplinary supporting courses including those offered by other disciplines. In addition to supporting courses, students will select two elective courses (6 credits) to broaden their knowledge in a general topical area. All elective and supporting courses must be approved by the student's faculty adviser or dissertation committee chairperson.

Dissertation Research
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  NGR 7980 - Dissertation Research The dissertation research addresses the design and conduct of research that advances nursing science. Students conduct the dissertation in areas of faculty interest and expertise. Students are required to complete at least 15 credit hours of dissertation and are required to register for 3 credit hours of dissertation each semester until they complete the degree requirements.

Doctoral Research
0 Total Credits

- The course NGR 7919 Doctoral Research is designed for students to gain research experience with a faculty researcher. Students must obtain permission from the faculty member before registering for this course and complete the College of Nursing doctoral research form. The purpose of this course is for students to have an experience with research in addition to that of the dissertation.

Admission to Candidacy and Examinations
0 Total Credits

- The process for candidacy will start with the appointment of the dissertation advisory committee. The Candidacy Examination has both written and oral components. When these are completed successfully, the student becomes a doctoral candidate and is eligible to enroll in dissertation credits. When candidacy status is obtained, the student must enroll in at least three-semester credits of dissertation credit each semester until successful oral defense of the dissertation is made and all graduation requirements are completed. The university requires a minimum of 15 dissertation credits. Post-candidacy status is subject to the rules and regulations of the University of Central Florida Graduate Catalog. Students are required to complete the following prior to scheduling their candidacy examination: Submittal of an approved program of study (should be finalized by the student's third semester). Completion of all coursework, except for dissertation hours. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Following successful completion of the candidacy examination, the student may enroll in dissertation hours. Evidence that items have been completed must be received by the Graduate College on the Friday before the first day of classes for those who wish to enroll in dissertation hours in that semester.

Grand Total Credits: 72
**Track Details**

Students in the Nursing BSN to PhD program must complete all course work with GPA of 3.0 (“B”) or better, a satisfactory dissertation and defense of dissertation.

**Equipment Fee**

Full-time students in the Nursing PhD program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 each semester.

**Independent Learning**

The dissertation satisfies the independent learning experience.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

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Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**  
Telephone: 407-823-0127  
gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

**Nursing Practice DNP**

**College**

College of Nursing

**Department**

Department of Nursing

**Program Website**

http://www.nursing.ucf.edu/admissions/graduate-programs/dnp/index

**Program Handbook Link**

For the track specific program handbook, please visit the track catalog entry linked at the bottom of this page.

**Program Contact Information**

Valerie Martinez, DNP, APRN, CPNP-PC  
Clinical Assistant Professor  
Valerie.Martinez@ucf.edu  
Telephone: 407-823-5024  
UTWR 459

**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare students in that regard, please visit https://apq.ucf.edu/licensure-programs/.
Program Description

The Doctor of Nursing Practice (DNP) program prepares nurses at the highest level of practice for the current health care environment based on a strong scientific foundation for practice; flexibility and emphasis on evidence-based practice, leadership, and organizational analysis; and analysis of the DNP Project.

The program offers five tracks: Adult/Gerontology Acute Care Nurse Practitioner, Adult/Gerontology Primary Care Nurse Practitioner, Family Nurse Practitioner, Advanced Practice DNP, and Nurse Executive DNP. Please scroll to the bottom of this page for further details on these tracks.

Program Objectives

The objectives of the DNP program are to prepare graduates to:

- Critically analyze complex clinical situations and practice systems.
- Assume leadership roles in the development of clinical practice models, health policy and standards of care.
- Develop practice models that support diagnostic reasoning skills and clinical judgment through the use of the evidence-based practice.
- Analyze the social, economic, political, epidemiological and other scientific data to improve individual, aggregate and population health.
- Demonstrate information fluency and advanced communication skills to lead quality improvement initiatives to improve patient care and healthcare systems.
- Design, implement, and evaluate comprehensive care models for populations and/or systems and disseminate findings.

Note for International Students: Please contact the College of Nursing at gradnurse@ucf.edu or 407-823-2744 prior to applying to this online program.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/
Nursing Practice DNP - Nursing Practice DNP, Adult-Gerontology Acute Care Nurse Practitioner Track

Track Website
http://www.nursing.ucf.edu

Track Handbook
Nursing Practice DNP, Adult-Gerontology Acute Care Nurse Practitioner Track

Track Contact Information
Christopher Blackwell PhD, ARNP, ANP-BC, AGACNP-BC, CNE, FAANP, FAAN
Associate Professor
christopher.blackwell@ucf.edu
Telephone: 407-823-2744
UTWR 453

Online Availability
No

Licensure Disclosure
Graduates of this program are eligible to sit for the Adult-Gerontology Acute Care Nurse Practitioner (AGACNP) National Board Certification Examination offered by the American Nurses Credentialing Center or the Acute Care Nurse Practitioner-Adult Gerontology (ACNP-AG) National Board Certification Examination offered by the American Association of Critical Care Nurses. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Adult-Gerontology-Acute-Care-DNP.pdf.

Track Description
The Doctor of Nursing Practice (DNP) program in the Adult-Gerontology Acute Care Nurse Practitioner Track prepares nurses at the highest level of practice for the current health care environment based on a strong scientific foundation for practice; flexibility and emphasis on evidence-based practice, leadership, and organizational analysis; and analysis of the DNP project.

The Adult-Gerontology Acute Care Nurse Practitioner Track prepares the advanced practice nurse to care for patients with medically complex stable and unstable acute, critical and chronic illnesses across care settings ranging from hospitals to subacute, ambulatory care, clinic and home care environments at the DNP level, incorporating DNP essentials in practice with a culminating DNP project.

Program Objectives
The objectives of the DNP program are to prepare graduates to:

- Critically analyze complex clinical situations and practice systems and disseminate findings.
- Assume leadership roles in the development of clinical practice models, health policy and standards of care.
- Develop practice models that support diagnostic reasoning skills and clinical judgment through the use of the evidence-based practice.
- Analyze the social, economic, political, epidemiological and other scientific data to improve individual, aggregate and population health.
- Demonstrate information fluency and advanced communication skills to lead quality improvement initiatives to improve patient care and healthcare systems.
- Design, implement, and evaluate comprehensive care models for populations and/or systems and disseminate findings.

The DNP Adult-Gerontology Acute Care Nurse Practitioner track requires a minimum of 75 credit hours beyond the baccalaureate degree. The curriculum includes 39 credits of core courses shared with other DNP tracks, 12 credits of APN core and 24 credits of specialty courses. A total of 1,020 practicum hours are required to earn the DNP. The program prepares nurses at the entry level for advanced practice for the current healthcare system based on a strong scientific foundation for practice; offers flexibility and emphasis on evidence-based practice, leadership and organizational analysis; and provides analytic, critical thinking and diagnostic reasoning skills to examine practice innovations involving completion of the residency project during the clinical residency courses. Details about this program are in the Advanced Practice DNP Handbook.

Total Credit Hours Required: 75 Credit Hours Minimum beyond the Bachelor's Degree
**Track Prerequisites**

- BSN degree from an accredited institution by program start date.*
- Undergraduate Statistics course.
- Licensure as a registered nurse in the State of Florida by program start date. (Out of state applicants must be eligible for licensure in Florida and must achieve RN licensure to begin clinical courses.)

*For Students with an RN license and a Bachelor's degree in a discipline other than nursing, please contact the College of Nursing Graduate Office at gradnurse@ucf.edu or 407-823-2744 for additional options.

Students with a bachelor's degree in a discipline other than nursing will be required to take the following courses prior to taking required program courses. Consistent with graduate nursing program policies, courses must be completed with a grade of 'B' or better.

- NUR 3805 - Dimensions of Professional Practice 3 Credit Hours
- NUR 4637 - Public Health Nursing 3 Credit Hours
- NUR 3165 - Nursing Research 3 Credit Hours

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Advanced Practice Core Courses
12 Total Credits

- Complete the following:
  - NGR5003 - Advanced Health Assessment and Diagnostic Reasoning (2)
  - NGR5003L - Advanced Health Assessment and Diagnostic Reasoning Lab (1)
  - NGR5141 - Pathophysiological Bases for Advanced Nursing Practice (3)
  - NGR5638 - Health Promotion (3)
  - NGR6172 - Pharmacology for Advanced Nursing Practice (3)

Specialty Courses: Adult-Gerontology Acute Care Nurse Practitioner
24 Total Credits

- Complete all of the following
  - Complete the following:
    - NGR6210 - Adult-Gerontology Acute Care Nurse Practitioner I (3)
    - NGR6230L - Diagnostics and Skills for the Critically Ill (2)
    - NGR6211 - Adult-Gerontology Acute Care Nurse Practitioner II (3)
    - NGR6211L - Adult-Gerontology Acute Care Nurse Practitioner II Clinical (3)
    - NGR6175 - Critical Care Pharmacology (3)
    - NGR6212 - Adult-Gerontology Acute Care Nurse Practitioner III (3)
    - NGR6212L - Adult-Gerontology Acute Care Nurse Practitioner III Clinical (3)
  - Earn at least 4 credits from the following:
    - NGR6215L - Adult-Gerontology Acute Care Nurse Practitioner Practicum (3 - 4)

DNP Core Courses
39 Total Credits

- Complete the following:
  - NGR5800 - Theory for Advanced Practice Nursing (3)
  - NGR6801 - Research Methods (3)
  - NGR6874 - Nursing Environment Management (3)
  - NGR7673 - Epidemiology Principles in Advanced Practice Nursing (3)
  - NGR7793 - Leadership and Economics in Advanced Practice Nursing (3)
  - NGR7827 - Concepts, Measurement, and Data Management (3)
  - NGR7820 - Innovative Technologies in Healthcare (3)
  - NGR7892 - Healthcare Systems and Policy (3)
  - NGR7855C - Evidence-Based Practice Development for DNP (3)
  - NGR7065 - Advanced Clinical Management for Advanced Practice Nursing (3)
  - NGR7911C - Doctoral Project I (3)
  - NGR7912C - Doctoral Project 2 (3)
  - NGR7913 - Doctoral Project 3 (3)

DNP Project
0 Total Credits

- The DNP Project is related to advanced nursing practice and benefits a group, population or community rather than an individual patient. It addresses identified needs and builds on an evidence base. DNP projects may include but are not limited to: Translate research into practice and evaluate outcomes Quality improvement (care processes, continuity of care, patient outcomes) Implement and evaluate evidence-based practice guidelines Analyze policy: develop, implement, evaluate or revise policy Design and use databases to retrieve information for decision making, planning, evaluation Conduct financial analyses to compare care models and potential cost savings, etc. Design and evaluate new models of care Design and evaluate health promotion and disease prevention programs Assess integration of technology in care The theme that links these forms of scholarly experiences is the use of evidence to improve either practice or patient outcomes. Additional examples of DNP projects can be found on the National Organization of Nurse Practitioner Faculty (NONPF) website under Practice Doctorate Resource Center.

Grand Total Credits: 75
Track Details

Progress to Degree

Students are required to maintain a 3.0 grade point average. Students who receive a grade below "B" in any course will be reviewed by the DNP Admissions, Progression and Graduation Committee for continuation in the program. Grades of below "B" are not acceptable in the doctoral program in the College of Nursing. Students who do not maintain a 3.0 GPA will be put on probation or dismissed from the program.

Graduation Requirements

- All course work completed with a minimum grade of "B"
- A satisfactory DNP Project
- Clinical performance evaluated at a satisfactory level
- A satisfactory public presentation of the DNP Project

Independent Learning

A DNP Project will be completed by all students in the DNP program. A scholarly project, derived from clinical practice, will be developed in depth with faculty supervision.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Nursing Practice DNP - Nursing Practice DNP, Adult-Gerontology Primary Care Nurse Practitioner Track

Track Website
http://www.nursing.ucf.edu/admissions/graduate-programs/dnp/index

Track Handbook
Nursing Practice DNP, Adult-Gerontology Primary Care Nurse Practitioner Track

Track Contact Information

Valerie Martinez, DNP, APRN, CPNP-PC, PMHS
Clinical Assistant Professor
valerie.martinez@ucf.edu
Telephone: 407-823-5024
UTWR 459

Online Availability

No

2022-2023 Graduate Catalog
Licensure Disclosure

The DNP Adult/Gerontology Primary Care Nurse Practitioner Track prepares students to care for primary care patients from adolescence through old age in primary care and home care settings, incorporating DNP essentials in practice with a culminating DNP project. Graduates of this program are eligible to sit for the Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP) National Board Certification Examination offered by the American Academy of Nurse Practitioners Certification Board or the American Nurses Credentialing Center. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Adult-Gerontology-Primary-Care-DNP.pdf.

Track Description

The Doctor of Nursing Practice (DNP) program in the Adult/Gerontology Primary Care Nurse Practitioner Track prepares nurses at the highest level of practice for the current health care environment based on a strong scientific foundation for practice; flexibility and emphasis on evidence-based practice, leadership, and organizational analysis; and analysis of the DNP project.

Program Objectives

The objectives of the DNP program are to prepare graduates to:

- Critically analyze complex clinical situations and practice systems and disseminate findings
- Assume leadership roles in the development of clinical practice models, health policy and standards of care.
- Develop practice models that support diagnostic reasoning skills and clinical judgment through the use of the evidence-based practice.
- Analyze the social, economic, political, epidemiological and other scientific data to improve individual, aggregate and population health.
- Demonstrate information fluency and advanced communication skills to lead quality improvement initiatives to improve patient care and healthcare systems.
- Design, implement, and evaluate comprehensive care models for populations and/or systems and disseminate finding.

The DNP Adult/Gerontology Primary Care Nurse Practitioner track requires a minimum of 72 credit hours beyond the baccalaureate degree. The curriculum includes 39 credits of core courses shared with other DNP tracks, 14 credits of APN core and 19 credits of specialty courses. A total of 1,080 practicum hours are required to earn the DNP. The program prepares nurses at the entry level for advanced practice for the current healthcare system based on a strong scientific foundation for practice; offers flexibility and emphasis on evidence-based practice, leadership and organizational analysis; and provides analytic, critical thinking and diagnostic reasoning skills to examine practice innovations involving completion of the residency project during the clinical residency courses. Details about this program are located in the handbook linked in the Track Handbook section.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor’s Degree

Track Prerequisites

- BSN degree from an accredited institution by program start date.*
- Undergraduate Statistics course.
- Licensure as a registered nurse in the State of Florida by program start date. (Out of state applicants must be eligible for licensure in Florida and must achieve RN licensure to begin clinical courses.)

*For Students with an RN license and a Bachelor's degree in a discipline other than nursing, please contact the College of Nursing Graduate Office at gradnurse@ucf.edu for additional options.

Students with a bachelor’s degree in a discipline other than nursing will be required to take the following courses prior to taking required program courses. Consistent with graduate nursing program policies, courses must be completed with a grade of ’B’ or better.

- NUR 3805 - Dimensions of Professional Practice 3 Credit Hours
- NUR 4637 - Public Health Nursing 3 Credit Hours
- NUR 3165 - Nursing Research 3 Credit Hours

College of Graduate Studies Contact Information

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Mailing Address

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Advanced Practice Core Courses
14 Total Credits

- Complete the following:
  - NGR5003 - Advanced Health Assessment and Diagnostic Reasoning (2)
  - NGR5003L - Advanced Health Assessment and Diagnostic Reasoning Lab (1)
  - NGR5141 - Pathophysiological Bases for Advanced Nursing Practice (3)
  - NGR5638 - Health Promotion (3)
  - NGR6172 - Pharmacology for Advanced Nursing Practice (3)
  - NGR6063L - Advanced Skills for the Management of Illness and Injuries (2)

Specialty Courses: Adult/Gerontology Nurse Practitioner
19 Total Credits

- Complete the following:
  - NGR6201 - Adult I Primary Care (3)
  - NGR6240L - Adult I Clinical for APNs (3)
  - NGR6202L - Adult II Primary Care Clinical (3)
  - NGR6334 - Women's Health for APNs (2)
  - NGR6263 - Gerontologic Care for APNs (3)
  - NGR6263L - Gerontologic Care Clinical for NPs (2)
  - NGR6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum (3)

DNP Core Courses
39 Total Credits

- Complete all of the following
  - The DNP courses serve to enhance the skill and science base of the graduate and strengthen the focus on research utilization. Safety and efficiency in health care systems is addressed and organizational and policy implications are emphasized within the context of care delivery. An emphasis is placed on evidence-based practice, state-of-the-art interventions and information fluency.
  - Complete the following:
    - NGR5800 - Theory for Advanced Practice Nursing (3)
    - NGR6801 - Research Methods (3)
    - NGR6874 - Nursing Environment Management (3)
    - NGR7065 - Advanced Clinical Management for Advanced Practice Nursing (3)
    - NGR7673 - Epidemiology Principles in Advanced Practice Nursing (3)
    - NGR7793 - Leadership and Economics in Advanced Practice Nursing (3)
    - NGR7820 - Innovative Technologies in Healthcare (3)
    - NGR7827 - Concepts, Measurement, and Data Management (3)
    - NGR7855C - Evidence-Based Practice Development for DNP (3)
    - NGR7892 - Healthcare Systems and Policy (3)
    - NGR7911C - Doctoral Project I (3)
    - NGR7912C - Doctoral Project 2 (3)
    - NGR7913 - Doctoral Project 3 (3)

DNP Project
0 Total Credits

- The DNP Project is related to advanced nursing practice and benefits a group, population or community rather than an individual patient. It addresses identified needs and builds on an evidence base. DNP projects may include but are not limited to: Translate research into practice and evaluate outcomes Quality improvement (care processes, continuity of care, patient outcomes) Implement and evaluate evidence-based practice guidelines Analyze policy: develop, implement, evaluate or revise policy Design and use databases to retrieve information for decision making, planning, evaluation Conduct financial analyses to compare care models and potential cost savings, etc. Design and evaluate new models of care Design and evaluate health promotion and disease prevention programs Assess integration of technology in care The theme that links these forms of scholarly experiences is the use of evidence to improve either practice or patient outcomes. Additional examples of DNP projects can be found on the National Organization of Nurse Practitioner Faculty (NONPF) website under Practice Doctorate Resource Center.

Grand Total Credits: 72
Track Details

Progress to Degree

Students are required to maintain a 3.0 grade point average. Students who receive a grade below "B" in any course will be reviewed by the DNP Admissions, Progression and Graduation Committee for continuation in the program. Grades of below B are not acceptable in the doctoral program in the College of Nursing. Students who do not maintain a 3.0 GPA will be put on probation or dismissed from the program.

Graduation Requirements

- All course work completed with a minimum grade of "B"
- A satisfactory DNP Project
- Clinical performance evaluated at a satisfactory level
- A satisfactory public presentation of the DNP Project

Independent Learning

A DNP Project will be completed by all students in the DNP program. A scholarly project, derived from clinical practice, will be developed in depth with faculty supervision.

Financial Information

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http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding

Nursing Practice DNP - Nursing Practice DNP, Advanced Practice Track

Track Website
www.nursing.ucf.edu

Track Handbook
Nursing Practice DNP, Advanced Practice Track

Track Contact Information

Jacqueline LaManna, ’13 PhD, APRN, ANP-BC, BC-ADM, CDCES, FADCES
Director of Advanced Practice DNP Program, Associate Professor
Jacqueline.LaManna@ucf.edu
UTWR 400
407-823-3023

Online Availability

Yes
Licensure Disclosure

Out-of-state instructional limitations apply to this degree program. This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-DNP-Online-Advanced-Practice.pdf

Track Description

The Doctor of Nursing Practice (DNP) program prepares nurses at the highest level of practice for the current health care environment based on a strong scientific foundation for practice; flexibility and emphasis on evidence-based practice, leadership, and organizational analysis; and analysis of the DNP Project.

Program Objectives

The objectives of the DNP program are to prepare graduates to:

- Critically analyze complex clinical situations and practice systems and disseminate findings.
- Assume leadership roles in the development of clinical practice models, health policy and standards of care.
- Develop practice models that support diagnostic reasoning skills and clinical judgment through the use of the evidence-based practice.
- Analyze the social, economic, political, epidemiological and other scientific data to improve individual, aggregate and population health.
- Demonstrate information fluency and advanced communication skills to lead quality improvement initiatives to improve patient care and healthcare systems.
- Design, implement, and evaluate comprehensive care models for populations and/or systems and disseminate findings.

For the Doctor of Nursing Practice (DNP), total graduate credit must equal or exceed 72 credit hours. Students take 27 credit hours of core courses, 9 credit hours of electives, and 6 credit hours of a DNP Project. The total clinical hours (including those hours accrued in the MSN degree) will be 1000. The core courses have been carefully constructed to incorporate the AACN competencies for DNP graduates. Details about this program are located in the Nursing DNP Handbook.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree

Students will take course work that incorporates The Essentials of Doctoral Education for Advanced Nursing Practice [American Association of Colleges of Nursing (AACN), 2006] and The Essentials: Core Competencies for Professional Nursing education (AACN, 2021). The Doctoral Essentials address the following:

1. Scientific underpinning for practice
2. Organizational and systems leadership for quality improvement and systems thinking
3. Clinical scholarship and analytical methods for evidence-based practice
4. Information systems/technology and patient care technology for the improvement and transformation of health care
5. Health care policy for advocacy in health care
6. Inter-professional collaboration for improving patient and population health outcomes
7. Clinical prevention and population health for improving the nation's health
8. Advanced nursing practice

Track Prerequisites

- MSN degree in an APRN specialty role or a post-MSN certificate (NP, CNS, CRNA, CNM) from an accredited institution.
- Certification as an APRN or proof of APRN certification by the withdrawal deadline of the first semester of enrollment is required.
- Advanced Practice Registered Nurse (APRN) licensure in the state in which you practice.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

DNP Core Courses
27 Total Credits

- Complete all of the following
  - The DNP core courses serve to enhance the skill and science base of the graduate and strengthen the focus on evidence-based practice. Safety and efficiency in health care systems is addressed and organizational and policy implications are emphasized within the context of care delivery. An emphasis is placed on evidence-based practice, state-of-the-art interventions and information fluency.
  - Complete the following:
    - NGR6874 - Nursing Environment Management (3)
    - NGR7892 - Healthcare Systems and Policy (3)
    - NGR7673 - Epidemiology Principles in Advanced Practice Nursing (3)
    - NGR7065 - Advanced Clinical Management for Advanced Practice Nursing (3)
    - NGR7855C - Evidence-Based Practice Development for DNP (3)
    - NGR7827 - Concepts, Measurement, and Data Management (3)
    - NGR7793 - Leadership and Economics in Advanced Practice Nursing (3)
    - NGR7820 - Innovative Technologies in Healthcare (3)
    - NGR7779C - Program Development and Management for DNP (3)

Restricted Electives
9 Total Credits

- Earn at least 9 credits from the following types of courses:
  - Restricted Electives

DNP Project
6 Total Credits

- Complete all of the following
  - Complete the following:
    - NGR7911C - Doctoral Project 1 (3)
    - NGR7912C - Doctoral Project 2 (3)
  - The DNP Project is the product of the culminating or comprehensive experience of an independent project that demonstrates application of advanced clinical and evidence-based practice. The DNP Project is guided and evaluated by an academic committee and is derived from the practice immersion experience. It will serve as a foundation for future scholarly practice. The DNP Project is related to advanced nursing practice and benefits a group, population or community rather than an individual patient. It addresses identified needs and builds on an evidence base. DNP projects may include but are not limited to: Translation of research into practice and evaluation of outcomes Program review Quality improvement (care processes, continuity of care, patient outcomes) Implementation and evaluation of evidence-based practice guidelines in a specific practice setting Policy analysis: development, implementation, evaluation, or revision of policy Design and usage of databases to retrieve information for decision making, planning, evaluation Conduct of financial analyses to compare care models and potential cost savings, etc. Design and evaluation of new models of care Design and evaluation of health promotion and disease prevention programs Assessment of integration of technology in care. The theme that links these forms of scholarly experiences is the use of evidence to improve either practice or patient outcomes. Additional examples of DNP projects can be found on the National Organization of Nurse Practitioner Faculty (NONPF) website under Practice Doctorate Resource Center.

Grand Total Credits: 42

Track Details

Progress to Degree

Students are required to maintain a 3.0 grade point average. Grades below B are not acceptable in the doctoral program in the College of Nursing. Students who receive a grade of below B in any course are subject to dismissal from the DNP program and will be reviewed by the DNP Admissions, Progression and Graduation Committee for continuation in the program. Students who do not maintain a 3.0 GPA will be put on probation or dismissed from the program.

Graduation Requirements

- All course work completed with a minimum grade of "B"
- A satisfactory DNP Project
- Clinical performance evaluated at a satisfactory level
- A satisfactory public presentation of the DNP Project

Equipment Fee

Full-time students in the Nursing Practice DNP program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 each semester.

Independent Learning

A DNP Project will be completed by all students in the DNP program. A scholarly project, derived from clinical practice, will be developed in depth with faculty supervision.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Nursing Practice DNP - Nursing Practice DNP, Executive Track

Track Website
http://www.nursing.ucf.edu/admissions/graduate-programs/dnp/index

Track Handbook
Nursing Practice DNP, Executive Track

Track Contact Information
Veronica B. Decker, DNP, MBA, APRN, PMHCNS-BC, FNAP
Director of Nurse Executive DNP Program, Assistant Professor
Veronica.Decker@ucf.edu
UTWR 427
407-823-5025

Online Availability
Yes

Licensure Disclosure
This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-DNP-Online-Executive.pdf.
**Track Description**

The Executive Track in the Doctor of Nursing Practice (DNP) program is a dynamic and engaging academic curriculum that prepares the nurse executive for the multiple dimensions of administrative responsibilities within varied healthcare environments. The Executive DNP track extends and enhances the knowledge, skill, and performance of healthcare system leaders in a wide variety of clinical and administrative environments.

The DNP Executive Track meets the unique needs and taps the talent of nurse executives through experiential learning and leadership projects in a team-centered environment. It provides enrolled executives the opportunity to interact with prominent healthcare experts who address emergent and challenging issues for nurse leaders and encourages networking with colleagues across local and state healthcare and policy organizations.

**Program Objectives**

The objectives of the DNP program are to prepare graduates to:

- Critically analyze complex clinical situations and practice systems and disseminate findings.
- Assume leadership roles in the development of clinical practice models, health policy, and standards of care.
- Develop practice models that support diagnostic reasoning skills and clinical judgment through the use of the evidence-based practice.
- Analyze the social, economic, political, epidemiological, and other scientific data to improve individual, aggregate, and population health.
- Demonstrate information fluency and advanced communication skills to lead quality improvement initiatives to improve patient care and health care systems.
- Design, implement, and evaluate comprehensive care models for populations and/or systems and disseminate findings.

The Executive Track in the Doctor of Nursing Practice program prepares nurses at the highest level of practice for the current healthcare environment based on a strong scientific foundation for practice; offers flexibility and emphasis on evidence-based practice, leadership, and organizational analysis, and provides analytic skills to examine practice innovations. Details about this program are located in the Executive DNP Handbook. For the Doctor of Nursing Practice (DNP), total graduate credit must equal or exceed 42 credit hours.

**Total Credit Hours Required: 42 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

- MSN with a leadership or healthcare systems focus (eg: Nursing Administration, Healthcare Systems, or Leadership) or Master's Degree in a related administration field (eg: MBA, MHA, or MPA) from an accredited institution.
- Applicants with an MSN with a non-leadership focus will be considered for conditional admission. Qualified applicants will be required to complete 9 credit hours, NGR 5720 Organizational Dynamics, NGR 6722 Financial Management and Resource Development, NGR 6723 Nursing Leadership and Management prior to beginning DNP courses. Additional practicum hours will be required.
- RN license the state in which you practice.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

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2022-2023 Graduate Catalog
**Degree Requirements**

**Required Courses**

27 Total Credits

- Complete the following:
  - NGR6874 - Nursing Environment Management (3)
  - NGR7673 - Epidemiology Principles in Advanced Practice Nursing (3)
  - NGR7793 - Leadership and Economics in Advanced Practice Nursing (3)
  - NGR7827 - Concepts, Measurement, and Data Management (3)
  - NGR7820 - Innovative Technologies in Healthcare (3)
  - NGR7892 - Healthcare Systems and Policy (3)
  - NGR7855C - Evidence-Based Practice Development for DNP (3)
  - NGR7779C - Program Development and Management for DNP (3)
  - NGR7778L - Advanced Leadership Selective for DNP (3)

**Elective**

3 Total Credits

- Earn at least 3 credits from the following types of courses:
  Electives should be 5000, 6000, or 7000-level courses from the College of Nursing and should support students to achieve DNP Essentials and AONL competencies. Courses from another discipline or university may be considered. Electives must be approved by the program director.

**DNP Executive Residency**

3 Total Credits

- Complete all of the following
  - The DNP Residency provides an in-depth clinical experience for students. This advanced practice experience provides the opportunity to link policy making with clinical systems, translate research into practice and serve as change agents for health care.
  - Complete the following:
    - NGR7976L - Executive DNP Residency (3)

**DNP Professional Practice Immersion**

0 Total Credits

- DNP clinical requirements are 1000 hours post-baccalaureate. Immersion hours depend upon record review of hours completed at the master's level. NGR 7942L - DNP Professional Practice Immersion VAR Credit Hours (60-180 practice hours) Can be repeated.

**DNP Project**

9 Total Credits

- Complete all of the following
  - The DNP Project is the product of the culminating or comprehensive experience of an independent project that demonstrates application of advanced clinical and evidence-based practice. The DNP Project is guided and evaluated by an academic committee. It will serve as a foundation for future scholarly practice. The DNP Project is related to advanced nursing practice and benefits a group, population or community rather than an individual patient. It addresses identified needs and builds on an evidence base.
  - Complete the following:
    - NGR7911C - Doctoral Project I (3)
    - NGR7912C - Doctoral Project 2 (3)
    - NGR7913 - Doctoral Project 3 (3)

Grand Total Credits: 42
Practicum Experience and Sponsor Requirements and Responsibilities:

Practicum experience hours in nursing leadership must be completed in the graduate educational program in accordance with current accrediting bodies. Additional practicum experience hours may be required to demonstrate executive leadership competence.

Students are required to secure a sponsor within an organization to coach, mentor and guide the student related to their learning activities. Students pursuing a DNP degree in Executive Leadership need guidance in applying their course content to executive nursing practice and planning, implementing, and evaluating an evidence-based practice project.

Practice hours for the Executive DNP are typically accrued by a student working independently in his or her organization related to course objectives or the DNP Project. The sponsor provides guidance to the student on the development of their leadership role. They also provide assistance in gaining access to resources or personnel that are needed to plan, implement, and evaluate their practice improvement project. They work with the student to identify organizational needs and priorities so the student can provide value to the organization.

Independent Learning

A DNP Project will be completed by all students in the DNP program. A scholarly project, derived from systems leadership practice, will be developed in depth with faculty supervision.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Nursing Practice DNP - Nursing Practice DNP, Family Nurse Practitioner Track

Track Website
http://www.nursing.ucf.edu/admissions/graduate-programs/dnp/index

Track Handbook
Nursing Practice DNP, Family Nurse Practitioner Track

Track Contact Information

Valerie Martinez, DNP, APRN, CPNP-PC, PMHS
Clinical Assistant Professor
valerie.martinez@ucf.edu
Telephone: 407-823-5024
UTWR 454

Online Availability

No
Licensure Disclosure

Upon completion of this program, students are eligible to sit for the Family Nurse Practitioner (FNP) National Board Certification Examination offered by the American Academy of Nurse Practitioners Certification Board or the American Nurses Credentialing Center. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-Family-Nurse-Practitioner-DNP.pdf.

Track Description

The Doctor of Nursing Practice (DNP) program in the Family Nurse Practitioner Track prepares nurses at the highest level of practice for the current health care environment based on a strong scientific foundation for practice; flexibility and emphasis on evidence-based practice, leadership, and organizational analysis; and analysis of the DNP project.

Program Objectives

The objectives of the DNP program are to prepare graduates to:

- Critically analyze complex clinical situations and practice systems.
- Assume leadership roles in the development of clinical practice models, health policy and standards of care.
- Develop practice models that support diagnostic reasoning skills and clinical judgment through the use of the evidence-based practice.
- Analyze the social, economic, political, epidemiological and other scientific data to improve individual, aggregate and population health.
- Demonstrate information fluency and advanced communication skills to lead quality improvement initiatives to improve patient care and healthcare systems.
- Design, implement, and evaluate comprehensive care models for populations and/or systems and disseminate findings.

The DNP Family Nurse Practitioner Track requires a minimum of 75 credit hours beyond the baccalaureate degree. The curriculum includes 39 credit hours of core courses shared with other DNP tracks, 14 credits of APN core and 22 credits of specialty courses. A total of 1,080 practicum hours are required to earn the DNP. The program prepares nurses at the entry level for advanced practice for the current healthcare system based on a strong scientific foundation for practice; offers flexibility and emphasis on evidence-based practice, leadership and organizational analysis; and provides analytic, critical thinking and diagnostic reasoning skills to examine practice innovations involving completion of the residency project during the clinical residency courses. Details about this program are located in the Advanced Practice DNP Family Nurse DNP Handbook.

Total Credit Hours Required: 75 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

- BSN degree from an accredited institution by program start date.*
- Undergraduate Statistics course.
- Licensure as a registered nurse in the State of Florida by program start date. (Out of state applicants must be eligible for licensure in Florida and must achieve RN licensure to begin clinical courses.)

*For Students with an RN and a Bachelor's degree in a discipline other than nursing, please contact the College of Nursing Graduate Office at gradnurse@ucf.edu for additional options.

Students with a bachelor's degree in a discipline other than nursing will be required to take the following courses prior to taking required program courses. Consistent with graduate nursing program policies, courses must be completed with a grade of 'B' or better.

- NUR 3805 - Dimensions of Professional Practice 3 Credit Hours
- NUR 4637 - Public Health Nursing 3 Credit Hours
- NUR 3165 - Nursing Research 3 Credit Hours

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Advanced Practice Core Courses
14 Total Credits
- Complete the following:
  - NGR5003 - Advanced Health Assessment and Diagnostic Reasoning (2)
  - NGR5003L - Advanced Health Assessment and Diagnostic Reasoning Lab (1)
  - NGR5141 - Pathophysiological Bases for Advanced Nursing Practice (3)
  - NGR5638 - Health Promotion (3)
  - NGR6063L - Advanced Skills for the Management of Illness and Injuries (2)
  - NGR6172 - Pharmacology for Advanced Nursing Practice (3)

Specialty Courses: Family Nurse Practitioner
22 Total Credits
- Complete the following:
  - NGR6201 - Adult I Primary Care (3)
  - NGR6240L - Adult I Clinical for APNs (3)
  - NGR6263 - Gerontologic Care for APNs (3)
  - NGR6263L - Gerontologic Care Clinical for NPs (2)
  - NGR6305 - Pediatric Primary Care (3)
  - NGR6305L - Pediatric Primary Care Clinical (2)
  - NGR6334 - Women's Health for APNs (2)
  - NGR6342L - Women's Health for APNs Clinical (1)
  - NGR6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum (3)

DNP Core Courses
39 Total Credits
- Complete all of the following
  - The DNP courses serve to enhance the skill and science base of the graduate and strengthen the focus on research utilization. Safety and efficiency in health care systems is addressed and organizational and policy implications are emphasized within the context of care delivery. An emphasis is placed on evidence-based practice, state-of-the-art interventions and information fluency.
  - Complete the following:
    - NGR5800 - Theory for Advanced Practice Nursing (3)
    - NGR6801 - Research Methods (3)
    - NGR6874 - Nursing Environment Management (3)
    - NGR7065 - Advanced Clinical Management for Advanced Practice Nursing (3)
    - NGR7673 - Epidemiology Principles in Advanced Practice Nursing (3)
    - NGR7793 - Leadership and Economics in Advanced Practice Nursing (3)
    - NGR7820 - Innovative Technologies in Healthcare (3)
    - NGR7827 - Concepts, Measurement, and Data Management (3)
    - NGR7855C - Evidence-Based Practice Development for DNP (3)
    - NGR7892 - Healthcare Systems and Policy (3)
    - NGR7911C - Doctoral Project 1 (3)
    - NGR7912C - Doctoral Project 2 (3)
    - NGR7913 - Doctoral Project 3 (3)

DNP Project
0 Total Credits
- The DNP Project is related to advanced nursing practice and benefits a group, population or community rather than an individual patient. It addresses identified needs and builds on an evidence base. DNP projects may include but are not limited to: Translate research into practice and evaluate outcomes Quality improvement (care processes, continuity of care, patient outcomes) Implement and evaluate evidence-based practice guidelines Analyze policy: develop, implement, evaluate or revise the policy Design and use databases to retrieve information for decision making, planning, evaluation Conduct financial analyses to compare care models and potential cost savings, etc. Design and evaluate new models of care Design and evaluate health promotion and disease prevention programs Assess integration of technology in care The theme that links these forms of scholarly experiences is the use of evidence to improve either practice or patient outcomes. Additional examples of DNP projects can be found on the National Organization of Nurse Practitioner Faculty (NONPF) website under Practice Doctorate Resource Center.

Grand Total Credits: 75
Track Details

Progress to Degree

Students are required to maintain a 3.0 grade point average. Students who receive a grade of below "B" in any course will be reviewed by the DNP Admissions, Progression and Graduation Committee for continuation in the program. Grades of below B are not acceptable in the doctoral program in the College of Nursing. Students who do not maintain a 3.0 GPA will be on probation or dismissed from the program.

Graduation Requirements

- All course work completed with a minimum grade of "B"
- A satisfactory DNP Project
- Clinical performance evaluated at a satisfactory level
- A satisfactory public presentation of the DNP Project

Independent Learning

A DNP Project will be completed by all students in the DNP program. A scholarly project, derived from clinical practice, will be developed in depth with faculty supervision.

Financial Information

Graduate students may receive financial assistance through fellowships, assistants, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

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gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

College of Optics and Photonics

Applied Photonics Graduate Certificate

College

College of Optics and Photonics

Department

College of Optics and Photonics

Program Website

https://www.creol.ucf.edu/academics/graduate/

Program Contact Information

Lawrence Lipe
gradprog@creol.ucf.edu
Telephone: 407-823-6986 or 407-823-4726
CREOL Room 208
Is this program available 100% online?
Yes

UCF Online

Please note: Applied Photonics Graduate Certificate may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Applied Photonics Graduate Certificate is designed to provide working professionals with knowledge and training in applied photonics to enhance their career opportunities and meet their current responsibilities.

The certificate program compliments their technical backgrounds in science and engineering with the basic principles and applications of photonics engineering in fiber communication systems, lasers, medicine, and aerospace and defense photonics.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233

Degree Requirements

Required Courses
6 Total Credits

- Take the following:
  - OSE5414 - Fundamentals of Optoelectronic Devices (3)
  - OSE6111 - Optical Wave Propagation (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - OSE5525 - Laser Engineering (3)
  - OSE6421 - Integrated Photonics (3)
  - OSE6474 - Fundamentals Optical Fiber Communications (3)
  - OSE6536 - Semiconductor Lasers (3)

Grand Total Credits: 12

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Optical Imaging Systems Graduate Certificate

2022-2023 Graduate Catalog
College
College of Optics and Photonics

Department
College of Optics and Photonics

Program Website
https://www.creol.ucf.edu/academics/graduate/

Program Contact Information
Lawrence Lipe
Ashley Rivera Mercado
gradprog@creol.ucf.edu
Telephone: 407-823-6986 or 407-823-4726
CREOL Room 208

Is this program available 100% online?
Yes

UCF Online

Please note: Optical Imaging Systems Graduate Certificate may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Optical Imaging Systems Graduate Certificate is designed to provide working professionals with knowledge and training in optical imaging systems to enhance their career opportunities and meet their current responsibilities.

The certificate program compliments their technical backgrounds in science and engineering with the basic principles and applications of optical engineering in imaging, electro-optic systems, radiometry, and optical system design.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
6 Total Credits

- Complete the following:
  - OSE5115 - Interference and Diffraction (3)
  - OSE6211 - Imaging and Optical Systems (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - OSE5203 - Geometrical Optics (3)
  - OSE5525 - Laser Engineering (3)
  - OSE6242 - Infrared Systems (3)
  - OSE6265 - Optical Systems Design (3)

Grand Total Credits: 12

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Optics and Photonics MS

College
College of Optics and Photonics

Department
College of Optics and Photonics

Program Website
http://www.creol.ucf.edu/

Program Handbook Link
Optics MS

Program Contact Information
Lawrence Lipe
Ashley Rivera Mercado
gradprog@creol.ucf.edu
Telephone: 407-823-6986 or 407-823-4726
CREOL Room 208

Is this program available 100% online?
Yes

UCF Online

Please note: Optics and Photonics MS may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

The Master of Science in Optics and Photonics program is intended for students with a bachelor's degree in optics, electrical engineering, physics, or closely related fields. The program is interdisciplinary and combines optical science and engineering.

The College of Optics and Photonics offers an interdisciplinary graduate program in optical science and engineering leading to a Master of Science in Optics and Photonics. The college has grown rapidly and now has 55 faculty members and faculty with joint appointments, 41 research scientists and 148 graduate students with research activities covering all aspects of optics, photonics, and lasers. Research expenditures are over $10 million annually, with over 20 percent of the funding coming from industrial partners, illustrating the effectiveness of the commitment to partnerships that is a foundational value of the COP.

Research activities cover all aspects of optics, photonics, and lasers, and the Center for Research and Education in Optics and Lasers (CREOL), the Florida Photonics Center of Excellence (FPCE), and the Townes Laser Institute (TLI) are integral parts of the College. Current research areas include: linear and nonlinear guided-wave optics and devices, high speed photonic telecommunications, fiber optic fabrication, fiber optic communications, solid state laser development, nonlinear optics, laser-induced damage, quantum-well optoelectronics, quantum optics, photonic information processing, infrared systems, optical diagnostics, optical system design, image analysis, virtual reality, medical imaging, diffractive optics, optical crystal growth and characterization, high intensity lasers, X-ray optics, EUV sources, optical glasses, laser materials processing, free-electron lasers, and light matter interaction.

The MS program is intended for students with a bachelor's degree in optics, electrical engineering, physics, or closely related fields. The program's mission is to:

- Provide the highest-quality education in optical science and engineering
- Conduct scholarly, fundamental, and applied research
- Aid in the development of Florida's and the nation's technology-based industries

This degree has 3 tracks: International Track, Optics Track and Photonics Track. Please scroll to the bottom of this page for further details on these Tracks.

Program Prerequisites

A bachelor's degree in Optics, Electrical Engineering, Physics, or closely related fields.

Students with degrees in related fields may be required to take undergraduate articulation courses determined by the program director on a case-by-case basis.

College of Graduate Studies Contact Information

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Core Courses
9 Total Credits

- Complete all of the following
  - Take the following:
    - OSE5115 - Interference and Diffraction (3)
    - OSE6111 - Optical Wave Propagation (3)
    - OSE5525 - Laser Engineering (3)
  - OSE 6536 Semiconductor Lasers may be used as a substitute for OSE 5525 Laser Engineering

Elective Courses
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  A listing and description of courses offered by the College of Optics and Photonics is found in the "Courses" section. Other courses with significant optics content may be accepted towards the Optics (OSE) course work requirement, upon approval by the Associate Dean.

Comprehensive Examination
0 Total Credits

- An oral master's comprehensive examination, based on the core courses (OSE 5115 Interference, Diffraction and Coherence, OSE 6111 Optical Wave Propagation, and OSE 5525 Laser Engineering) must be passed as a graduation requirement for the MS degree in Optics and Photonics. Students will be required to take this exam within one semester after completing the core courses. The exam may be taken twice. After failing on the second attempt, the student will be required to re-take the courses covering the areas in which the examination committee determined the student to be deficient. The retaken courses must be passed with a minimum grade of B+ in order for the student to graduate. This Comprehensive Examination requirement may be satisfied by passing the Optics and Photonics PhD Qualifying exam.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  Thesis
    - Complete all of the following
      - Earn at least 6 credits from the following:
        - OSE6971 - Special Topics (1 - 99)
      - The thesis option requires at least 6 credit hours of thesis research. Independent study and directed research credit hours are not allowed toward the degree requirements. The student must prepare an approved program of study and form a thesis committee upon completion of nine credit hours. The MS thesis committee consists of three members, with at least two regular graduate faculty members from the College of Optics and Photonics. Students are required to write a thesis and pass an oral exam based primarily on the topics of the thesis and course work.
  Nonthesis
    - Complete all of the following
      - Earn at least 6 credits from the following types of courses:
        A listing and description of courses offered by the College of Optics and Photonics is found in the "Courses" section.
      - The nonthesis option requires an additional 6 credit hours of electives. Up to 3 credit hours of directed research (OSE 6918) or research report (OSE 6909) may be included as electives with prior approval of the College of Optics and Photonics although they are not counted toward the required 27 credit hours of formal coursework. Students must prepare an approved plan of study upon completion of nine credit hours. The research report is a written report on a subject based on research completed under the guidance of a faculty advisor who is a member of the graduate faculty in the College of Optics and Photonics. The subject matter will be determined by advisor and should be on some aspect of experimental, theoretical, or literature research in the area of optics and photonics. Normally the research and report should be completed within one semester. The written report should contain between 5,000 and 10,000 words and should roughly follow the format of a scientific journal paper. The report will be evaluated by a committee consisting of the advisor and two other faculty members. The student will be expected to present a brief oral presentation of the work to the committee, not less than 5 business days after submitting the written report to the committee and prior to the last day of classes in the semester. The report will be graded on a satisfactory/unsatisfactory basis by the advisor, based on the input from the committee.

Independent Learning
0 Total Credits

- Nonthesis students engage in directed research or research report. Thesis students enroll in 6 hours of thesis credits during the completion of their research study.

Grand Total Credits: 30
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Optics and Photonics MS - Optics and Photonics MS, International Track

Track Website
http://www.creol.ucf.edu/

Track Contact Information

Lawrence Lipe

Ashley Rivera Mercado

gradprog@creol.ucf.edu
Telephone: 407-823-6986 or 407-823-4726
CREOL Room 208

Online Availability
No

Track Description

NOTE: The Optics and Photonics MS program is not currently accepting applications for the International Track. For additional information, please contact 407-823-6986 or gradprog@creol.ucf.edu.

The International track in the Optics and Photonics MS program is intended for those students involved in an international exchange program with particular programs in other countries as approved by the university and the College of Optics and Photonics. The requirements for this track are the same as the general MS program.

Track Prerequisites

A bachelor's degree in Optics, Electrical Engineering, Physics, or closely related fields.

Students with degrees in related fields may be required to take undergraduate articulation courses determined by the program director on a case-by-case basis.
College of Graduate Studies Contact Information

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Institution Codes

GRE: 5233
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TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses

24 Total Credits

- Complete all of the following
  Core Courses
  - Complete all of the following
    - Take the following:
      - OSE5115 - Interference and Diffraction (3)
      - OSE6111 - Optical Wave Propagation (3)
      - OSE5525 - Laser Engineering (3)
    - The foundation courses are strongly recommended for all students unless they can demonstrate knowledge sufficient to waive the course in which case they will take an additional elective.

Research Methods/Laboratory

- Complete all of the following
  - Earn at least 6 credits from the following:
    - OSE6455C - Photonics Laboratory (3)
    - OSE6526C - Laser Engineering Laboratory (3)
    - OSE6615L - Optoelectronic Device Fabrication Laboratory (3)
  - At least 6 credit hours of approved Optics and related science/engineering research methods/laboratory courses are required from the list below. At least one must be in Optics (OSE). One required laboratory may be waived if the student can demonstrate an equivalent hands-on proficiency in that laboratory specialization. These research methods/laboratory courses count toward the formal graduate course work requirement. Other graduate-related science and engineering methodology labs may be taken with approval by the College of Optics and Photonics.

Elective Courses

- Earn at least 9 credits from the following types of courses:
  - All students are required to take a minimum of 9 credit hours of electives. Other courses with significant optics content may be accepted toward the Optics (OSE) course work requirement, upon approval by the Associate Dean. A listing and description of courses offered by the College of Optics and Photonics is found in the "Courses" section

Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following
  Thesis
  - Complete all of the following
    - Earn at least 6 credits from the following:
      - OSE6971 - Special Topics (1 - 99)
    - The thesis option requires at least 6 credit hours of thesis research. Independent study and directed research credit hours are not allowed toward the degree requirements. The student must prepare an approved program of study and form a thesis committee upon completion of nine credit hours. The MS thesis committee consists of three members, with at least two regular graduate faculty members from the College of Optics and Photonics. Students are required to write a thesis and pass an oral exam based primarily on the topics of the thesis and course work.

Nonthesis

- Earn at least 6 credits from the following types of courses:
  - The nonthesis option requires an additional 6 credit hours of electives. Up to 3 credit hours of directed research (OSE 6918) or research report (OSE 6909) may be included with prior approval of the College of Optics and Photonics although they are not counted toward the formal course work requirement. Students must prepare an approved program of study upon completion of nine credit hours. Students are required to pass a final oral comprehensive examination based primarily on the subject matter of the courses taken. The purpose of the exam is for the student to demonstrate his or her basic knowledge of the fundamentals of optics and photonics. The nonthesis master's requires a minimum of two methods/laboratory courses as described above. These laboratory courses involve a substantial amount of independent learning on the part of the student. For example, laboratory reports must include sections on the theoretical and historical background behind the phenomena explored in laboratory experiments, and students are expected to obtain this background information on their own by researching the scientific literature. One required Optics laboratory may be waived if the student can demonstrate an equivalent hands-on proficiency in that laboratory specialization. These methodology/laboratory courses count toward the formal course work requirement.

Grand Total Credits: 30
Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
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http://finaid.ucf.edu

Fellowship Information
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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Optics and Photonics MS - Optics and Photonics MS, Optics Track

Track Website
http://www.creol.ucf.edu/

Track Handbook
Optics and Photonics MS, Optics Track

Track Contact Information
Lawrence Lipe
gradprog@creol.ucf.edu
Telephone: 407-823-6986
CREOL Room 208

Online Availability
Yes

Track Description
The Optics Track in the Master of Science in Optics and Photonics program is intended for students with a bachelor's degree in optics, electrical engineering, physics, or closely related fields. The program is interdisciplinary and combines optical science and engineering.

Track Prerequisites
A bachelor's degree in Optics, Electrical Engineering, Physics, or closely related fields.

Students with degrees in related fields may be required to take undergraduate articulation courses determined by the program director on a case-by-case basis.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Core Courses
18 Total Credits

- Complete all of the following
  - Take the following:
    - OSE5115 - Interference and Diffraction (3)
    - OSE5203 - Geometrical Optics (3)
    - OSE6111 - Optical Wave Propagation (3)
    - OSE6211 - Imaging and Optical Systems (3)
    - OSE6265 - Optical Systems Design (3)
    - OSE5525 - Laser Engineering (3)
  - OSE 6536 Semiconductor Lasers may be used as a substitute for OSE 5525 Laser Engineering

Elective Courses
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  All students are required to take a minimum of 6 credit hours of electives. Other courses with significant optics content may be accepted toward the Optics (OSE) course work requirement, upon approval by the Associate Dean. A listing and description of courses offered by the College of Optics and Photonics is found in the "Courses" section.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis
  - Nonthesis

  Complete all of the following
  - Earn at least 6 credits from the following:
    - OSE6971 - Special Topics (1 - 99)
  - The thesis option requires at least 6 credit hours of thesis research. Independent study and directed research credit hours are not allowed toward the degree requirements. The student must prepare an approved plan of study and form a thesis committee upon completion of 9 credit hours. The MS thesis committee consists of three members, with at least two regular graduate faculty members from the College of Optics and Photonics. Students are required to write a thesis and pass an oral exam based primarily on the topics of the thesis and course work.

  Nonthesis
  - Earn at least 6 credits from the following types of courses:
    The nonthesis option requires an additional 6 credit hours of courses or electives. Up to 3 credit hours of Research Report (OSE 6909) may be included. For students in a nonthesis option, a Research Report may be completed in the last term of study. The Optics or Photonics master's tracks require a research report in the nonthesis option, but this is optional in the general MS degree. The research report is a written report on a subject based on research completed under the guidance of a faculty adviser who is a member of the graduate faculty in the College of Optics and Photonics. The subject matter will be determined by the adviser and should be on some aspect of experimental, theoretical, or literature research in the area of optics and photonics. Normally, the research and report should be completed within one semester. The written report should contain between 5,000 and 10,000 words and should roughly follow the format of a scientific journal paper. The report will be evaluated by a committee consisting of the adviser and two other faculty members. The student will be expected to present a brief oral presentation of the work to the committee, not less than 5 business days after submitting the written report to the committee and prior to the last day of classes in the semester. The report will be graded on a satisfactory/unsatisfactory basis by the adviser, based on the input from the committee. Students must select an adviser from the College of Optics and Photonics faculty to serve on their Research Report. Students must prepare an approved plan of study upon completion of 9 credit hours. Students are required to pass a final oral comprehensive examination based primarily on the subject matter of the courses taken. The purpose of the exam is for the student to demonstrate his or her basic knowledge of the fundamentals of optics and photonics.

Comprehensive Examination
0 Total Credits

- An oral master's comprehensive examination, based on the core courses (OSE 5115 Interference, Diffraction and Coherence, OSE 6111 Optical Wave Propagation, and OSE 5525 Laser Engineering or OSE 6536 Semiconductor Lasers may be used as a substitute for OSE 5525 Laser Engineering) must be passed as a graduation requirement for the MS degree in Optics and Photonics. Students will be required to take this exam within one semester after completing the core courses. The exam may be taken twice. After failing on the second attempt, the student will be required to re-take the courses covering the areas in which the examination committee determined the student to be deficient. The retaken courses must be passed with a minimum grade of B+ in order for the student to graduate. This Comprehensive Examination requirement may be satisfied by passing the Optics and Photonics Ph.D. Qualifying exam.

Grand Total Credits: 30
Track Details

Up to 9 credit hours of appropriate graduate courses from accredited universities recognized by UCF may be transferred with approval from the College of Optics and Photonics. Only courses with grades of "B" or better can be transferred.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
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Fellowship Information

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Optics and Photonics MS - Optics and Photonics MS, Photonics Track

Track Website
http://www.creol.ucf.edu/

Track Handbook
Optics and Photonics MS, Photonics Track

Track Contact Information

Lawrence Lipe
gradprog@creol.ucf.edu
Telephone: 407-823-6986
CREOL Room 208

Online Availability

Yes

Track Description

The Photonics Track in the Optics and Photonics MS program is intended for students with a bachelor's degree in optics, electrical engineering, physics, or closely related fields. The program is interdisciplinary and combines optical science and engineering.

Track Prerequisites

A bachelor's degree in Optics, Electrical Engineering, Physics, or closely related fields.

Students with degrees in related fields may be required to take undergraduate articulation courses determined by the program director on a case-by-case basis.
College of Graduate Studies Contact Information

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Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Core Courses**

18 Total Credits

- Complete all of the following
  - Take the following:
    - OSE5414 - Fundamentals of Optoelectronic Devices (3)
    - OSE5115 - Interference and Diffraction (3)
    - OSE6111 - Optical Wave Propagation (3)
    - OSE5525 - Laser Engineering (3)
    - OSE6421 - Integrated Photonics (3)
    - OSE6474 - Fundamentals Optical Fiber Communications (3)
    - OSE 6536 Semiconductor Lasers maybe used as a substitute for OSE 5525 Laser Engineering

**Elective Courses**

6 Total Credits

- Earn at least 6 credits from the following types of courses:
  All students are required to take a minimum of 6 credit hours of electives. Other courses with significant optics content may be accepted toward the Optics (OSE) coursework requirement, upon approval by the Associate Dean. A listing and description of courses offered by the College of Optics and Photonics is found in the "Courses" section.

**Thesis/Nonthesis Option**

6 Total Credits

- Complete 1 of the following
  - Thesis
    - Complete all of the following
      - Earn at least 6 credits from the following:
        - OSE6971 - Special Topics (1 - 99)
      - The thesis option requires at least 6 credit hours of thesis research. Independent study and directed research credit hours are not allowed toward the degree requirements. The student must prepare an approved plan of study and form a thesis committee upon completion of 9 credit hours. The MS thesis committee consists of three members, with at least two regular graduate faculty members from the College of Optics and Photonics. Students are required to write a thesis and pass an oral exam based primarily on the topics of the thesis and course work.
    - Nonthesis
      - Earn at least 6 credits from the following types of courses:
        - The nonthesis option requires an additional 6 credit hours of courses or electives. Up to 3 credit hours of Research Report (OSE 6909) may be included. For students in a non-thesis option, a Research Report may be completed in the last term of study. The Optics or Photonics Masters tracks require a research report in the non-thesis option, but this is optional in the general MS degree. The research report is a written report on a subject based on research completed under the guidance of a faculty advisor who is a member of the graduate faculty in the College of Optics and Photonics. The subject matter will be determined by advisor and should be on some aspect of experimental, theoretical, or literature research in the area of optics and photonics. Normally the research and report should be completed within one semester. The written report should contain between 5,000 and 10,000 words and should roughly follow the format of a scientific journal paper. The report will be evaluated by a committee consisting of the advisor and two other faculty members. The student will be expected to present a brief oral presentation of the work to the committee, not less than 5 business days after submitting the written report to the committee and prior to the last day of classes in the semester. The report will be graded on a satisfactory/unsatisfactory basis by the advisor, based on the input from the committee. Students must select an adviser from the College of Optics and Photonics Faculty to serve on their Research Report. Students must prepare an approved plan of study upon completion of 9 credit hours. Students are required to pass a final oral comprehensive examination based primarily on the subject matter of the courses taken. The purpose of the exam is for the student to demonstrate his or her basic knowledge of the fundamentals of optics and photonics.

**Comprehensive Examination**

0 Total Credits

- An oral master's comprehensive examination, based on the core courses (OSE 5115 Interference, Diffraction and Coherence, OSE 6111 Optical Wave Propagation, and OSE 5525 Laser Engineering or OSE 6536 Semiconductor Lasers may be used as a substitute for OSE 5525 Laser Engineering) must be passed as a graduation requirement for the MS degree in Optics and Photonics. Students will be required to take this exam within one semester after completing the core courses. The exam may be taken twice. After failing on the second attempt, the student will be required to re-take the courses covering the areas in which the examination committee determined the student to be deficient. The retaken courses must be passed with a minimum grade of B+ in order for the student to graduate. This Comprehensive Examination requirement may be satisfied by passing the Optics and Photonics Ph.D. Qualifying exam.

**Grand Total Credits:** 30
Track Details

Up to 9 credit hours of appropriate graduate courses from accredited universities recognized by UCF may be transferred with approval from the College of Optics and Photonics. Only courses with grades of "B" or better can be transferred.

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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Optics and Photonics PhD

College
College of Optics and Photonics

Department
College of Optics and Photonics

Program Website
http://www.creol.ucf.edu/

Program Handbook Link
Optics and Photonics PhD

Program Contact Information

Lawrence Lipe
Ashley Rivera Mercado

gradprog@creol.ucf.edu
Telephone: 407-823-6986 or 407-823-4726
CREOL Room 208

Is this program available 100% online?
No
Program Description

The Optics and Photonics PhD program provides the highest-quality education in optical science and engineering, allowing students to conduct scholarly, fundamental, and applied research, while aiding in the development of Florida's and the nation's technology-based industries.

Research activities cover all aspects of optics, photonics, and lasers, and the Center for Research and Education in Optics and Lasers (CREOL), the Florida Photonics Center of Excellence (FPCE), and the Townes Laser Institute (TLI) are integral parts of the College of Optics and Photonics. Current research areas include: linear and nonlinear guided-wave optics and devices, high speed photonic telecommunications, fiber optic fabrication, fiber optic communications, solid state laser development, nonlinear optics, laser-induced damage, quantum-well optoelectronics, quantum optics, photonic information processing, infrared systems, optical diagnostics, optical system design, image analysis, virtual reality, medical imaging, diffractive optics, optical crystal growth and characterization, high intensity lasers, x-ray optics, EUV sources, optical glasses, laser materials processing, free-electron lasers, and light matter interaction.

The College of Optics and Photonics (COP) was the first program to be offered the distinction of a college devoted to Optics in the United States. The College of Optics and Photonics has grown rapidly and now has 55 faculty members and faculty with joint appointments, 41 research scientists and 148 graduate students with research activities covering all aspects of optics, photonics, and lasers. Research expenditures are over $10 million annually, with more than 20 percent of the funding coming from industrial partners, illustrating the effectiveness of the commitment to partnerships that is a foundational value of the COP.

Program Prerequisites

Bachelor's or master's degree in Optics, Electrical Engineering, Physics or closely related discipline.

Students with degrees in related fields may be required to take undergraduate articulation courses determined by the program director on a case-by-case basis.

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Graduate Admissions

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
21 Total Credits

- Complete all of the following
  - Core Courses
    - Complete all of the following
      - Complete the following:
        - OSE6111 - Optical Wave Propagation (3)
        - OSE5115 - Interference and Diffraction (3)
        - OSE5312 - Light Matter Interaction (3)
        - OSE6211 - Imaging and Optical Systems (3)
        - OSE6474 - Fundamentals Optical Fiber Communications (3)
        - OSE5525 - Laser Engineering (3)
      - OSE 6536 Semiconductor Lasers may be used as a substitute for OSE 5525 Laser Engineering Research Methods/ Laboratory Courses
        - Complete all of the following
          - Complete at least 1 of the following:
            - Course Not Found
            - OSE6455C - Photonics Laboratory (3)
            - OSE6526C - Laser Engineering Laboratory (3)
            - OSE6615L - Optoelectronic Device Fabrication Laboratory (3)
      - Other graduate science and engineering labs may be taken with college approval.

Elective Courses
36 Total Credits
Complete all of the following

**Restricted Electives**

- Earn at least 9 credits from the following types of courses:
  Students will need to complete an additional 9 credit hours to meet the 30 hours of formal Optics (OSE) course work required. An additional three hours of optics coursework will be required if the student waived out of the research methods/laboratory courses above, or if the laboratory courses taken is not an OSE prefix. Other courses with significant optics content may be accepted toward the Optics (OSE) coursework requirement, upon approval by the Associate Dean. A listing and description of courses offered by the College of Optics and Photonics is found in the "Courses" section.

**Unrestricted Electives**

- Earn at least 27 credits from the following types of courses:
  A combination of formal course work and research hours comprise the remaining unrestricted hours. At least 9 of these hours must be formal course work, which may be graduate optics, science or engineering courses. In addition to the 9 hours, 18 credits may be regular formal course work, doctoral research hours, independent study, or doctoral dissertation hours. The independent study hours are limited to a maximum of 3 credit hours. Any courses outside of the graduate optics, science or engineering disciplines must be approved by the college associate dean.

**Dissertation**
15 Total Credits

- Earn at least 15 credits from the following:
  - OSE7980 - Dissertation (1 - 99)

**Qualifying Examination**
0 Total Credits

- Before students are eligible to take the candidacy examination, they must first pass the qualifying examination. The purpose of the exam is for the student to demonstrate mastery of the fundamentals of optics and photonics. The qualifying exam is an oral exam that focuses on the fundamental concepts and topics covered in the following four core courses: • OSE 5115 Interference, Diffraction and Coherence • OSE 5312 Light Matter Interaction • OSE 6111 Optical Wave Propagation • OSE 6211 Imaging and Optical Systems The exam is waived for students earning an average GPA of 3.5 or higher in the four core courses. The exam is held at the end of each semester. Students are expected to take the exam at the next opportunity after all the core courses have been taken and before completing 24 credit hours in the program. Students must have a minimum GPA of 3.0 in the four core courses to take the exam. The exam is administered by the doctoral qualifying examination committee, which consists of several faculty members representing the appropriate disciplines, appointed by the graduate program director or designee. The examination committee may recommend pass, not pass or conditional pass with required remedial course work. Students have two attempts to pass the exam. Those students failing on the first attempt must retake the exam at the next attempt. Failure to take the exam at the required time will be regarded as equivalent to a failure of the exam. Students who do not pass the qualifying examination in two attempts will not continue in the program.

**Candidacy Examination**
0 Total Credits

- Students are required to successfully complete the candidacy examination before admission to full doctoral status. The purpose of the candidacy exam is for the student to demonstrate his or her readiness for the PhD program through preliminary research work in the chosen field of study. The candidacy exam is comprised of written and oral portions. The exam is administered by the members of the student's dissertation advisory committee who are full faculty members of the College of Optics and Photonics. External committee members of the dissertation advisory committee are not appointed until after the student has passed the candidacy exam. The exam is normally taken near the completion of required course work. Students who do not pass the candidacy exam before registering for doctoral dissertation hours (OSE 7980).

**Admission to Candidacy**
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: Completion of most course work, except for dissertation hours. Successful completion of the candidacy examination. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study.

**Dissertation Proposal and Defense**
0 Total Credits

- Approximately one year after passing the general candidacy examination, and after the student has begun research, the student will write a dissertation proposal and present it to their dissertation advisory committee for its approval. The proposal must include the research performed to date and the research planned to complete the dissertation. The committee, which consists of three graduate faculty members from the College of Optics and Photonics and one faculty member from outside the college, must be approved by the director or designee and will meet annually to review the student's progress. The dissertation advisory committee also administers the dissertation oral defense examination.

**Independent Learning**
0 Total Credits

- The dissertation satisfies the independent learning experience.

Grand Total Credits: 72
Financial Information

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https://funding.graduate.ucf.edu

College of Sciences

Anthropology MA

College
College of Sciences

Department
Department of Anthropology

Program Website
http://sciences.ucf.edu/anthropology/

Program Handbook Link
Anthropology MA

Program Contact Information

Beatriz Reyes-Foster PhD
Associate Professor
beatriz.reyes-foster@ucf.edu
Telephone: 407-823-2206
HPH RM 309

Is this program available 100% online?
No
Program Description

The Department of Anthropology offers a graduate program leading to the Master of Arts degree in Anthropology. The course work in this program is conceptually three-field, with faculty strengths in archaeology, cultural anthropology, and biological anthropology. The department follows an apprenticeship model, and thus the MA student works directly under the supervision of their graduate adviser. Students are informed of who their graduate adviser is when they are admitted to the program. Visit the Faculty Page for the UCF Department of Anthropology for more information about our faculty. Students in the program are prepared to enter doctoral programs or begin professional careers following the MA degree.

Degree-seeking students in the Anthropology MA program may elect to follow either a thesis or non-thesis plan of study. Each plan of study requires a minimum of 30 credit hours, 15 of which must be at the 6000-level. The thesis option is designed for students who plan to enter doctoral programs, while the non-thesis option is more appropriate for students entering or continuing professional careers following the MA degree.

The anthropology faculty conduct research in many geographical areas including Bolivia, Colombia, Egypt, Guatemala, Mexico, Peru, the Philippines, Turkey, the United States and various other locations in the Caribbean and Europe. The department also has multiple research facilities on the Orlando campus that including the following: an archaeology lab specializing in lithic and ceramic analysis, a forensic anthropology lab, a paleoethnobotany archaeology lab, a bioarchaeological sciences lab, and an interdisciplinary geospatial science lab. Students may have the opportunity to conduct research projects in the various countries or research facilities as part of their program.

Degree-seeking students in the Anthropology MA program may elect to follow either a thesis or a non-thesis program of study. Both thesis and non-thesis options require 30 hours of course work, of which half must be at the 6000 level.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor’s Degree

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gradadmissions@ucf.edu
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Graduate Admissions

Mailing Address

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Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses

12 Total Credits

- Complete all of the following
  - Complete the following:
    - ANG5094 - Writing in Anthropology (3)
    - ANG6110 - Archaeological Theory and Method (3)
    - ANG6587 - Seminar in Biological Anthropology (3)
    - ANG6930 - Seminar in Cultural Anthropology (3)
  - These courses provide an in-depth understanding of the epistemological foundations of the discipline. Students are introduced to the theory and practice of anthropology at a level of synthesis that will prepare them for future doctoral study should they wish to pursue it. These courses also establish the foundations of understanding that will prepare students for nonacademic careers that employ anthropological perspectives and knowledge.

Elective Courses

12 Total Credits

- Complete all of the following
  - A minimum of 12 additional credit hours must be selected from the list below in conjunction with the faculty adviser and/or the advisory committee members and approved by the program graduate coordinator. Additional electives may be selected as they become available or as they are added to the course curriculum. With prior approval, the student may take one elective (3 credit hours) in another department. Under special circumstances, students may enroll in a graduate-level Directed Independent Study course or a Directed Independent Research course to fulfill their non-required elective course requirements. No more than 6 hours of graduate-level courses in Directed Independent Study or Directed Independent Research may be included in a student’s program of study.
  - Earn at least 12 credits from the following:
Course Not Found
Course Not Found
Course Not Found
ANG5166 - Problems in Maya Studies (3)
ANG5228 - Maya Iconography (3)
ANG5486 - Quantitative Research in Anthropology (3)
ANG5742 - Problems in Forensic Anthropology (3)
ANG5525C - Human Osteology (4)
ANG6520C - Advanced Human Osteology (3)
ANG6740C - Advanced Forensic Anthropology (3)
Course Not Found
Course Not Found
Course Not Found
ANG5531 - Nutritional Anthropology (3)
ANG5738 - Advanced Medical Anthropology (3)
ANG5822 - Maya Field Research (3)
ANG5852 - GIS Methods in Anthropology (3)
ANG5853 - Advanced GIS Methods in Anthropology (3)
ANG6168 - The Ancient Maya (3)
ANG6821 - Forensic Archeology Field Methods (3)
ANG6181C - GIS Applications in Anthropology (3)
ANG6324 - Contemporary Maya (3)
ANG6701 - Public and Applied Anthropology (3)
ANG6801 - Ethnographic Research Methods (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis
    - Earn at least 6 credits from the following types of courses:
      - In the thesis option, the student must write and defend an original research thesis. The thesis will be written under the guidance of the adviser and a Thesis Advisory Committee made up of at least three members, including the adviser who will serve as chair. The committee needs to be established prior to defending the thesis proposal and enrolling in thesis hours. When a thesis topic has been selected, students, in conjunction with their faculty adviser, will develop a thesis proposal. A proposal meeting will be scheduled with the student and advisory committee prior to enrolling in thesis hours. Students who elect to write a thesis should become familiar with the university's requirements and deadlines for organizing and submitting the thesis. The completion of the thesis must be followed by an oral defense before the Thesis Advisory Committee. A successful format review, oral defense, and electronic submission of the thesis to the College of Graduate Studies for review completes the program requirements. Students are required to follow all procedures and timetables specified by the College of Graduate Studies.
  - Nonthesis
    - Earn at least 6 credits from the following types of courses:
      - Students selecting the nonthesis option take an additional 6 hours of elective course work for a total of 18 credit hours of electives.

Comprehensive Examination
0 Total Credits

- At the conclusion of course work, nonthesis students will be given a comprehensive examination. The comprehensive examination will be administered by an Examination Committee comprised of the faculty adviser and to additional faculty members.

Independent Learning
0 Total Credits

- Students who choose the thesis option will gain independent learning experiences through their thesis research where they are expected to design and conduct their own research which culminates with the writing and defense of their thesis. Students will also gain this experience through their core course requirements as each course contains an independent research assignment. Students in the nonthesis option will gain independent learning experiences through all of their core courses, all of which contain an independent research component.

Grand Total Credits: 30

2022-2023 Graduate Catalog
Financial Information

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Big Data Analytics PhD

College
College of Sciences

Department
Department of Statistics

Program Website
http://sciences.ucf.edu/statistics/graduate

Program Handbook Link
Big Data Analytics PhD

Program Contact Information
Edgard Maboudou, PhD
Professor
Edgard.Maboudou@ucf.edu
Telephone: 407-823-2695
TC2 201

Is this program available 100% online?
No

Program Description

Big Data Analytics will train researchers with a statistics background to analyze massive, structured or unstructured data to uncover hidden patterns, unknown correlations and other useful information that can be used to make better decisions.

The program will provide a strong foundation in the major methodologies associated with Big Data Analytics such as predictive analytics, data mining, text analytics and statistical analysis with an interdisciplinary component that combines the strength of statistics and computer science. It will focus on statistical computing, statistical data mining and their application to business, social, and health problems complemented with ongoing industrial collaborations. The scope of this program is specialized to prepare data scientists and data analysts who will work with very large data sets using both conventional and newly developed statistical methods.

The Ph.D. in Big Data Analytics requires 72 hours beyond an earned Bachelor's degree. Required coursework includes 42 credit hours of courses, 15 credit hours of restricted elective coursework, and 15 credit hours of dissertation research.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree
Program Prerequisites

Students must have the following background and courses completed before applying to the Big Data Analytics PhD program. These courses are: MAC 2311C: Calculus with Analytic Geometry I, MAC 2312: Calculus with Analytic Geometry II, MAC 2313: Calculus with Analytic Geometry III, MAS 3105: Matrix and Linear Algebra or MAS 3106: Linear Algebra, COP 3503C - Computer Science II. These required courses are basic undergraduate courses from the Math and Computer Science departments. Students without background in COP 3503C can still apply for admission but they will need to take that course sometime after admission in the PhD program. COP 3503C serves as pre-requisite for COP 5711, which is required for the qualifying exam.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
42 Total Credits

- Complete the following:
  - STA5104 - Advanced Computer Processing of Statistical Data (3)
  - STA5703 - Data Mining Methodology I (3)
  - STA6106 - Statistical Computing I (3)
  - STA6236 - Regression Analysis (3)
  - STA6238 - Logistic Regression (3)
  - STA6326 - Theoretical Statistics I (3)
  - STA6327 - Theoretical Statistics II (3)
  - STA6329 - Statistical Applications of Matrix Algebra (3)
  - STA6704 - Data Mining Methodology II (3)
  - STA7722 - Statistical Learning Theory (3)
  - STA7734 - Statistical Asymptotic Theory in Big Data (3)
  - STA6714 - Data Preparation (3)
  - CNT5805 - Network Science (3)
  - COP5711 - Parallel and Distributed Database Systems (3)

Restricted Electives (at least 9 credit hours must be STA coursework)
15 Total Credits

- Complete all of the following
  - Other courses may be included in a Plan of Study with departmental approval. All Ph.D. students must have an approved Plan of Study (POS) developed by the student and advisor that lists the specific courses to be taken as part of the degree. Students must maintain a minimum GPA of 3.0 in their POS, as well as a "B" (3.0) in all courses completed toward the degree and since admission to the program.
  - Earn at least 15 credits from the following:
    - STA6107 - Statistical Computing II (3)
    - STA6226 - Sampling Theory and Applications (3)
    - STA6237 - Nonlinear Regression (3)
    - STA6246 - Linear Models (3)
    - STA6346 - Advanced Statistical Inference I (3)
    - STA6347 - Advanced Statistical Inference II (3)
    - STA6507 - Nonparametric Statistics (3)
    - STA6662 - Statistical Methods for Industrial Practice (3)
    - STA6705 - Data Mining Methodology III (3)
    - STA6707 - Multivariate Statistical Methods (3)
    - STA6709 - Spatial Statistics (3)
    - STA6857 - Applied Time Series Analysis (3)
    - STA7239 - Dimension Reduction in Regression (3)
    - STA7719 - Survival Analysis (3)
    - STA7935 - Current Topics in Big Data Analytics (3)
Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  STA 7980 - Dissertation Research

Examinations
0 Total Credits

- After passing candidacy, students will enroll into dissertation hours (STA7980) with their dissertation advisor. The dissertation can be either research- or project-based depending on the area of study, committee, and with the approval of the dissertation advisor.

Qualifying Examination
0 Total Credits

- The qualifying examination is a written examination that will be administered by the doctoral exam committee at the start of the fall term (end of the summer) once a year. The courses required to prepare for the examination are STA 5703, STA 6704, CNT 5805, STA 6326, STA 6327 and COP 5711. Students must obtain permission from the Graduate Program Coordinator to take the examination. Students normally take this exam just before the start of their third year and are expected to have completed the exam by the start of their fourth year. To be eligible to take the Ph.D. qualifying examination, the student must have a minimum grade point average of 3.0 (out of 4.0) in all the coursework for the Ph.D. The exam may be taken twice. If a student does not pass the qualifying exam after the second try, he/she will be dismissed from the program.

Candidacy Examination
0 Total Credits

- The candidacy exam is administered by the student's dissertation advisory committee and will be tailored to the student's individual program to propose either a research- or project-based dissertation. The candidacy exam involves a dissertation proposal presented in an open forum, followed by an oral defense conducted by the student's advisory committee. This committee will give a Pass/No Pass grade. In addition to the dissertation proposal, the advisory committee may incorporate other requirements for the exam. The student can attempt candidacy any time after passing the qualifying examination, after the student has begun dissertation research (STA7919, if necessary), but prior to the end of the second year following the qualifying examination. The candidacy examination can be taken no more than two times. If a student does not pass the candidacy exam after the second try, he/she will be removed from the program.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours. Completion of all coursework, except for dissertation hours Successful completion of the qualifying examination Successful completion of the candidacy examination including a written proposal and oral defense The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars Submittal of an approved program of study

Dissertation
0 Total Credits

- After passing the qualifying exam, the student must select a dissertation adviser. In consultation with the dissertation adviser, the student should form a dissertation advisory committee. The dissertation adviser will be the chair of the student's dissertation advisory committee. In consultation with the dissertation advisor and with the approval of the chair of the department, each student must secure qualified members of their dissertation committee. This committee will consist of at least four faculty members chosen by the candidate, three of whom must be from the department and one from outside the department or UCF. Graduate faculty members must form the majority of any given committee. A dissertation committee must
be formed prior to enrollment in dissertation hours. The dissertation serves as the culmination of the coursework that comprises this degree. It must make a significant original theoretical, intellectual, practical, creative or research contribution to the student's area within the discipline. The dissertation can be either research- or project-based depending on the area of study, committee, and with the approval of the dissertation advisor. The dissertation will be completed through a minimum of 15 hours of dissertation research credit.

**Masters Along the Way**

0 Total Credits

- PhD Students can obtain their Master's degree in Statistics & Data Science - Data Science Track along the way to their PhD degree. To satisfy the requirements for the MS degree, the student must complete the requirement for the MS degree.

**Independent Learning**

0 Total Credits

- As will all graduate programs, independent learning is an important component of the Big Data Analytics doctoral program. Students will demonstrate independent learning through research seminars and projects and the dissertation.

**Grand Total Credits: 72**

**Financial Information**

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**UCF Student Financial Assistance**

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finaid@ucf.edu
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

Telephone: 407-823-0127
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https://graduate.ucf.edu/funding/

**Big Data Analytics PhD - Big Data Analytics PhD, Statistics Track**

**Track Website**

http://sciences.ucf.edu/statistics/graduate

**Track Handbook**


**Track Contact Information**

Edgard Maboudou, PhD
Professor
Edgard.Maboudou@ucf.edu
Telephone: 407-823-2695
TC2 201

**Online Availability**

No
Track Description

Big Data Analytics, Statistics track, will train researchers with a strong statistics background to analyze massive, structured or unstructured data to uncover hidden patterns, unknown correlations and other useful information that can be used to make better decisions.

The track will provide a strong foundation in statistical theory and the major methodologies associated with Big Data Analytics such as predictive analytics, data mining, text analytics and statistical analysis with an interdisciplinary component that combines the strength of statistics and computer science. It will focus on statistical theory in addition to statistical computing, statistical data mining and their application to business, social, and health problems complemented with ongoing industrial collaborations.

The Ph.D. in Big Data Analytics, Statistics track, requires 72 hours beyond an earned Bachelor's degree. Required coursework includes 42 credit hours of required courses, 15 credit hours of restricted elective coursework, and 15 credit hours of dissertation research.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

Students must have the following background and courses completed before applying to the Big Data Analytics PhD program. These courses are: MAC 2311C: Calculus with Analytic Geometry I, MAC 2312: Calculus with Analytic Geometry II, MAC 2313: Calculus with Analytic Geometry III, MAS 3105: Matrix and Linear Algebra or MAS 3106: Linear Algebra, COP 3503C - Computer Science II. These pre-required courses are basic undergraduate courses from the Math and Computer Science departments. Students without background in COP 3503C can still apply for admission but they will need to take that course sometime after admission in the PhD program. COP 3503C serves as pre-requisite for COP 5711, which is required for the qualifying exam.

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Institution Codes

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GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses

42 Total Credits

- Take the following:
  - STA6106 - Statistical Computing I (3)
  - STA6107 - Statistical Computing II (3)
  - STA6224 - Bayesian Survey Methods (3)
  - STA6707 - Multivariate Statistical Methods (3)
  - STA5205 - Experimental Design (3)
  - STA7734 - Statistical Asymptotic Theory in Big Data (3)
  - STA6329 - Statistical Applications of Matrix Algebra (3)
  - STA5825 - Stochastic Processes and Applied Probability Theory (3)
  - STA7719 - Survival Analysis (3)
  - STA6857 - Applied Time Series Analysis (3)
  - STA6236 - Regression Analysis (3)
  - STA6246 - Linear Models (3)
  - STA6326 - Theoretical Statistics I (3)
  - STA6327 - Theoretical Statistics II (3)

Elective Courses

15 Total Credits

- Take at least 5 of the following:
  - STA7348 - Bayesian Modeling and Computation (3)
  - STA6662 - Statistical Methods for Industrial Practice (3)
  - STA6226 - Sampling Theory and Applications (3)
  - STA6237 - Nonlinear Regression (3)
  - MAP6465 - Wavelets and Their Applications (3)
  - STA7722 - Statistical Learning Theory (3)
  - STA5703 - Data Mining Methodology I (3)
  - STA6704 - Data Mining Methodology II (3)
  - STA6326 - Theoretical Statistics I (3)
  - STA6327 - Theoretical Statistics II (3)
  - STA6507 - Nonparametric Statistics (3)
  - STA6226 - Sampling Theory and Applications (3)
  - STA7239 - Dimension Reduction in Regression (3)
  - STA7348 - Bayesian Modeling and Computation (3)
  - STA5104 - Advanced Computer Processing of Statistical Data (3)
  - STA6709 - Spatial Statistics (3)
  - STA6238 - Logistic Regression (3)
  - STA6714 - Data Preparation (3)
  - MAA6238 - Measure and Probability I (3)
  - Course Not Found
  - STA6705 - Data Mining Methodology III (3)
  - STA6346 - Advanced Statistical Inference I (3)
  - STA6347 - Advanced Statistical Inference II (3)
  - MAS5145 - Advanced Linear Algebra and Matrix Theory (3)
  - MAP6207 - Optimization Theory (3)
  - MAA7239 - Asymptotic Methods in Mathematical Statistics (3)

Dissertation

15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - STA 7980 - Dissertation Research

Grand Total Credits: 72

Track Details

All Ph.D. students must have an approved Plan of Study (POS) developed by the student and advisor that lists the specific courses to be taken as part of the degree. Students must maintain a minimum GPA of 3.0 in their POS, as well as a "B" (3.0) in all courses completed toward the degree and since admission to the program.

2022-2023 Graduate Catalog
Financial Information

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Fellowship Information

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gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Biology MS

College
College of Sciences

Department
Department of Biology

Program Website
https://sciences.ucf.edu/biology/graduate/

Program Handbook Link
Biology MS

Program Contact Information

Kate Mansfield PhD
Associate Professor
Graduate Program Director
BioGradChair@ucf.edu
BIO 402B

Juana Pasco
Graduate Admissions Specialist
juana.pasco@ucf.edu
Telephone: 407-823-6525
BL301

Is this program available 100% online?
No

Program Description

The Master of Science in Biology program offers a broad range of research opportunities ranging from the sub-cellular to entire ecosystems. Our program offers broad-based training in a variety of disciplines including Conservation Biology, Ecology, Evolution, Physiology, Genetics, and Cell and Developmental Biology.

The Master of Science in Biology program offers a thesis option only (the non-thesis MS option is not currently accepting applications). The thesis option requires a minimum of 30 credit hours, 15 of which must be at the 6000 level. Given the thesis requirement, students who wish to pursue this degree must receive a commitment from a faculty adviser for admission into the program. The thesis option curriculum contains a minimum of 24 credit hours of coursework excluding thesis hours (note: Independent Study and Directed Research may account for a maximum of 6 of the 24 coursework credits).

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
**Program Prerequisites**

Applicants do not need to have an undergraduate degree in a biological science, but are expected to have 18 hours of biological sciences, including ecology and genetics. Courses in organic chemistry, calculus, and statistics are also recommended. After acceptance, minor deficiencies must be remedied by enrollment in the appropriate course at the first opportunity.

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Millican Hall 230
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**Mailing Address**

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PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

7 Total Credits

- Complete all of the following
  - Complete the following:
    - PCB6095 - Professional Development in Biology I (1)
    - PCB6096 - Professional Development in Biology II (1)
    - PCB6466 - Methods in Experimental Ecology (3)
  - Earn at least 2 credits from the following:
    - BSC6935 - Seminar in Biology (1)
    - BSC 6935 - Seminar in Biology: Students will take 1 credit hour each of two semesters.

**Thesis Option**

23 Total Credits

- Earn at least 23 credits from the following types of courses:
  - BSC 6971 - Thesis 6 Credit Hours (minimum)
  - Electives - 17 Credit Hours selected with the faculty adviser and advisory committee and approved by the graduate program director.

**Examinations**

0 Total Credits

- A thesis proposal defense is required. The purpose of the proposal defense is to present the planned research and its foundations as a seminar to an interested audience of peers and the advisory committee. The proposal should be distributed to advisory committee members two weeks in advance of the defense, and the defense should be advertised (contact the graduate program specialist two weeks in advance). Public attendees typically have an opportunity to ask questions and comment following the seminar, after which the committee meets with the student to further discuss the proposal. The advisory committee must then vote to accept or reject the proposal. The thesis proposal defense must be passed a minimum of one semester preceding the oral thesis defense (i.e., the proposal defense and thesis defense cannot occur in the same semester). When the research is completed, the final oral thesis defense is conducted similar to the proposal defense.

**Non-thesis Option (NOTE: The Biology Department is no longer accepting applications to the non-thesis program)**

0 Total Credits

- In addition to the 7 credit hours of required courses listed above, nonthesis students must complete 12 credit hours of restricted electives, 19 credit hours of unrestricted electives, and a research report. Currently enrolled thesis option students interested in transferring to the nonthesis option should contact the graduate program director for information. Restricted Electives—12 Credit Hours Students take 12 credit hours of courses in at least three of the five areas below. Ecology Evolutionary Biology Genetics Physiology Cell and Developmental Biology Unrestricted Electives—19 Credit Hours Students take 19 credit hours of unrestricted electives that must be approved by the program graduate director. Research Report—2 Credit Hours BSC 6909 - Research Report 2 Credit Hours Examination Nonthesis students must take a comprehensive exam no later than the semester preceding that of graduation. If a student fails the comprehensive examination, a minimum of four weeks must elapse before reexamination. The comprehensive exam may be taken a maximum of two times.

**Independent Learning**

0 Total Credits

- Nonthesis students are required to complete a research report as their independent learning experience. The thesis satisfies the independent learning experience for thesis option students.

**Grand Total Credits: 30**

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Chemistry MS

College
College of Sciences

Department
Department of Chemistry

Program Website
https://sciences.ucf.edu/chemistry/

Program Handbook Link
Chemistry MS

Program Contact Information
Qun Huo PhD
Professor, Program Coordinator
Qun.Huo@ucf.edu
Telephone: 407-882-2845
PVL 0422

chemgrad@ucf.edu
Telephone: 407-823-5728
PSB 255

Is this program available 100% online?
No

Program Description

The Master of Science in Chemistry (MS) program prepares students for careers in the chemical industry or further graduate studies. The curriculum is designed to provide a broad overall perspective of the chemical sciences field while placing the primary emphasis upon chemistry and the application of chemical principles.

The Chemistry MS program offers both a thesis option and a nonthesis option. The thesis option requires a minimum of 30 credit hours beyond the bachelor's degree, including 16 credit hours of required courses, at least 6 credit hours of thesis research, and 8 credit hours of electives that must be approved by the student's advisory committee. The nonthesis option requires a minimum of 31 credit hours beyond the bachelor's degree, including 16 credit hours of required courses, 14 credit hours of electives that must be approved by the student's advisory committee, and 1 credit hour of independent study that culminates in a research report.

Total Credit Hours Required: 30-31 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Qualifying Examinations
0 Total Credits

- All students must satisfy qualifying (proficiency) requirements in four of the five areas (analytical chemistry, biochemistry, inorganic chemistry, organic chemistry and physical chemistry) during the first year by taking exams in four of these five subjects. Additional course work may be required if one or more of the qualifying exams are not satisfied. Satisfaction of this requirement will help ensure that all students are adequately prepared for the core courses. If students do not satisfy the proficiency exam requirements within the first year, they may be subject to dismissal from the program.

Required Courses
16 Total Credits

- Complete all of the following
  - Complete at least 4 of the following:
    - CHM6710 - Applied Analytical Chemistry (3)
    - CHS6240 - Chemical Thermodynamics (3)
    - CHS6251 - Applied Organic Synthesis (3)
    - CHM6440 - Kinetics and Catalysis (3)
    - BCH6740 - Advanced Biochemistry (3)
  - Students must take four of the above courses. If a student successfully completes all five required courses, one course will count toward fulfilling the electives requirement.
- Seminar
  - Complete all of the following
    - Earn at least 4 credits from the following:
      - CHM6936 - Graduate Chemistry Seminar (1)
    - CHM 6936 - Graduate Chemistry Seminar will be repeated 4 times.

Elective Courses
8 Total Credits

- Complete all of the following
  - All elective courses must be approved by the student's advisory committee.
  - Earn at least 8 credits from the following:
    - CHM5225 - Advanced Organic Chemistry (3)
    - CHM5235 - Applied Molecular Spectroscopy (3)
    - CHM5305 - Bioconjugate Chemistry (3)
    - CHM5450 - Polymer Chemistry (3)
    - CHM5451C - Techniques in Polymer Science (3)
    - CHM5580 - Advanced Physical Chemistry (3)
    - CHM6134 - Advanced Instrumental Analysis (3)
    - CHM6711 - Chemistry of Materials (3)
    - CHS6613 - Current Topics in Environmental Chemistry (3)
  - CHM/CHS Special topics courses may be taken as offered.

Thesis/Nonthesis Option
6 - 7 Total Credits

- Complete 1 of the following
  - Thesis Option
  - Complete all of the following
    - Earn at least 6 credits from the following:
The grounding in scientific research methodology provided by the thesis requirement is a central focus of the thesis option in the Chemistry MS program. Students will conduct research either on site or at the professional laboratories where they work. In either case, a member of the UCF Chemistry Department faculty will act as research adviser and approve the research topic. This research culminates in the writing and presentation of the thesis. The student will present his/her thesis for final examination (oral defense of thesis) by a committee consisting of three members including the research adviser. The committee has to be approved by the Graduate Coordinator of the Chemistry program. The thesis must be judged worthy of publication by the review committee and may not be submitted for examination until so deemed. For nonresident students, the thesis adviser will visit the student's laboratory, where their research is to be performed, before the research begins and on a regular basis until the work is complete.

Nonthesis Option

- Complete all of the following
  - Earn at least 1 credits from the following:
    - CHM6908 - Directed Independent Studies (1 - 99)
  - Earn at least 6 credits from the following types of courses:
    - Additional Electives : 6 Credit Hours

Equipment Fee
0 Total Credits

- Full-time students in the Chemistry MS program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

Independent Learning
0 Total Credits

- For the thesis option, the grounding in scientific research methodology is a central focus. This research culminates in the writing and presentation of the thesis. For the nonthesis option, students take an additional 6 credit hours of approved electives and one-credit hour of Independent Study (CHM 6908), which culminates in a required report of the independent study experience.

Grand Total Credits: 30 - 31

Financial Information

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Fellowship Information

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https://funding.graduate.ucf.edu

Chemistry PhD

College
College of Sciences

Department
Department of Chemistry

Program Website
http://sciences.ucf.edu/chemistry/
**Program Handbook Link**
Chemistry PhD

**Program Contact Information**

**Qun Huo PhD**
Professor
Qun.Huo@ucf.edu
Telephone: 407-882-2845
PVL 0422

**Is this program available 100% online?**
No

**Program Description**

The Chemistry PhD program focuses on all areas of modern chemistry with faculty actively engaged in research in the often interdisciplinary fields of Materials Chemistry, Environmental Chemistry, Forensic Science, Biochemistry and Chemical Education. The training prepares future scientists and educators for research within contemporary subjects which yield graduates that are very competitive when entering the workforce in industry, government, and academic positions.

The PhD program in Chemistry provides a doctoral education in the following technical focal areas: Materials Chemistry, Environmental Chemistry, Forensic Science, Biochemistry and Chemical Education, drawing upon the strengths of the Department of Chemistry and other units, such as the College of Optics and Photonics, Advanced Materials Processing and Analysis Center, National Center of Forensic Science, Nanoscience and Technology Center, College of Medicine, College of Engineering and Computer Science, and the College of Community Innovation and Education. These areas meet the ever-pressing demand for the development of new materials, the increasing urgency of addressing crucial environmental and security problems, and new methods and understanding for STEM education. The curriculum has been formulated in collaboration with industrial, government, and academic scientists and represents a response to current and projected competencies needed by industry and the scientific community. The purpose of the program is to develop scientists and educators capable of conducting research to solve important problems in contemporary fields of the chemical sciences while preparing a highly skilled work force to ensure the technological/economic health and competitiveness in Central Florida and the nation.

The Chemistry PhD program requires 72 credit hours beyond the bachelor's degree with a minimum 18 credit hours of electives in the chosen sub-discipline, an original research project, and dissertation presentation. At least 27 hours of formal course work, exclusive of independent study, are required in order to fulfill degree requirements. This includes four core courses and four electives, three of which must be taken from Chemistry. Six credit hours of directed research are also required; additional courses may be specified by the student’s research adviser.

**Total Credit Hours Required:** 72 Credit Hours Minimum beyond the Bachelor's Degree

**Program Prerequisites**
A Bachelor of Science degree in the Chemical Sciences or a closely related field.

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ETS PPI: 5233

**Degree Requirements**

Core Courses
12 Total Credits

- Complete at least 4 of the following:
  - CHM6710 - Applied Analytical Chemistry (3)
  - CHM6440 - Kinetics and Catalysis (3)
  - CHS6251 - Applied Organic Synthesis (3)
  - CHS6240 - Chemical Thermodynamics (3)
Complete all of the following:

- Earn at least 7 credits from the following:
  - CHM6936 - Graduate Chemistry Seminar (1)
  - CHM 6936 - Graduate Chemistry Seminar: Six seminar credits must be taken consecutively through the first 3 years in the program (excluding summer); the seventh seminar credit will be taken one semester before anticipated dissertation defense.

Directed Research
6 Total Credits

- Earn at least 6 credits from the following:
  - CHM6918 - Research Report (1 - 99)

Required Elective Courses
12 Total Credits

- Complete 1 of the following:
  - All students who enter the program need to take four elective courses (12 credit hours). All 12 credits must come from one of the following concentrations listed below: Materials Chemistry Concentration Environmental Chemistry Concentration Forensic Science Concentration Biochemistry Concentration.
  - Materials Chemistry Concentration:
    - Earn at least 12 credits from the following types of courses:
      - CHS 5110 - Radiochemistry 3 Credit Hours CHM 5937 - Bioinorganic Chemistry 3 Credit Hours CHM 5305 - Bioconjugate Chemistry 3 Credit Hours CHM 5225 - Advanced Organic Chemistry 3 Credit Hours CHM 5580 - Advanced Physical Chemistry 3 Credit Hours CHS 6260 - Chemical Unit Operations and Separations 3 Credit Hours CHM 6711 - Chemistry of Materials 3 Credit Hours CHM 6620 - Solid State Inorganic Chemistry 3 Credit Hours CHM 5450 - Polymer Chemistry 3 Credit Hours CHM 5451C - Techniques in Polymer Science 3 Credit Hours CHM 5305 - Bioconjugate Chemistry 3 Credit Hours CHM 6938 - Special Topics 3 Credit Hours CHM 5235 - Applied Molecular Spectroscopy 3 Credit Hours CHM 6134 - Advanced Instrumental Analysis 3 Credit Hours CHM 7938 - Frontiers in Chemistry 3 Credit Hours (three semesters, 1 credit hour each semester) CHM 7919 - Directed Research in Materials Chemistry 6 Credit Hours Courses from outside the Chemistry Department. IDS 6252 - Biomedical Nanotechnology 3 Credit Hours IDS 6254 - Nanofabrication and Characterization 3 Credit Hours IDS 6255 - Nanotechnology and Energy and Sustainability 3 Credit Hours IDS 6261 - Nanotechnology for Sustainable Agriculture 3 Credit Hours OSE 5203 - Geometrical Optics 3 Credit Hours OSE 6313 - Materials for Optical Systems 3 Credit Hours OSE 5414 - Fundamentals of Optoelectronic Devices 3 Credit Hours EMA 5504 - Modern Characterization of Materials 3 Credit Hours EMA 6518 - Transmission Electron Microscopy 3 Credit Hours EMA 5108 - Surface Science 3 Credit Hours EMA 6129 - Solidification and Microstructure Evolution 3 Credit Hours EMA 6130 - Advanced Phase Transformations in Materials 3 Credit Hours EMA 6136 - Diffusion in Solids 3 Credit Hours EMA 6516 - X-ray Diffraction and Crystallography 3 Credit Hours PHY 5933 - Selected topics in biophysics of macromolecules 3 Credit Hours PCB 5527 - Genetic Engineering and Biotechnology 3 Credit Hours BSC 5408L - Advanced Biology Laboratory Techniques 3 Credit Hours
  - Environmental Chemistry Concentration:
    - Earn at least 12 credits from the following types of courses:
      - CHS 5110 - Radiochemistry 3 Credit Hours CHM 5937 - Bioinorganic Chemistry 3 Credit Hours CHM 5305 - Bioconjugate Chemistry 3 Credit Hours CHM 5225 - Advanced Organic Chemistry 3 Credit Hours CHM 5580 - Advanced Physical Chemistry 3 Credit Hours CHM 6938 - Special Topics 3 Credit Hours CHM 5235 - Applied Molecular Spectroscopy 3 Credit Hours CHM 6134 - Advanced Instrumental Analysis 3 Credit Hours CHM 7938 - Frontiers in Chemistry 3 Credit Hours (three semesters, 1 credit hour each semester) CHM 7919 - Directed Research in Materials Chemistry 6 Credit Hours Courses from outside the Chemistry Department. IDS 6252 - Biomedical Nanotechnology 3 Credit Hours IDS 6254 - Nanofabrication and Characterization 3 Credit Hours IDS 6255 - Nanotechnology and Energy and Sustainability 3 Credit Hours IDS 6261 - Nanotechnology for Sustainable Agriculture 3 Credit Hours OSE 5203 - Geometrical Optics 3 Credit Hours OSE 6313 - Materials for Optical Systems 3 Credit Hours OSE 5414 - Fundamentals of Optoelectronic Devices 3 Credit Hours EMA 5504 - Modern Characterization of Materials 3 Credit Hours EMA 6518 - Transmission Electron Microscopy 3 Credit Hours EMA 5108 - Surface Science 3 Credit Hours EMA 6129 - Solidification and Microstructure Evolution 3 Credit Hours EMA 6130 - Advanced Phase Transformations in Materials 3 Credit Hours EMA 6136 - Diffusion in Solids 3 Credit Hours EMA 6516 - X-ray Diffraction and Crystallography 3 Credit Hours PHY 5933 - Selected topics in biophysics of macromolecules 3 Credit Hours PCB 5527 - Genetic Engineering and Biotechnology 3 Credit Hours BSC 5408L - Advanced Biology Laboratory Techniques 3 Credit Hours
  - Forensic Science Concentration:
    - Earn at least 12 credits from the following types of courses:
      - CHS 5110 - Radiochemistry 3 Credit Hours CHM 5937 - Bioinorganic Chemistry 3 Credit Hours CHM 5305 - Bioconjugate Chemistry 3 Credit Hours CHM 5225 - Advanced Organic Chemistry 3 Credit Hours CHM 5580 - Advanced Physical Chemistry 3 Credit Hours CHM 6938 - Special Topics 3 Credit Hours CHM 5235 - Applied Molecular Spectroscopy 3 Credit Hours CHM 6134 - Advanced Instrumental Analysis 3 Credit Hours CHM 7938 - Frontiers in Chemistry 3 Credit Hours (three semesters, 1 credit hour each semester) CHM 7919 - Directed Research in Materials Chemistry 6 Credit Hours Courses from outside the Chemistry Department. IDS 6252 - Biomedical Nanotechnology 3 Credit Hours IDS 6254 - Nanofabrication and Characterization 3 Credit Hours IDS 6255 - Nanotechnology and Energy and Sustainability 3 Credit Hours IDS 6261 - Nanotechnology for Sustainable Agriculture 3 Credit Hours OSE 5203 - Geometrical Optics 3 Credit Hours OSE 6313 - Materials for Optical Systems 3 Credit Hours OSE 5414 - Fundamentals of Optoelectronic Devices 3 Credit Hours EMA 5504 - Modern Characterization of Materials 3 Credit Hours EMA 6518 - Transmission Electron Microscopy 3 Credit Hours EMA 5108 - Surface Science 3 Credit Hours EMA 6129 - Solidification and Microstructure Evolution 3 Credit Hours EMA 6130 - Advanced Phase Transformations in Materials 3 Credit Hours EMA 6136 - Diffusion in Solids 3 Credit Hours EMA 6516 - X-ray Diffraction and Crystallography 3 Credit Hours PHY 5933 - Selected topics in biophysics of macromolecules 3 Credit Hours PCB 5527 - Genetic Engineering and Biotechnology 3 Credit Hours BSC 5408L - Advanced Biology Laboratory Techniques 3 Credit Hours
  - Biochemistry Concentration:
    - Earn at least 6 credits from the following:
      - CHM6918 - Research Report (1 - 99)
Biology 3 Credit Hours CHS 6535L - Forensic Analysis of Biological Materials 3 Credit Hours CHS 6536 - Population Genetics and Genetic Data 3 Credit Hours CHM 7938 - Frontiers in Chemistry 1 Credit Hours (three semesters, 1 credit hour each semester) CHM 7919 - Directed Research in Biochemistry 3 Credit Hours Courses from outside the Chemistry Department. IDS 6252 - Biomedical Nanotechnology 3 Credit CHS 6253 - Bioanalytical Technology 3 Credit CHM 6261 - Nanotechnology for Sustainable Agriculture 3 Credit Hours PHY 5933 - Selected topics in biophysics of macromolecules 3 Credit Hours MCB 5654 - Applied Microbiology 3 Credit Hours MCB 6417C - Microbial Metabolism 3 Credit Hours MCB 6407C - Laboratory Methods in Molecular Biology 3 Credit Hours MCB 5127 - Foundation of Bio- Imaging Science 3 Credit Hours EMA 5127 - Cancer Biology 3 Credit Hours EMA 5151 - X-ray Diffraction and Crystallography 3 Credit Hours EMA 6518 - Transmission Electron Microscopy 3 Credit Hours

Additional Electives
20 Total Credits

- Earn at least 20 credits from the following types of courses:
  Students who enter the program without a master's degree will be required to take 20 additional hours. These 20 hours must be in the same Concentration as the other 12 Required Electives selected above. Students and advisers need to be careful about how elective courses are selected so that at least 12 credit hours of electives must be formal course work, exclusive of independent study. Doctoral research, dissertation research, independent study and directed research may also be used to satisfy additional hours in the concentration.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  CHM 7980 - Doctoral Dissertation Within three months before defending the dissertation, the student will present a dissertation research seminar to the Department of Chemistry, registering for one credit hour of seminar.

Qualifying Examinations
0 Total Credits

- Students will be expected to satisfy qualifying (proficiency) requirements (analytical chemistry, biochemistry, inorganic chemistry, organic chemistry and physical chemistry) during the first year by passing exams in four of these five areas. These exams may be waived if the entering student possesses an MS degree in the Chemical Sciences. Satisfaction of this requirement will help ensure that students are adequately prepared for the core courses. If a student does not satisfy the proficiency exam requirements within the first year, the student will be subject to dismissal from the program.

Candidacy Examination
0 Total Credits

- As part of the degree requirement, all graduate students pursuing a doctoral degree in chemistry must pass a candidacy exam before the sixth semester from the start of their study in the program. The candidacy examination consists of writing and orally defending an original research proposal to the student's faculty advisory committee. Every doctoral student must demonstrate proficiency in his/her dissertation research area, the ability to independently develop an original research topic, and the ability to communicate these ideas effectively using concise scientific writing and presentation skills. Students are required to take the candidacy exam no later than the end of the fifth semester (excluding summer) from the start of their study in the program. If a student fails to pass the exam at the first attempt, the student must retake and pass the exam before the end of the sixth semester (excluding summer) of their study. Failure to pass the PhD candidacy exam will result in dismissal from the program.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: Completion of all required and formal elective course work, except for seminar credit hours and dissertation hours. Successful completion of the candidacy examination. Successful defense of the written dissertation proposal. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study.

Dissertation Defense
0 Total Credits

- The final requirement for the PhD degree is completion of a satisfactory written dissertation of the student's research, along with successful presentation and defense of the dissertation to the advisory committee, including one doctorate-holding non-program faculty member.

Equipment Fee
0 Total Credits

- Full-time students in the Chemistry PhD program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

Independent Learning
0 Total Credits

- The grounding in scientific research methodology provided by the dissertation requirement is a central focus of the proposed program. Students will conduct research either on site or at the professional laboratories where they work. In either case, a member of the UCF Chemistry Department graduate faculty will act as research adviser and approve the research topic. This
research culminates in the writing and presentation of the dissertation. The student will present his/her dissertation for examination by a committee consisting of a minimum of five members including the research adviser. One of the committee members will be from outside the Chemistry department. A majority of the program committee members will hold tenure-earning faculty appointments in the Chemistry Department. The committee has to be approved by the Graduate Coordinator of the Chemistry program and the department Chair. The dissertation must be judged worthy of publication by the dissertation committee and may not be submitted for examination until so deemed. For students performing their dissertation research off campus, the dissertation adviser will visit the student's laboratory, where their research is to be performed, before the research begins and on a regular basis until the work is complete.

Grand Total Credits: 72

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Clinical Psychology MA

College

College of Sciences

Department

Department of Psychology

Program Website

https://sciences.ucf.edu/psychology/graduate/ma-clinical/

Program Contact Information

Monique Levermore, PhD
Director, Clinical Psychology MA Program
Associate Lecturer
Monique.Levermore@ucf.edu
Telephone: 407-708-2825

Is this program available 100% online?

No

Licensure Disclosure

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-COS-Clinical-Psychology-MA.pdf.
Program Description

The Master of Arts Clinical Psychology Program is a terminal master's program offered at the UCF Sanford/Lake Mary Campus. The program consists of two tracks:

Applied Pre-Licensure/Non-Thesis Track: The Master of Arts Clinical Psychology Program is a terminal master's program offered at the UCF Sanford/Lake Mary Campus. The Applied Pre-Licensure/Non-Thesis Track is designed for students interested in delivering clinical services in a variety of settings including community agencies and private practice. After completing the program and after two years of postgraduate supervised clinical experience, graduates are eligible to become Licensed Mental Health Counselors (LMHCs) in the state of Florida.

Can you provide an overview of the Pre-licensure Track?

This track has been offered for decades. As mentioned in our catalogue description, the primary goal of this track is to train students to become licensed, master’s-level clinicians. More specifically, graduates of this track are eligible to become Licensed Mental Health Counselors (LMHCs) in the State of Florida, and they will likely be eligible for master’s level licensure in most other states. This track includes a full course load (9-12 credits/per semester) for two years. Students in this track complete a practicum (10 hours/week in the first spring in the program) and internship (20 hours/week in the fall, spring, and summer semesters in the second year in the program). A majority of the graduates of this program enter clinical practice and obtain licensure at the master’s level. We usually admit 15 to 16 students into this track each fall term.

How do I get licensed?

Students in the applied/prelicensure track meet the eligibility criteria for licensure as a Licensed Mental Health Counselor (LMHC) in the State of Florida. Please note that more details about eligibility criteria can be found on the Florida Department of Health website. In addition, our students are also eligible for similar licensure in most other states; however, we are unable to confirm the licensure and certification requirements of other states. Consequently, if you intend to pursue such credentialing outside of Florida, we advise you to contact the applicable state credentialing authority to familiarize yourself with its specific requirements and determine if our program meets its eligibility criteria.

Can I get into a doctoral program if I complete the pre-licensure track?

Yes! As mentioned above, most students in the pre-licensure track practice at the master’s level upon graduation. Having said that, each year we have a number of graduating students who apply to and get into Ph.D. or Psy.D. programs (usually around 2-4 students out a cohort of 15-16 students). Engagement in research may increase students’ competitiveness when applying to doctoral programs.

Can I do research if I am in the pre-licensure track?

Yes. Research is not required as part of this track; however, students in the pre-licensure track are often engaged in collaborative research with faculty. It is common for students in this track to present research at scientific conferences, and some of these students become coauthors of peer-reviewed publications in scientific journals.

Research/Thesis Track: The Master of Arts Clinical Psychology Program is a terminal master's program offered at the UCF Sanford/Lake Mary Campus. The Research/Thesis Track is designed for students who wish to focus on clinical research and/or are interested in pursuing entry into a doctoral program following the completion of their Master's degree. Students who complete this option are not eligible to become Licensed Mental Health Counselors upon graduation.

Can you provide an overview of the research/thesis Track?

The faculty developed this track for students who are interested in focusing on research and/or are interested in gaining entry into a research-focused doctoral program. This track is a great fit for students who are not particularly interested in clinical practice at the master’s level upon graduation. In addition to an empirical thesis, we encourage students in this track to engage in other research projects. Students in the thesis track have a reduced course load relative to the prelicensure track, which allows more time for engagement in research. The tradeoff is that students in this track will not be eligible for licensure at the master’s level when they graduate. We anticipate admitting no more than 5 to 6 students into the thesis track this year.

Is it possible to get clinical experience in the research/thesis track?

Yes. It is possible for students in the research/thesis track to chose to do a practicum. This experience would be approximately 10 hours/week during one spring semester.

Am I guaranteed admission into a Ph.D. program if I am in the research/thesis track?

No. The program has the potential to increase a student’s competitiveness when applying to research-focused doctoral programs; however, we cannot guarantee admission into a doctoral program.

Please scroll to the bottom of this page for further details on these Tracks.

Please visit the program's website for more information, including a list of program faculty members, and frequently asked questions (FAQs), including additional information about each track: https://sciences.ucf.edu/psychology/graduate/ma-clinical/.

Please see the specific admission, application requirement, financial and contact information for the track in which you are interested.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Program Details

At times, we have prospects who are uncertain as to which is the best track for them: Pre-Licensure or Research Thesis Track. The following information is to help you make a best decision related to your academic and professional aspirations.

Pre-licensure Track

Can you provide an overview of the Pre-licensure Track?

This track has been offered for decades. As mentioned in our catalogue description, the primary goal of this track is to train students to become licensed, master’s-level clinicians. More specifically, graduates of this track are eligible to become Licensed Mental Health Counselors (LMHCs) in the State of Florida, and they will likely be eligible for master’s level licensure in most other states. This track includes a full course load (9-12 credits/semester) for two years. Students in this track complete a practicum (10 hours/week in the first spring in the program) and internship (20 hours/week in the fall, spring, and summer semesters in the second year in the program). A majority of the graduates of this program enter clinical practice and obtain licensure at the master’s level. We usually admit 15 to 16 students into this track each fall term.

How do I get licensed?

Students in the applied/prelicensure track meet the eligibility criteria for licensure as a Licensed Mental Health Counselor (LMHC) in the State of Florida. Please note that more details about eligibility criteria can be found on the Florida Department of Health website. In addition, our students are also eligible for similar licensure in most other states; however, we are unable to confirm the licensure and certification requirements of other states. Consequently, if you intend to pursue such credentialing outside of Florida, we advise you to contact the applicable state credentialing authority to familiarize yourself with its specific requirements and determine if our program meets its eligibility criteria.

Can I get into a doctoral program if I complete the pre-licensure track?

Yes! As mentioned above, most students in the pre-licensure track practice at the master’s level upon graduation. Having said that, each year we have a number of graduating students who apply to and get into Ph.D. or Psy.D. programs (usually around 2-4 students out a cohort of 15-16 students). Engagement in research may increase students’ competitiveness when applying to doctoral programs.

Can I do research if I am in the pre-licensure track?

Yes. Research is not required as part of this track; however, students in the pre-licensure track are often engaged in collaborative research with faculty. It is common for students in this track to present research at scientific conferences, and some of these students become coauthors of peer-reviewed publications in scientific journals.

Research/Thesis Track

Can you provide an overview of the research/thesis Track?

The faculty developed this track for students who are interested in focusing on research and/or are interested in gaining entry into a research-focused doctoral program. This track is a great fit for students who are not particularly interested in clinical practice at the master’s level upon graduation. In addition to an empirical thesis, we encourage students in this track to engage in other research projects. Students in the thesis track have a reduced course load relative to the prelicensure track, which allows more time for engagement in research. The tradeoff is that students in this track will not be eligible for licensure at the master’s level when they graduate. We anticipate admitting no more than 5 to 6 students into the thesis track this year.

Is it possible to get clinical experience in the research/thesis track?

Yes. It is possible for students in the research/thesis track to chose to do a practicum. This experience would be approximately 10 hours/week during one spring semester.

Am I guaranteed admission into a Ph.D. program if I am in the research/thesis track?

No. The program has the potential to increase a student’s competitiveness when applying to research-focused doctoral programs; however, we cannot guarantee admission into a doctoral program.

Clinical Psychology MA - Clinical Psychology MA, Applied Pre-Licensure Non-Thesis Track

Track Website

https://sciences.ucf.edu/psychology/graduate/ma-clinical/
**Track Handbook**

Clinical Psychology MA, Applied Pre Licensure Non Thesis Track

**Track Contact Information**

Monique Levermore, PhD  
Director, Clinical Psychology MA Program  
Associate Lecturer  
Monique.Levermore@ucf.edu  
Telephone: 407-708-2825

**Online Availability**

No

**Licensure Disclosure**

This program has potential ties to professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-COS-Clinical-Psychology-MA.pdf.

**Track Description**

The Master of Arts Clinical Psychology Program is a terminal master's program offered at the UCF Sanford/Lake Mary Campus. The Applied Pre-Licensure/Non-Thesis Track is designed for students interested in delivering clinical services in a variety of settings including community agencies and private practice. After completing the program and after two years of postgraduate supervised clinical experience, graduates are eligible to become Licensed Mental Health Counselors (LMHCs) in the state of Florida. Please visit the program's website for more information, including a list of program faculty members and answers to frequently asked questions (FAQs): https://sciences.ucf.edu/psychology/graduate/ma-clinical/faqs/.

The Clinical Psychology Applied Pre-Licensure/Non-Thesis Track requires a minimum of 61 credit hours beyond the Bachelor's degree, including 49 credit hours of required courses and 12 clinical internship credit hours. This track is for students primarily interested in clinical practice at the Master's level upon graduation; however, some students in this track have applied to and gained admission into doctoral programs after graduation.

The primary areas of emphasis include assessment or evaluation skills and intervention or psychotherapy skills, and the program curriculum is consistent with the educational criteria for licensure as a mental health counselor in the state of Florida. Program graduates have been involved in mental health service delivery through individual, marital, family, and group psychotherapy, as well as crisis intervention and other specialized therapeutic procedures. Although research is not required in this track, students in this track do have the opportunity to engage in collaborative research with program faculty.

**Total Credit Hours Required: 61 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

A bachelor's degree in Psychology or a related area. A minimum of 15 semester hours of undergraduate psychology courses are required as a prerequisite for applicants with a degree in a field other than psychology. Completion of courses in abnormal psychology and research methods and/or statistics is strongly recommended. Other recommended courses include clinical psychology, developmental psychology, personality theory, physiological psychology, and psychology of diversity.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses

49 Total Credits

- Complete the following:
  - CLP5166 - Advanced Psychopathology (3)
  - CLP6181 - Psychological Theories of Substance Abuse Treatment (3)
  - CLP6191 - Multicultural Psychotherapy (3)
  - CLP6195C - Introduction to Psychotherapy (3)
  - CLP6321 - Psychotherapy in Community Settings (3)
  - CLP6441C - Individual Psychological Assessment I (3)
  - CLP6457C - Group Psychotherapy (3)
  - CLP6459C - Human Sexuality, Marriage, and Sex Therapies (3)
  - CLP6461 - Cognitive-Behavioral Therapy (3)
  - CLP6449C - Career and Lifestyle Assessment (3)
  - CLP6932 - Ethical and Professional Issues in Mental Health Practices (3)
  - CYP6942 - Practicum in Psychological Counseling (3)
  - DEP5057 - Developmental Psychology (3)
  - PSY6216C - Research Methodology (4)
  - PSB5005 - Physiological Psychology (3)
  - CLP6460C - Introduction to Child, Adolescent, and Family Therapies (3)

Internship

12 Total Credits

- Complete all of the following
  - Earn at least 12 credits from the following:
    - CYP6948C - Psychology Internship (1 - 99)
  - The purpose of the internship requirement is to provide the MA candidate in Clinical Psychology with comprehensive, practical experiences under the supervision of licensed mental health professionals. A public agency or nonprofit institution with nondiscriminatory practices is the prototype. The intern is assigned to an acceptable agency for a total of 1000 hours during three consecutive academic semesters (20 hours per week for 16 weeks during fall and spring terms, and 30 hours per week for 12 weeks during the summer term). An additional commitment of three hours per week is required for the interns to meet as a group with a departmental faculty member for review, feedback, and discussions. A major portion of intern training is in the area of psychotherapy/counseling. The intern also engages in differential diagnosis and participates in a wide variety of psychological assessment procedures. It is believed that supervision by qualified and experienced personnel is the primary learning mode by which the intern develops professional expertise and augments classroom didactics. Satisfactory completion ("B" [3.0-grade point average] or better) of the following courses is required prior to internship: CLP 5166, CLP 6195C, CLP 6441C, and CYP 6942. The program director and clinical placement coordinator approve internship placements. Interns are provided with a system for maintaining accurate accounts of their activity during each week of their internship. In addition, both the intern and supervisor(s) complete an Internship Evaluation form each semester.

Comprehensive Exam and Case Presentation

0 Total Credits

- The culminating academic experience for all students in the program is successful completion of a comprehensive exam and case presentation. All students must complete the comprehensive exam their final semester. The exam covers the core professional knowledge required by state licensing agencies. Students also are required to complete a written and oral clinical case presentation. Criteria for passing the exam and presentation are provided in the program handbook.

Grand Total Credits: 61
Track Details

Additional Program Requirements

For all students in the Clinical MA program, successful completion requires demonstration of academic and clinical excellence. Students who receive grades lower than B (including B- and grades of U in courses graded satisfactory/unsatisfactory) in six semester hours or more will be dismissed from the program. It is a program requirement that all coursework with a grade lower than B be retaken and completed successfully, although both grades are still calculated in the GPA.

In addition to academic excellence, students are expected to demonstrate clinical skills and personal resources necessary to meet the demands of the program and for clinical practice. At the end of each semester, students will receive written feedback from the faculty on the extent to which they are meeting the programs requirements and performance expectations. Student progress will be rated as satisfactory or unsatisfactory. Students who receive an unsatisfactory rating will be asked to complete remediation as determined by the faculty. If the identified problems are not remedied and/or a second unsatisfactory rating is received, the student will be dismissed from the program.

Summer Enrollment

Summer enrollment is required for all students in this track.

Independent Learning

There are several independent learning experiences built into the programs of study that help to individualize the training program. Students work with the internship coordinator and academic advisor to select specific practicum and internship placements. During practicum and internship students will have the opportunity to present cases that incorporate an integration of assessment data and its interpretation, theoretical conceptualization, treatment planning, course of therapy, and available outcome data. This is done ensuring client confidentiality and the highest ethical standards. Although not required for this track, students in this track do have the opportunity to engage in collaborative research with program faculty.

Can you provide an overview of the Pre-licensure Track? Is this the right track for me to apply to?

This track has been offered for decades. As mentioned in our catalogue description, the primary goal of this track is to train students to become licensed, master’s-level clinicians. More specifically, graduates of this track are eligible to become Licensed Mental Health Counselors (LMHCs) in the State of Florida, and they will likely be eligible for master’s level licensure in most other states. This track includes a full course load (9-12 credits/per semester) for two years. Students in this track complete a practicum (10 hours/week in the first spring in the program) and internship (20 hours/week in the fall, spring, and summer semesters in the second year in the program). A majority of the graduates of this program enter clinical practice and obtain licensure at the master’s level. We usually admit 15 to 16 students into this track each fall term.

How do I get licensed?

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Can I get into a doctoral program if I complete the pre-licensure track?

Yes! As mentioned above, most students in the pre-licensure track practice at the master’s level upon graduation. Having said that, each year we have a number of graduating students who apply to and get into Ph.D. or Psy.D. programs (usually around 2-4 students out a cohort of 15-16 students). Engagement in research may increase students’ competitiveness when applying to doctoral programs.

Can I do research if I am in the pre-licensure track?

Yes. Research is not required as part of this track; however, students in the pre-licensure track are often engaged in collaborative research with faculty. It is common for students in this track to present research at scientific conferences, and some of these students become coauthors of peer-reviewed publications in scientific journals.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Clinical Psychology MA - Clinical Psychology MA, Research Thesis Track

Track Website
https://sciences.ucf.edu/psychology/graduate/ma-clinical/

Track Handbook
Clinical Psychology MA, Thesis Track

Track Contact Information

Monique Levermore, PhD
Director, Clinical Psychology MA Program
Associate Lecturer
Monique.Levermore@ucf.edu
Telephone: 407-708-2825

Online Availability

No

Track Description

The Master of Arts Clinical Psychology Program is a terminal master's program offered at the UCF Sanford/Lake Mary Campus. The Research/Thesis Track is designed for students who wish to focus on clinical research and/or are interested in pursuing entry into a doctoral program following the completion of their Master's degree. Students who complete this option are not eligible to become Licensed Mental Health Counselors upon graduation. Please visit the program's website for more information, including a list of program faculty members and frequently asked questions (FAQs): https://sciences.ucf.edu/psychology/graduate/ma-clinical/faq/.

The Clinical Psychology MA Research/Thesis Track program requires a minimum of 38 credit hours beyond the bachelor's degree, including 32 credit hours of required courses, and 6 thesis hours. The curriculum emphasizes the development of research experience and skills. Further, the curriculum is designed to be flexible, with numerous elective courses to help the student pursue specific interests and to work towards specific goals. Students in this track work closely with a faculty mentor.

Note: This track is for students who wish to focus on clinical research and/or preparation for doctoral-level study upon graduation. Students who complete this track will not be license-eligible when they graduate. Completion of this track does not guarantee admissions into a doctoral program.

Total Credit Hours Required: 38 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

A bachelor's degree in Psychology or a related area. A minimum of 15 semester hours of undergraduate psychology courses are required as a prerequisite for applicants with a degree in a field other than psychology. Completion of courses in abnormal psychology and research methods and/or statistics is strongly recommended. Other recommended courses include clinical psychology, developmental psychology, personality theory, physiological psychology, and psychology of diversity.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete the following:
  - CLP5166 - Advanced Psychopathology (3)
  - CLP6195C - Introduction to Psychotherapy (3)
  - CLP6932 - Ethical and Professional Issues in Mental Health Practices (3)

General Clinical Elective Courses
15 Total Credits

- Complete all of the following
  - In addition to the requirements associated with the Clinical Psychology Core, select 5 additional courses (advisor permission required)
  - Complete at least 5 of the following:
    - CLP6181 - Psychological Theories of Substance Abuse Treatment (3)
    - CLP6191 - Multicultural Psychotherapy (3)
    - CLP6321 - Psychotherapy in Community Settings (3)
    - CLP6441C - Individual Psychological Assessment I (3)
    - CLP6449C - Career and Lifestyle Assessment (3)
    - CLP6457C - Group Psychotherapy (3)
    - CLP6459C - Human Sexuality, Marriage, and Sex Therapies (3)
    - CLP6460C - Introduction to Child, Adolescent, and Family Therapies (3)
    - CLP6461 - Cognitive-Behavioral Therapy (3)
    - CYP6942 - Practicum in Psychological Counseling (3)
    - DEP5057 - Developmental Psychology (3)
    - PSB5005 - Physiological Psychology (3)

Research Courses
14 Total Credits

- Complete all of the following
  - Complete the following:
    - CLP6527C - Measurement, Research Design, and Statistical Analysis in Clinical Psychology I (4)
    - CLP6528C - Measurement, Research Design, and Statistical Analysis in Clinical Psychology II (4)
  - Earn at least 6 credits from the following:
    - PSY6971 - Thesis (1 - 99)

Grand Total Credits: 38
**Track Details**

**Additional Program Requirements**

For all students in the Clinical MA program, successful completion requires demonstration of academic and excellence. Students who receive grades lower than B (including B- and grades of U in courses graded satisfactory/unsatisfactory) in six semester hours or more will be dismissed from the program. It is a program requirement that all course work with a grade lower than B be retaken and completed successfully, although both grades are still calculated in the GPA.

In addition to academic excellence, students are expected to demonstrate skills and personal resources that are up to the demands of the program. At the end of each semester, students will receive written feedback from the faculty on the extent to which they are meeting the programs requirements and performance expectations. Student progress will be rated as satisfactory or unsatisfactory. Students who receive an unsatisfactory rating will be asked to complete remediation as determined by the faculty. If the identified problems are not remedied and/or a second unsatisfactory rating is received, the student will be dismissed from the program.

**Summer Enrollment**

Summer enrollment may be required for completion of the program.

**Independent Learning**

There are several independent learning experiences built into the programs of study that help to individualize the training program. Students who pursue the research thesis track engage in independent learning through the design and implementation of original research in collaboration with faculty. They will work closely with a faculty mentor in relation to research and selection of electives. Further, although not required, students have the opportunity to take a clinical practicum in their second year in the program to gain clinical experience.

**Can you provide an overview of the research/thesis Track? Is this the right track for me to apply to?**

The faculty developed this track for students who are interested in focusing on research and/or are interested in gaining entry into a research-focused doctoral program. This track is a great fit for students who are not particularly interested in clinical practice at the master’s level upon graduation. In addition to an empirical thesis, we encourage students in this track to engage in other research projects. Students in the thesis track have a reduced course load relative to the prelicensure track, which allows more time for engagement in research. The tradeoff is that students in this track will not be eligible for licensure at the master’s level when they graduate. We anticipate admitting no more than 5 to 6 students into the thesis track this year.

**Is it possible to get clinical experience in the research/thesis track?**

Yes. It is possible for students in the research/thesis track to chose to do a practicum. This experience would be approximately 10 hours/week during one spring semester.

**Am I guaranteed admission into a Ph.D. program if I am in the research/thesis track?**

No. The program has the potential to increase a student’s competitiveness when applying to research-focused doctoral programs; however, we cannot guarantee admission into a doctoral program.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

**UCF Student Financial Assistance**

Millican Hall 120  
Telephone: 407-823-2827  
Appointment Line: 407-823-5285  
Fax: 407-823-5241  
finaid@ucf.edu  
http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

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gradfellowship@ucf.edu  
https://funding.graduate.ucf.edu

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**Clinical Psychology PhD**

2022-2023 Graduate Catalog
College
College of Sciences

Department
Department of Psychology

Program Website
https://sciences.ucf.edu/psychology/graduate/ph-d-clinical/

Program Handbook Link
Clinical Psychology PhD

Program Contact Information
Jeffrey Bedwell PhD
Professor and Program Director
jeffrey.bedwell@ucf.edu
Telephone: 407-823-5858

Kenneth Davis
Graduate Admissions Specialist
kenneth.davis@ucf.edu
Telephone: 407-823-2157

Is this program available 100% online?
No

Licensure Disclosure
This program has potential ties to state-regulated professional licensure or certification in the field. For more information on how this program may prepare you in that regard, please visit https://apq.ucf.edu/files/Licensure-Disclosure-COS-Clinical-Psychology-PhD.pdf.

Program Description
The Psychology Department offers a PhD in Clinical Psychology, educating students in both the science and the practice of clinical psychology.

The Clinical Psychology track in the Psychology PhD Program emphasizes the scientist-practitioner model of training as promulgated by the American Psychological Association (APA). The doctoral program in Clinical Psychology is accredited by the American Psychological Association.

The PhD Program in Clinical Psychology at the University of Central Florida educates graduate students "to generate and integrate scientific and professional knowledge, attitudes, and skills to further psychological science, professional practice, and human welfare. Graduates are capable of functioning as a scientist and a practitioner and may function as either or both, consistent with the highest standards in psychology" (National Conference on the Education and Training of Scientist-Practitioners for the Professional Practice of Psychology, 1990). Our program is committed to the inclusion of students, faculty, and staff from different backgrounds. In particular, we endeavor to help change the distribution of future professionals in Clinical Psychology to better reflect the diversity (e.g., racial, ethnic, sexual orientation) found across the United States. As a part of these goals, we infuse the latest empirical knowledge related to clinical treatment, research, and pedagogy with diverse individuals in our curriculum and clinical/research experiences.

The PhD program aspires to achieve excellence in research and clinical training and to contribute to and perpetuate science and practice in the field of Clinical Psychology through faculty and graduate student involvement in scholarly and professional activities.

Consistent with the mission of a major metropolitan university, the Clinical Psychology PhD program at UCF takes advantage of and builds upon community partnerships. Our partnerships with public and private health service delivery resources in the Central Florida area provides externship training sites and research opportunities.

The Clinical Psychology track in the Psychology PhD Program is designed to be a full-time program, with some summer enrollment expected. There is a total of 86 semester hours of courses, practica, and research requirements.

Total Credit Hours Required: 86 Credit Hours Minimum beyond the Bachelor's Degree. 56 Credit Hours Minimum beyond the Master's Degree.
Program Prerequisites

Students must have obtained a baccalaureate or higher degree in Psychology, prior to the start of the term for which the student is admitted, from a regionally accredited institution or from a recognized foreign institution. Students without a baccalaureate or higher degree from an accredited institution (or equivalent) are not admitted to graduate degree programs, graduate certificate programs, or graduate nondegree status. If the baccalaureate degree does not include a major in Psychology, students must have completed at least 18 credit hours of Psychology courses at the undergraduate level or above. These courses must include Intro/General Psychology, Research Methods/Statistics, Abnormal Psychology, and Personality Theory/Psychology. The following courses are strongly encouraged: Social Psychology, Cognitive Psychology, Biological/Physiological Psychology, and Developmental Psychology. The program requires that History and Systems of Psychology is completed at the undergraduate level with a grade of at least a "B." This can either be completed prior to starting the program or as an undergraduate course during the program. Applicants who enter with a Master's degree may be eligible to waive or transfer up to 30 credit hours for credits earned from a completed Master's degree from an accredited institution recognized by UCF (as long as this number does not exceed 50% of the program's requirements). In these cases, each applicant's situation will be reviewed individually based on program standards and requirements.

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Institution Codes
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GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
71 Total Credits

Details:

Psychology Foundation Courses
12 Total Credits

Complete the following:
- DEP5057 - Developmental Psychology (3)
- SOP5059 - Advanced Social Psychology (3)
- PSB6348 - The Neuroanatomical Basis of Psychological Function (3)
- EXP6506 - Human Cognition and Learning (3)

Integrative Course
3 Total Credits

Complete all of the following

- CLP7939 - Affective Neuroscience (3)
- This course may be substituted with any future course that the program designates as an integrative course.

Research Courses
18 Total Credits

Complete all of the following

- PSY7217C - Advanced Research Methodology I (4)
- PSY7218C - Advanced Research Methodology II (4)
- PSY7219C - Advanced Research Methodology III (4)
- Earn at least 6 credits from the following:
  - PSY6971 - Thesis (1 - 99)

Clinical Courses
32 Total Credits

Complete all of the following

- Complete the following:
- CLP7447C - Clinical Psychological Assessment (3)
- CLP7125 - Lifespan Psychopathology (3)
- CLP7623 - Ethical and Professional Issues in Clinical Psychology (3)
- CLP7494 - Empirically Supported Psychotherapies (3)
- CLP6191 - Multicultural Psychotherapy (3)
- CLP7942L - Supervision Practicum (1)

Earn at least 4 credits from the following:
- CLP7145C - Introduction to Clinical Psychology and Psychotherapy (3)
- CLP 7145C - 2 credit hours; taken two times at 2 credit hours each time.

Earn at least 3 credits from the following:
- CLP6949 - Predoctoral Internship (1)
- CLP 6949 - 1 credit hour; taken three times at 1 credit hour each time.

Earn at least 9 credits from the following:
- CLP7943C - Clinical Practicum: taken 3 times at 3 hours each time.

Elective
6 Total Credits
- Earn at least 6 credits from the following types of courses:
  Any graduate-level course as approved by the program director.

Dissertation
15 Total Credits
- Earn at least 15 credits from the following types of courses:
  PSY 7980 - Doctoral Dissertation

Qualifying and Comprehensive Doctoral Examinations
0 Total Credits
No Rules
Purpose
0 Total Credits
- The purpose of the Qualifying and Comprehensive Examination is to develop and assess the competency of professional behaviors in doctoral-level graduate students in the Clinical Psychology PhD Program that are consistent with the program's professional training goals. These goals include but are not limited to the development and demonstration of skills and abilities that enable graduating students to (a) be expertly trained, empirically oriented clinicians capable of designing, implementing and assessing programs concerned with health service and mental health delivery broadly defined and (b) formulate research questions, design research studies, and write research proposals independently. The Clinical Qualifying Examination involves a demonstration of clinical skills while the Research Comprehensive Examination involves writing of a research proposal independently.

Requirements, Rationale, and Objectives
0 Total Credits
- Successful completion of Qualifying and Comprehensive Examination requirements reflects the program’s desire to ensure overall breadth of training in the field of Clinical Psychology. The two professional domains outlined above are consistent with this intent.

Admission to Candidacy
0 Total Credits
- The following are required to be admitted to Candidacy and enroll in Dissertation hours: Completion of most course work, except for Dissertation hours and Supervision Practicum. Successful completion of the Qualifying and Comprehensive Examinations. The Dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study. The American Psychological Association requires that graduate students be evaluated at least annually and provide written feedback to graduate students. Because Clinical Psychology involves the provision of mental health services to the public, special care must be taken to ensure that graduate students possess the requisite interpersonal sensitivity and skill. As a result, evaluation procedures within this track will focus not only on academic performance but also on: clinical proficiency; ethical and professional conduct; response to supervision; interpersonal behavior; and interpersonal functioning. The Clinical Psychology committee reserves the right to drop from the program graduate students who continue to exhibit serious difficulties in these behavioral domains and do not respond to feedback and efforts at remediation.

Master of Science in Clinical Psychology
0 Total Credits
- Graduate students enrolled in the Clinical Psychology PhD Program earn a Master of Science in Clinical Psychology in route to their doctorate unless they are admitted with an acceptable Master's degree. This is a nonterminal Master's degree available only to students in the Clinical Psychology PhD program.
As befits the nature of graduate training and the pursuit of a doctoral degree, graduate students in Clinical Psychology are expected to engage in independent learning throughout their graduate career. The completion of the Master's Thesis and the Doctoral Dissertation are two examples of independent learning in which all graduate students participate. In addition, depending upon their career goals, other experiences, such as directed readings or additional research projects, may be undertaken by graduate students.

Grand Total Credits: 86

Financial Information

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Fellowship Information

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https://funding.graduate.ucf.edu

Communication MA

College
College of Sciences

Department
Nicholson School of Communication and Media

Program Website
https://communication.ucf.edu/degree/communication/

Program Handbook Link
Communication MA

Program Contact Information

Sally Hastings, PhD
Associate Professor and MA Program Coordinator
Sally.Hastings@ucf.edu
Telephone: 407-823-1711
CMB 170H

Jamie Kosnosky and Dionna Jean-Baptiste
NSCM Graduate Admissions Specialists
nicholsongrad@ucf.edu
Telephone: 407-823-5595
CMB 203

Is this program available 100% online?
No
**Program Description**

UCF's Master of Arts in Communication prepares students for a wide range of professions in academia and the public and private sectors. This program, comprised of industry-leading scholars and professionals, provides students with the knowledge to succeed as expert communicators - all within a convenient and practical curriculum.

Housed in the Nicholson School of Communication and Media, the MA in Communication is part of UCF Downtown, a 21st-century campus with access to arts, culture, nightlife, and business. While some courses are offered online, required core courses and most electives are offered in a face-to-face or mixed-mode formats, typically Monday - Thursday evenings at UCF Downtown.

The MA degree program in Communication is a four-semester program for full-time students. Part-time students make take up to seven years to complete the program. Both thesis and nonthesis options are offered and both consist of a minimum of 33 semester hours of work.

**Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

**Required Courses**

9 Total Credits

- Complete all of the following
  - All required courses must be completed with a grade of B- or higher.
  - Complete the following:
    - COM5312 - Introduction of Communication Research (3)
    - COM6008 - Proseminar in Communication (3)
    - COM6401 - Communication Theory (3)

**Research Methods Concentration**

3 Total Credits

- Complete at least 1 of the following:
  - COM6303 - Qualitative Research Methods in Communication (3)
  - COM6304 - Quantitative Research Methods in Communication (3)

**Elective Courses**

18 Total Credits

- Complete all of the following
  - In addition to the courses listed below, special topics courses, study abroad courses, independent study, directed research, internship, and graduate-level courses taken outside the Nicholson School of Communication and Media may be counted as restricted electives, pending approval by the program director, for up to 6 credit hours total.
  - Earn at least 18 credits from the following:
    - ADV6209 - Advertising and Society (3)
    - COM5932 - Topics in Communication Theory and Research (3)
    - COM6046 - Interpersonal Communication (3)
    - COM6048 - Communication in Close Relationships (3)
    - COM6121 - Communication Management (3)
    - COM6145 - Organizational Communication (3)
    - COM6463 - Studies in Intercultural Communication (3)
    - COM6463 - Studies in Intercultural Communication (3)
    - COM6467 - Studies in Persuasion (3)
    - COM6468 - Communication and Conflict (3)
    - COM6535 - Communication Campaigns (3)
Thesis/Nonthesis Options
6 Total Credits

Complete all of the following

Thesis Option

- Earn at least 3 credits from the following types of courses:

  COM 6971 Thesis (minimum of 3 credit hours, can be taken individually) The thesis option requires a minimum of 3 hours of thesis credit and a successful defense of a thesis. Students may enroll in thesis hours after they have successfully completed the three core courses and their thesis committee has been approved by the department, college, and Graduate Studies. The student's permanent faculty adviser will chair their committee, which also will include two additional graduate faculty members in the Nicholson School of Communication and Media. One additional member, who is also a graduate faculty member, may be added from outside the NSCM. All members of the thesis committee are selected in consultation with the student's permanent faculty adviser. When a topic has been selected, students, in conjunction with their permanent adviser, will develop a thesis proposal. Copies of the proposal will be routed to members to their thesis committee and a proposal hearing scheduled. All student must pass a proposal hearing as well as a final oral defense of their thesis. Students who elect to write a thesis should become familiar with the university's requirements and deadlines for organizing and submitting the thesis.

Nonthesis Options

Complete 1 of the following

Nonthesis Option 1: Comprehensive Examination

- Complete all of the following

  - The nonthesis comprehensive examination option is a four-examination requirement that assesses students' coursework competency. Students who choose the comprehensive examination option must take one additional elective course (three credit hours) and successfully complete the comprehensive examinations. Upon completing their 18th hour in the program, students must select a permanent advisor and form a comprehensive exam committee. The examinations will cover research methods, communication theory, and elective areas selected together by the student with his or her comprehensive examination committee. In order to fulfill the comprehensive exam requirement, the student must earn a passing grade on all exams. If a student fails to pass any of the comprehensive exam area questions, they are allowed two additional attempts to satisfy the comprehensive exam requirement. Once an exam in an area is passed, the student does not have to sit for that exam area again. Students are allowed three attempts to satisfy the comprehensive exam requirement. Students are expected to refer to the Communication MA Graduate Program Handbook for the comprehensive examination protocol.

  - Earn at least 3 credits from the following types of courses:

    Additional Elective

Nonthesis Option 2: Applied Professional Project

- Complete all of the following

  - The nonthesis applied project option requires students to demonstrate their ability to apply the knowledge and skills learned in the graduate program to a problem/topic that integrates the range of communication theory, practice, and research presented throughout the program. Upon completing their 18th hours in the program, each student must select a permanent advisor and form an applied project committee. The student will work directly with a faculty adviser to develop a project and the adviser will supervise the project. Students and faculty advisors are encouraged to meet with committee members at the proposal and final defense stages. The grading system for the project is Pass/No Pass. Students who receive a grade of Pass will be allowed to graduate assuming all other requirements are met.

  - Earn at least 3 credits from the following:

    - COM6909 - Research Report (1 - 99)

Equipment Fee
0 Total Credits

- Full-time students in the Communication MA program pay a $16 equipment fee each semester that they are enrolled. Part-time students pay $8 per semester.

Independent Learning
0 Total Credits

- Students who elect the thesis option engage in independent learning through the design and implementation of original
research in the thesis process. Students who pursue the comprehensive examination option experience independent learning through their individual preparation for each of four comprehensive examinations. Students who pursue the applied project option engage in applied, original communication research in an applied setting. All students engage in independent learning in every Communication core course. A research paper or project is required in each of these classes. The papers and projects provide independent learning by requiring students to design and carry out research projects and develop analytical papers, some of which are submitted to conferences and/or journals for peer review. Internships and independent studies are also common opportunities for independent learning in the Communication MA program.

Grand Total Credits: 36

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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The majority of financial assistance provided by the Nicholson School of Communication and Media graduate program is granted through assistantships. The number of total Assistantships at the Master's level is limited, and varies year-to-year. Preference will be given to applicants who complete their application for admission prior to the January 15th priority deadline. It is the applicants' responsibility to ensure they have a complete application on file by the priority deadline. Applicants may indicate their interest in an assistantship in the application and follow up with the admission specialist or program coordinator. Students on assistantship are paid a stipend, receive tuition support, and are eligible for health insurance. For general information regarding assistantships at UCF, refer to the Assistantships (www.students.graduate.ucf.edu/assistantships) section of the College of Graduate Studies website.

The Nicholson School of Communication and Media offers primarily two types of assistantships:

- Graduate Teaching Assistants are assigned to work with faculty members and assist them with their teaching responsibilities. This includes assisting with large lecture classes, grading exams, compiling information for lectures, and working with students, as instructed, to help keep a class operating smoothly.
- Graduate Teaching Associates are graduate students who, after completing eighteen hours of their graduate program of study and the required university and department training, are assigned to teach their own sections of undergraduate courses. Typically, Graduate Teaching Associates teach SPC 1608 (Fundamentals of Oral Communication) or SPC 1603 (Fundamentals of Technical Presentation).

Conservation Biology Graduate Certificate

College

College of Sciences

Department

Department of Biology

Program Website

http://biology.cos.ucf.edu/graduate_index.php
Program Contact Information

Kate Mansfield PhD
Assistant Professor
kate.mansfield@ucf.edu
Telephone: 407-823-4431
BIO 402B

Is this program available 100% online?

No

Program Description

This certificate is no longer accepting applications effective Fall 2016.

The Graduate Certificate in Conservation Biology provides students with an excellent opportunity for cross-discipline training in conservation theory in a classroom setting with fieldwork in the laboratory portions of Biology. The Graduate Certificate in Conservation Biology emphasizes basic and applied conservation biology. The certificate offers an excellent opportunity for cross-discipline training that provides conservation theory in a classroom setting and valuable field work in the laboratory portions of the Biology courses. The Department of Biology provides basic courses on campus, while scientists at Walt Disney World’s Animal Kingdom offer applied courses on Disney property. Practical experience dealing with small animal populations is provided within Disney’s unique zoological setting.

The Conservation Biology certificate requires four graduate courses (12 credit hours) in conservation study.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor’s Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
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Institution Codes

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Degree Requirements

Required Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  Students should take two courses from Group A, one course from Group B, and the course from Group C. Group A BSC 5332 - Invasion Biology 3 Credit Hours PCB 5045 - Conservation Biology 4 Credit Hours PCB 5935 - Population Genetics 3 Credit Hours PCB 6053C - Restoration Ecology 4 Credit Hours PCB 6328C - Landscape Ecology 4 Credit Hours PCB 6480C - Quantitative Conservation Biology 4 Credit Hours PCB 6556 - Conservation Genetics 3 Credit Hours Group B BOT 6623C - Plant Ecology 4 Credit Hours PCB 5824 - Biogeography 4 Credit Hours ENY 5006C - Entomology 4 Credit Hours PCB 5326C - Ecosystems of Florida 5 Credit Hours PCB 5435C - Marine Ecology of Florida 4 Credit Hours PCB 6035C - Wetland Ecology 4 Credit Hours ZOO 5456C - Ichthyology 4 Credit Hours ZOO 5463C - Herpetology 4 Credit Hours ZOO 5475L - Field Ornithology 3 Credit Hours ZOO 5486 - Mammalogy 4 Credit Hours Group C PAZ 5235 - Zoo and Aquarium Biology Management 3 Credit Hours

Independent Learning
0 Total Credits

- Graduate students enrolled in the Graduate Certificate in Conservation Biology are expected to engage in independent learning throughout their enrollment. Independent learning is a key component of all of the courses approved for inclusion in this certificate, where emphasis is placed on the development of analytical skills and critical thinking. In addition, depending upon their career goals, other experiences such as directed readings, additional research projects, or internships may be undertaken by the students.

Grand Total Credits: 12

Corporate Communication Graduate Certificate
College of Sciences

Nicholson School of Communication and Media

Program Website
https://communication.ucf.edu/degree/corporate-communication/

Program Contact Information
Sally Hastings, PhD
Associate Professor and Program Coordinator
Sally.Hastings@ucf.edu
Telephone: 407-823-1711
CMB 170H

Is this program available 100% online?
No

Program Description
The Graduate Certificate in Corporate Communication offers industry-relevant training in creating, managing, and communicating corporate reputation. Coursework focuses on theory, research, and practical applications of principles related to corporate communication. The program is composed of three core graduate courses and three elective courses, totaling 18 credit hours, suitable for professionals working in the industry.

Housed in the Nicholson School of Communication and Media, the graduate Corporate Communication Certificate is part of UCF Downtown, a 21st-century campus with access to arts, culture, nightlife, and business. While some courses are offered online, required core courses and most electives are offered in a face-to-face or mixed-mode formats, typically Monday-Thursday evenings at UCF Downtown.

The program is composed of three required graduate courses and three elective courses that can be incorporated into a master's program of study in Communication or taken as an add-on to another graduate degree. The required and elective courses are drawn from a limited list of courses that reflect current professional development needs for corporate communication. Students must enroll in COM 6008 Pro-Seminar in Communication in their first fall semester.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

Graduate Admissions Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
9 Total Credits
- Complete the following:
  - COM6008 - Proseminar in Communication (3)
  - PUR6005 - Theories of Public Relations (3)
  - PUR6403 - Crisis Public Relations (3)

Electives
9 Total Credits
- Complete at least 3 of the following:
  - ADV6209 - Advertising and Society (3)
  - COM5312 - Introduction of Communication Research (3)
  - COM5932 - Topics in Communication Theory and Research (3)
  - COM6047 - Interpersonal Support in the Workplace (3)
  - COM6121 - Communication Management (3)
  - COM6145 - Organizational Communication (3)
  - COM6467 - Studies in Persuasion (3)
  - COM6468 - Communication and Conflict (3)
  - COM6525 - Communication Strategy and Planning (3)
  - MMC6202 - Legal and Ethical Issues for Communication (3)
  - MMC6307 - International Communication (3)
  - MMC6567 - New Media (3)
  - MMC6600 - Media Effects and Audience Analysis (3)
  - MMC6735 - Social Media as Mass Communication (3)
  - PUR6215 - Communicating Corporate Social Responsibility (3)
  - PUR6405 - Communication and Public Relations in Politics and Government (3)

Grand Total Credits: 18

Data Modeling Graduate Certificate

College
College of Sciences

Department
Department of Mathematics

Program Website
http://sciences.ucf.edu/math/graduate

Program Contact Information
Qiyu Sun
Professor
qiyu.sun@ucf.edu
Telephone: 407-823-4839
PO Box 161364

Is this program available 100% online?
Yes

UCF Online

Please Note: Data Modeling Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
**Program Description**

The Mathematical Science Graduate Certificate on Data Modeling is designed for students to gain knowledge of mathematical modeling and analytics techniques for data extraction, and to prepare their career on data analyst and data architect.

The mathematical science graduate certificate on data modeling requires taking 4 graduate courses (12 credit hours) with letter grade B- or higher, including 9 credit hours of required courses and 3 credit hours of elective courses.

**Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree**

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
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Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

Complete at least 3 of the following:

- MAP6195 - Mathematical Foundations for Massive Data Modeling and Analysis (3)
- MAT5712 - Scientific Computing (3)
- MAP5117 - Mathematical Modeling (3)
- MAP6168 - Mathematical Modeling II (3)
- MAP5336 - Ordinary Differential Equations and Applications (3)

Earn at least 3 credits from the following types of courses:

Students should take one additional core, or one graduate-level course on mathematical data modeling offered across the campus with the prior approval of the program director.

Grand Total Credits: **12**

**Digital Media MA**

**College**

College of Sciences

**Department**

Nicholson School of Communication and Media

**Program Website**

https://communication.ucf.edu/degree/digital-media-ma/

**Program Handbook Link**

Digital Media MA

**Program Contact Information**

**NSCM Graduate Student Services Coordinator**
nicholsongrad@ucf.edu  
Telephone: 407-823-5595  
Full-time Location: CMB 203, UCF Downtown  
Part-time Location: NSCM 238, UCF Main Campus
Is this program available 100% online?
No

Program Description
The MA program in Digital Media engages students in theoretical frameworks, methods, and critical media practice related to computational, interactive media. Through rigorous creative and research projects, the MA prepares students for continued study in a PhD program or employment within the industry. Working closely with an innovative faculty and technology partnerships in downtown Orlando, students will employ emerging technologies to communicate interactive narratives and experiences while also producing cutting-edge research in interactive media.

The Digital Media MA combines theory and practice to train the next generation of interactive media scholars and practitioners. Part of the first wave of UCF’s state-of-the-art downtown campus, students in this program have unique opportunities to participate in socially impactful research and artistic production. In the first year, students gain an introduction to aesthetic, theoretical, programming, and design approaches to interactive media, while gaining valuable foundations in research and storytelling. In the second year, students either pursue a thesis or studio production path, while learning about contemporary topics and emerging Artificial Intelligence (AI) research and design. Throughout the program, students are encouraged to create portfolio-ready pieces and/or present their work at conferences, thus preparing them for future professional, artistic, and scholarly success at the forefront of interactive media.

The program focuses on the following areas:

- **Theory and Practice**: The program trains students to pair theory and practice regardless of the path they choose through the program. Students will learn to develop theoretically sophisticated creative works and to pair creativity with research. This is accomplished by providing students with a solid foundation in aesthetic, design, programming, and theoretical approaches.

- **Narrative and Experience Design**: The program also emphasizes interactive storytelling and an understanding of how to design compelling experiences specifically for interactive media. This is accomplished through coursework on these subjects, and the time allotted in the program’s plan of study for students to develop in-depth creative and research projects that put the concepts learned in coursework into play.

- **Social Impact**: The MA in Digital Media also takes advantage of the creative, research, and business opportunities available through the program’s downtown Orlando location to provide students with a range of real-world, socially impactful research and creative experiences. Course projects and students’ own creative and research work benefit from the social, cultural, and economic context of a thriving downtown sector.

- **Professional and Scholarly Outcomes**: The MA program offers two equally in-depth and rigorous tracks—the Thesis or Studio Production paths. The required coursework provides the foundational skills and knowledge needed for students to create an exhibition or publication-ready projects.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites
Desirable background skills for this degree include familiarity with computer coding and/or digital design, but these are not required as coursework addresses these areas.

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Orlando, FL 32816-0112

Institution Codes
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TOEFL: 5233
ETS PPI: 5233

2022-2023 Graduate Catalog
Degree Requirements

Required Courses
24 Total Credits

- Complete the following:
  - DIG5487 - Media Aesthetics (3)
  - DIG5508 - Programming for Digital Media (3)
  - DIG5831 - Computational Media (3)
  - DIG6136 - Design for Interactive Media (3)
  - DIG6551 - Theory and Practice of Interactive Storytelling (3)
  - DIG6647 - History and Theory of Dynamic Media (3)
  - DIG6817 - Contemporary Topics in Interactive Media (3)
  - DIG6817 - Contemporary Topics in Interactive Media (3)

Thesis/Non-Thesis Option
12 Total Credits

- Complete 1 of the following
  - Thesis Option: 6 Credit Hours of Thesis and 6 Credit Hours of Electives
  - Complete all of the following
    - Students choosing the Thesis option will take all required courses, along with two electives (one in Fall and one in Spring of their second year in a typical program of study). The electives may come from any COM, DIG, or FIL prefix or other as approved by the graduate coordinator. Many graduate-level courses in the College of Arts and Humanities can be used as electives, based on an adviser-approved plan of study. These courses must be selected to ensure that at least one-half of the courses in the student's plan of study are taken at the 6000 level. In addition, students will take 6 hours of DIG 6971: Thesis credit (3 in Fall and 3 in Spring in a typical program of study). Each candidate for the Master of Arts submits a thesis prospectus and preliminary bibliography on a topic selected in consultation with the adviser. The formal thesis is initiated by the preparation of a proposal that meets both departmental and university requirements for the thesis. Prior to enrollment into thesis credit hours, the adviser, in consultation with the student, designates a Thesis Committee to be further approved by the College Graduate of Studies. This committee is chaired by the adviser and includes two or more additional faculty members from the Nicholson School of Communication and Media. The members of the student’s thesis committee judge the proposal as the preliminary step to beginning the thesis. This committee must approve the Thesis Proposal before academic credit can accrue. The thesis is a formal written document. The introduction cites similar, related, and antecedent work. The body explains the purposes of the project, the method of its production, and any evaluation that was performed. The conclusion includes plans for future work. The thesis also includes an archival copy of the resulting creative product. Both the thesis and the creative product must be delivered in digital form, acceptable by the UCF library according to its standards for digital dissertations and theses.
    - Earn at least 6 credits from the following:
      - DIG6971 - Thesis (1 - 99)
    - Earn at least 6 credits from the following types of courses:
      - Electives
      - Thesis Defense
      - In addition to a written thesis, the final step in completing the thesis requirement is an oral defense before the thesis committee. Candidates must present their creative or research work and explain its creation in an oral defense. These presentations are made to the student's committee in a public meeting that other faculty and students may attend.

- Studio Production, Non-Thesis Option
  - Complete all of the following
    - Students selecting the Studio Production option complete 6 required credit hours: DIG 6571: Studio 1 (3 credit hours) and DIG 6909: Research Report (3 credit hours), and an additional 6 credit hours of electives. The electives may come from any COM, DIG, or FIL prefix or other as approved by the graduate coordinator. Many graduate-level courses in the College of Arts and Humanities can be used as electives, based on an adviser-approved plan of study. These courses must be selected to ensure that at least one-half of the courses in the student's plan of study are taken at the 6000 level.
    - Complete the following:
      - DIG6524 - Studio 1 (3)
    - Earn at least 3 credits from the following types of courses:
      - DIG 6909 - Research Report
    - Earn at least 6 credits from the following types of courses:
      - Electives

Grand Total Credits: **36**
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Feature Film Production MFA

College
College of Sciences
Department
Nicholson School of Communication and Media
Program Website
https://communication.ucf.edu/degree/film-production-mfa/
Program Handbook Link
Feature Film Production MFA
Program Contact Information
NSCM Graduate Student Services Coordinator
nicholsongrad@ucf.edu
Telephone: 407-823-5595
Full-time Location: CMB 203, UCF Downtown
Part-time Location: NSCM 238, UCF Main Campus
Is this program available 100% online?
No
Program Description

The Feature Film Production MFA is a terminal degree, the highest degree awarded to filmmakers or film artists. It is a highly selective and rigorous professional film production program for visual artists and film practitioners who demonstrate exceptional artistic and intellectual prowess, evidence of significant professional promise and a commitment to the expressive potential of digital filmmaking and the exploration of non-traditional modes of distribution. The Feature Film Production MFA produces graduates with mastery of storytelling through the digital medium as it encourages the candidate to find his or her personal style. Entrepreneurial in spirit, the program emphasizes story, performance, aesthetic choice, business, and creative thinking. When participation is committed and complete, the program develops graduates who can compete in the worlds of national and international independent filmmaking.

Students will pursue a modality - narrative, documentary, or experimental - for their thesis film, or body of work, during their first two semesters in the program. All MFA candidates must take the core required courses but will choose electives that best match their modalities and interests. Upon completion of the degree, each student will have produced a microbudget digital feature film or equivalent body of work that meets standards outlined in the Program Graduate Handbook. Students will also have prepared a marketing strategy for its distribution and exhibition. Graduates in this program are responsible to funding their own their own thesis projects, including fundraising and soliciting investors where needed. Historically, graduates have produced feature films within the budget range of 5-25K. Budgetary needs can vary greatly depending on the scope and modality of the thesis. Consulting with the thesis committee regarding the appropriate budgetary scale is advised for all students. Budgets exceeding 50K are strongly discouraged.

We welcome innovative approaches within the digital cinema paradigm that reimagine how new technologies can create alternative performances to exploit the tension between narrative and experimental storytelling, creating a new agency for actors and new expectations for audiences.

Program Prerequisites

A BA or BFA in film production is preferred, however, degrees in the following areas are acceptable if accompanied by a strong video portfolio:

- Animation
- Art
- Cinema Studies
- Communication
- English/Creative Writing
- Game Design
- Graphic Design
- Illustration
- Journalism
- Photography
- Radio/TV

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
30 Total Credits

- Complete all of the following
  - Complete the following:
    - FIL5406 - Theories of Film Production (3)
    - FIL5800 - Research Methods in Film and Digital Media (3)
    - FIL6454 - Microbudget Production Design (3)
    - FIL6596 - Advanced Directing Workshop for Film and Digital Media (3)
    - FIL6619 - Guerilla Marketing and Models of Distribution (3)
    - FIL6644 - Microbudget Pre-Production (3)
    - FIL6649 - Microbudget Post-Production (3)
    - FIL6673 - Arts and Media Entrepreneurship (3)
Earn at least 6 credits from the following:

- FIL5924 - Graduate Seminar (1)

Note: FIL 5924 Graduate Seminar is 1 Credit Hour to be taken each semester for a total of 6 credits.

Internal Elective Courses
9 Total Credits

- Complete all of the following
  - Students select a minimum of 9 credit hours of internal electives that reflect their mode of filmmaking interest (narrative, documentary, or experimental). More than 9 credit hours of internal electives may be taken to substitute for external electives if approved by the graduate program coordinator. Students in other graduate programs are required to receive instructor consent before enrolling.

- Complete at least 3 of the following:
  - FIL5141C - Feature/TV Writing (3)
  - FIL5371C - Documentary Production II (3)
  - FIL5419 - Developing the Film Screenplay (3)
  - FIL5419 - Developing the Film Screenplay (3)
  - FIL6146 - Screenplay Refinement (3)

Note: FIL 5907 Independent Study and FIL 5917/5918 Directed Research may be taken for a total of no more than six credit hours each.

External Electives
12 Total Credits

- Complete all of the following
  - Students select a minimum of 12 credit hours of external electives that align with their particular interests, outside the MFA in Feature Film Production. Choice of external electives should be made after discussion with the thesis advisor or graduate coordinator. Other electives related to the thesis topic may be approved by the graduate coordinator. Not all of these courses are offered every term, prerequisites and consent of instructor may be required.

- Complete at least 4 of the following:
  - ADV6209 - Advertising and Society (3)
  - ARH5897 - Advanced Seminar in Art History (3)
  - ART5280 - Serial Content (3)
  - ART6683 - Time Arts (3)
  - ART6911C - Studio Concentration (3)
  - COM5932 - Topics in Communication Theory and Research (3)
  - COM6046 - Interpersonal Communication (3)
  - COM6048 - Communication in Close Relationships (3)
  - COM6121 - Communication Management (3)
  - COM6145 - Organizational Communication (3)
  - COM6463 - Studies in Intercultural Communication (3)
  - COM6467 - Studies in Persuasion (3)
  - COM6468 - Communication and Conflict (3)
  - DIG5366C - Animation and Visual Effects Production II (3)
  - DIG5378C - Editing for Animation and Visual Effects I: Theory and Production (3)
  - DIG5386C - Animation and Visual Effects Production I (3)
  - DIG5439C - Script and Story Development for Animation and Visual Effects (3)
  - DIG5487 - Media Aesthetics (3)
  - DIG5865 - The History of Animation and Visual Effects (3)
  - DIG6136 - Design for Interactive Media (3)
  - DIG6365C - Media and Music for Animation and Visual Effects (3)
  - DIG6379C - Editing for Animation and Visual Effects II: Practical Editing (3)
  - DIG6551 - Theory and Practice of Interactive Storytelling (3)
  - ENT5016 - New Venture Design (3)
  - ENT5206 - New Venture Implementation (3)
  - ENT5619 - Creativity and Entrepreneurship (3)
  - MMC6202 - Legal and Ethical Issues for Communication (3)
  - MMC6307 - International Communication (3)
  - MMC6507 - New Media (3)
  - MMC6600 - Media Effects and Audience Analysis (3)
  - MMC6612 - Communication and Government (3)
  - MMC6735 - Social Media as Mass Communication (3)
  - PUR6215 - Communicating Corporate Social Responsibility (3)
  - PUR6405 - Communication and Public Relations in Politics and Government (3)
  - SPC6340 - Teaching Communication (3)
  - Course Not Found

Thesis
12 Total Credits

- Complete all of the following
  - Earn at least 12 credits from the following:
    - FIL6971 - Thesis (1 - 99)
Before undertaking the thesis project, candidates must meet with the thesis advisory committee to submit and discuss the proposed project and obtain the committee's approval. The thesis requires intensive applied learning in order to complete a feature-length project and/or body of work. The student cannot enroll in thesis hours until the thesis advisory committee has been selected and approved. Once a student has begun to take thesis hours, they must enroll in at least one thesis hour for each remaining term until graduation. Students may spread out thesis hours any way they wish but are advised to follow recommendations in the program handbook. The thesis project has a strong research component both in the initial development phase and in the creation of the distribution and marketing plan for the project. In addition to creating the feature film or body of work, the student must write an accompanying thesis paper that meets all university requirements (see ETD Requirements). The final stage of the curriculum serves as a bridge to the professional world and supports the entrepreneurial philosophy of the program. The thesis project must be reviewed by the faculty adviser throughout the production process, and meet agreed upon criteria within a stated time frame. Once the thesis project is completed, candidates must have a screening or exhibition of the work and meet with the thesis advisory committee for final approval and oral defense.

Equipment Fee
0 Total Credits

- Students in the Feature Film Production MFA program pay a $90 equipment fee each semester that they are enrolled. Courses containing a production element may charge an additional materials and equipment fee.

Grand Total Credits: 63

Financial Information

Graduate students may receive financial assistance through a limited number of competitive fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Financial Mathematics Graduate Certificate

College
College of Sciences

Department
Department of Mathematics

Program Website
http://sciences.ucf.edu/math/graduate

Program Contact Information
Qiyu Sun
Professor
qiyu.sun@ucf.edu
Telephone: 407-823-4839
PO Box 161364

Is this program available 100% online?
Yes
UCF Online

Please Note: Financial Mathematics Graduate Certificate may be completed fully online although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Mathematical Science Graduate Certificate on Financial Mathematics is designed for students to gain knowledge of mathematical finance and to pursue careers in financial services industry and regulatory agency.

The mathematical science graduate certificate on financial mathematics requires taking 4 graduate courses (12 credit hours), including 9 credit hours of required courses and 3 credit hours of elective courses.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete at least 3 of the following:
  - MAP5641 - Financial Mathematics I (3)
  - MAP6646 - Risk Management for Financial Mathematics (3)
  - MAP5612 - Computational Methods for Financial Mathematics I (3)
  - MAP606 - Differential Equations for Financial Mathematics (3)
  - MAP6195 - Mathematical Foundations for Massive Data Modeling and Analysis (3)

Elective Courses
3 Total Credits

- Complete all of the following
  - Students should take one additional core course, or one of the following four courses offered by the department of mathematics or one graduate-level course related to mathematical finance offered across the campus with the prior approval of the program director.
  - Earn at least 3 credits from the following:
    - MAP6642 - Financial Mathematics II (3)
    - MAP6616 - Computational Methods for Financial Mathematics II (3)
    - MAP5931 - Proseminar for Financial Mathematics (1)
    - MAP6207 - Optimization Theory (3)

Grand Total Credits: 12

Forensic Science MS
Is this program available 100% online?

Yes

UCF Online

Please note: Forensic Science MS may be completed fully online by domestic students, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in the in-person version of this program and a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

The Master of Science in Forensic Science program is designed to service the needs of both practicing professionals and full-time students who desire an advanced program of study in forensic science. The program is comprised of three concentrations: Forensic Analysis, Forensic Biochemistry and Forensic Professional. The Forensic Biochemistry and Forensic Analysis concentrations require the student to perform original research and defend a written thesis. The Forensic Professional concentration is a non-thesis option comprised of course work and an independent study capstone project.

Forensic Science is a highly interdisciplinary science, as reflected in the following programs of study. The interdisciplinary nature of the program makes it imperative that students seek advising from faculty members on the appropriateness of this program towards their future career as well as the content of courses to ensure that they have the appropriate background to master the course content.

Thesis Options

The grounding in scientific research methodology provided by the thesis requirement is a central focus of the thesis-based concentrations. The Forensic Analysis and Biochemistry concentrations are comprised of 32 credit hours of study beyond the BS degree. Students will conduct research either on site or at the professional laboratories where they work. In either case, a member of the UCF Forensic Science faculty will act as research adviser and approve the research topic. This research culminates in the writing and presentation of the thesis.

The student’s research adviser will select the thesis examination committee, consisting of two UCF faculty members and at least one other acknowledged forensic expert in the field. The student will present his/her thesis for examination by the committee. The thesis must be judged worthy of publication by the review committee and may not be submitted for examination until approved. For students choosing to conduct research at non-UCF sites, the thesis adviser may visit the student’s laboratory where the research is to be performed, before the research begins and on a regular basis until the work is complete.

- **Forensic Analysis Concentration:** The Forensic Analysis concentration emphasizes the application of modern chromatographic, spectroscopic and micro-analytical techniques to problems in forensic science.
- **Forensic Biochemistry Concentration:** The Forensic Biochemistry concentration has a strong biochemistry-DNA focus to serve the needs of supervisory personnel in DNA sections of crime laboratories. National DNA standards mandate that such personnel have advanced degrees.

Nonthesis Option

The nonthesis concentration is specifically designed for the forensic analyst who currently holds employment in an operational forensic laboratory or has previously worked for a minimum of three years in an operational forensic laboratory. Applicants who do not meet these criteria must apply for one of the thesis-based concentrations. This specialized program option is not designed for international applicants.

- **Forensic Professional Concentration:** The Forensic Professional concentration is comprised of 34 credit hours of study beyond the bachelor of science degree but does not require an original laboratory-based research project. The Forensic Professional concentration culminates in a one-credit-hour independent study capstone project performed under the direction of one of the faculty members in the program.

Program Overview

The Forensic Science MS degree is comprised of 32 or 34 credit hours of study beyond the BS degree with an intensive specialization in one of three concentrations: Forensic Analysis, Forensic Biochemistry or Forensic Professional. Full-time students should complete the degree in two years of continuous full-time study, while part-time students will generally finish the degree in four years.

The program in Forensic Analysis and Forensic Biochemistry is research-based and requires original and independent research resulting in a written thesis to be defended before a committee consisting of two UCF graduate faculty members and at least one other acknowledged forensic expert in the field. These concentrations require 32 credit hours, including 9 credit hours of required courses, 15 credit hours of concentration courses, and 8 credit hours of Thesis.

The program in Forensic Professional requires 34 credit hours, including 9 hours of required courses and 24 hours of elective courses and one credit hour of independent study as the capstone experience. This concentration does not require an original laboratory-based research project. Students not in residence at UCF should consult the catalog for courses with online offerings.

Students with undergraduate degrees in chemistry, biochemistry, biology, forensic science, statistics and physics are encouraged to apply. Students applying to this program with a forensic science undergraduate degree, please be aware that this program is designed for students interested in pursuing a career in forensic chemistry, forensic biology, forensic biochemistry applications.

Students interested in pursuing careers in any of the following forensic disciplines should apply to a more appropriate program:

- Forensic Psychology, you should apply to a graduate Psychology program.
- Forensic Anthropology, you should apply to a graduate Anthropology program.
- Crime Scene Investigation, you should apply to a graduate Criminal Justice program.
- Forensic Pathology or Medical Examination, you should apply to a medical school.
- Forensic Engineering, you should apply to a graduate Engineering program.

**Total Credit Hours Required: 32-34 Credit Hours Minimum beyond the Bachelor's Degree**
Program Prerequisites
A bachelor's degree in Chemistry, Biochemistry, Molecular Biology, Physics, Statistics, Forensic Science, or another physical science, based on at least 30 hours of college-level science subjects, which will provide the background required to be successful in this program.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 523

Degree Requirements

 Required Courses
9 Total Credits

Complete the following:

- CHS5504 - Topics in Forensic Science (3)
- CHS5596 - The Forensic Expert in the Courtroom (3)
- CHS6513 - Quality Assurance for Forensic Scientists (3)

Thesis/Nonthesis Option
23 - 25 Total Credits

Complete 1 of the following

Thesis Option

Complete all of the following

- Earn at least 8 credits from the following types of courses:
  - CHS 6971 Thesis The Forensic Analysis and Forensic Biochemistry concentrations require the student to conduct original research and successfully defend a written thesis.

Program Concentrations

Complete 1 of the following

Forensic Analysis Concentration:

- Earn at least 15 credits from the following:
  - STA5206 - Statistical Analysis (3)
  - CHM5235 - Applied Molecular Spectroscopy (3)
  - CHM6492 - Atomic Spectroscopy (3)
  - CHS6546 - Forensic Analysis of Ignitable Liquids (3)
  - CHS6545 - Forensic Analysis of Explosives (3)
  - CHS5937 - Special Topics (3)

Forensic Biochemistry Concentration

Complete all of the following

- Complete the following
  - STA5206 - Statistical Analysis (3)
  - CHS5235 - Forensic Molecular Biology (3)
  - CHS6535L - Forensic Analysis of Biological Materials (3)
  - CHS6536 - Population Genetics and Genetic Data (3)
  - BCH6740 - Advanced Biochemistry (3)

Nonthesis Option/Forensic Professional Concentration

Complete all of the following

- Students in the Forensic Professional concentration are required to take 24 credit hours selected from the list below with approval of their faculty adviser and complete the Capstone course.
- Earn at least 24 credits from the following:
  - STA5206 - Statistical Analysis (3)
  - CHM5235 - Applied Molecular Spectroscopy (3)
  - CHM6492 - Atomic Spectroscopy (3)
Earn at least 1 credits from the following types of courses:

- CHS 6908 - Independent Study

The capstone experience in the Forensic Professional concentration requires one credit hour of Independent Study, which culminates in the submission of a required report on a pre-approved topic. This study will comprise either (1) a review of the current literature on a particular forensic science research topic area, or (2) a holistic case study dealing with a particular criminal case in which forensic evidence played a significant role.

Equipment Fee
0 Total Credits

- Full-time students in the Forensic Science MS program pay a $90 equipment fee each semester that they are enrolled. Part-time students pay $45 per semester.

Independent Learning
0 Total Credits

- Students in the Forensic Analysis and Forensic Biochemistry concentrations are required to conduct original research and defend a written thesis. Students in the Forensic Professional concentration complete a capstone experience that requires independent research and a report.

Grand Total Credits: 32 - 34

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
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https://funding.graduate.ucf.edu

Human Factors and Cognitive Psychology PhD
**College**
College of Sciences

**Department**
Department of Psychology

**Program Website**
https://sciences.ucf.edu/psychology/graduate/ph-d-human-factors-and-cognitive-psychology/

**Program Handbook Link**
Human Factors and Cognitive Psychology PhD

**Program Contact Information**

James Szalma PhD  
Professor  
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Telephone: 407-823-0920  
PSY 351

Mikala Armioia  
Mikala.Armioia@ucf.edu  
Telephone: 407-823-3919  
PSY 301E

Is this program available 100% online?
No

**Program Description**

A PhD degree track in Human Factors and Cognitive (HFC) Psychology, accredited by the Human Factors and Ergonomics Society, is offered to those with a baccalaureate or master's degree in psychology or an allied area. The track seeks to develop the capacity to design, conduct, and apply human factors and cognitive psychology research in a variety of professional and academic settings. It is patterned on the scientist-practitioner model of the American Psychological Association (APA) and adheres to guidelines established by the committee for Education and Training of APA's Division 21 (Applied Experimental and Engineering Psychology).

The PhD degree track in HFC Psychology seeks to develop the capacity to design, conduct, and apply applied experimental and human factors research in a variety of professional settings. Students receive training in the content and techniques of human factors psychology-including statistical and quantitative procedures, experimental design, survey methods, computer techniques, and other research methodologies. Students are encouraged to also select a concentration area, which they complete as part of their required elective coursework. Examples include human-computer interaction, human-machine-environment interface, human performance, human factors in simulation and training, cognitive neuroscience, or other areas of interest with advisor authorization. In addition to the course requirements, students must demonstrate their knowledge and skills by completing the five competency domains. Finally, a dissertation representing a significant research contribution to the field is required.

We continue to improve the curriculum to adapt to the changing professional and societal demands and to offer the best graduate education and training in human factors and cognitive psychology. In particular, we have modified our curriculum and program requirements and introduced project and outcome-based competency assessments. These changes have helped to focus students' attention on their respective programs of research while simultaneously developing the knowledge and skill sets required to be Ph.D. scientist/practitioners in human factors and cognitive psychology.

Students and graduates of the HFC program have served the local community by improving the enjoyment, comfort, and safety of Walt Disney World entertainment rides, serving as an educational professional at several local colleges and universities and consulting at several government agencies and private industries. To date, our doctoral program continues to be the largest and one of the most prominent in the nation. Both faculty and students have received numerous honors and awards from the Human Factors and Ergonomics Society.

For students who enter with a baccalaureate degree, the Human Factors and Cognitive track in the Psychology PhD program requires a minimum of 75 credit hours, and students may earn the MA degree en route to the PhD by completing all of the requirements of the PhD except for dissertation. For students who already have a master's degree in Psychology, the MA is not available. Students who enter with a master's degree in psychology may be allowed to waive up to 30 hours of graduate course work to the doctoral program with approval of the program faculty, and will also be required to complete a minimum of 60 semester hours at UCF.

**Total Credit Hours Required: 75 Credit Hours Minimum beyond the Bachelor's Degree**

For students who already have a master's degree in psychology, the number of credit hours will depend on the number of credit hours transferred or waived. However, all students in the program must complete 15 credit hours of dissertation.
Program Prerequisites

Degree(s) should be in psychology or an allied area.

Evidence of successful completion of undergraduate courses in statistics and general areas of experimental psychology.

Students are not normally admitted to the program without having completed a minimum amount of basic preparation in content related to experimental psychology. This preparation is judged on an individual basis but typically consists of at least 18 semester hours in the following:

- Courses in research methods, computer applications, and statistical methods.
- General experimental psychology courses, e.g., learning, physiological, perception, human learning, cognition, motivation, and measurement.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses

42 Total Credits

- Complete all of the following
  - Students are required to achieve a minimum grade of B- in each core curriculum course. Students who take PSB 6328 and PSB 6348 must achieve a B- in both courses. If students earn a C+ or lower in any core curriculum course, they will be placed on academic probation and they may be required to retake the course or to complete remedial work required by the HFC committee in consultation with the student’s adviser. If students earn a C+ or lower in two or more core curriculum courses they will be subject to immediate review by the Program Committee and may be dismissed from the program. It is anticipated that in most cases earning a C+ or lower in two core curriculum courses will result in dismissal from the program.
  - Complete the following:
    - EXP5256 - Human Factors I (3)
    - EXP6257 - Human Factors II (3)
    - EXP6258 - Human Factors III (3)
    - EXP5208 - Sensation and Perception (3)
    - EXP6116 - Visual Performance (3)
    - EXP6255 - Human Performance (3)
    - EXP6506 - Human Cognition and Learning (3)
    - EXP6541 - Advanced Human Computer Interaction (3)
    - INP7089 - Human Factors Professional Issues (3)
    - PSB5005 - Physiological Psychology (3)
    - PSY7217C - Advanced Research Methodology I (4)
    - PSY7218C - Advanced Research Methodology II (4)
    - PSY7219C - Advanced Research Methodology III (4)

Elective Courses

18 Total Credits

- Complete all of the following
  - Students should choose electives in concentrated course groupings: for example, human-machine systems, performance measurement and evaluation, simulation and training, or quantitative methods. Other elective course groupings may be developed for the student’s specific interests. Students may choose to satisfy these elective requirements by taking courses outside the Psychology Department that can serve their multidisciplinary needs. Courses outside of the Department that have already been approved as electives are contained in the list below. A student who wishes to use courses that are not included on this list may seek approval by petitioning the HFC Faculty Committee through their academic adviser. Students may take up to 12 credit hours of Directed Research, however, it is highly recommended that they take elective courses that are related to their discipline from other graduate programs or departments at UCF. Electives may include but are not limited to the following courses:
Complete at least 6 of the following:
- DEP5057 - Developmental Psychology (3)
- DIG6432 - Transmedia Story Creation (3)
- EINS5248 - Ergonomics (3)
- EINS5251 - Usability Engineering (3)
- EINS5255C - Interactive Simulation (3)
- EINS5255C - Interactive Simulation (3)
- EME6613 - Instructional System Design (3)
- EME6614 - Instructional Game Design for Training and Education (3)
- EXP5254 - Human Factors and Aging (3)
- IDS6916 - Simulation Research Methods and Practicum (3)
- ID65166 - Modeling and Simulation Systems (3)
- ID65147 - Perspectives on Modeling and Simulation (3)
- DIG5875C - Introduction to Modeling and Simulation (3)
- ID56149 - Human Systems Integration for Modeling and Simulation (3)
- ID56149 - Modeling and Simulation for Test and Evaluation (3)
- Course Not Found
- INP7310 - Organizational Psychology I (3)
- Course Not Found
- PSB6328 - Psychophysiology (3)
- PSB6348 - The Neuroanatomical Basis of Psychological Function (3)
- PSB6352 - Neuroimaging Design and Analysis Methods (3)
- PSB7349 - Advanced Topics in Cognitive Neuroscience (3)
- SPS5605 - Building and Improving Relationship and Emotional Intelligence (3)
- SOP5059 - Advanced Social Psychology (3)

EXP 6939 - Teaching Seminar - 3 Credit Hours may also be taken

Concentration in Cognitive Neuroscience (Optional)
0 Total Credits
- The Human Factors and Cognitive Psychology PhD Program offers students opportunities for both lab and course-based training in Cognitive Neuroscience. To support cognitive neuroscience research training, the Department of Psychology maintains state-of-the-art research facilities, including space and equipment for electroencephalography/event-related potentials (EEG/ERP), functional near-infrared spectroscopy (fNIRS), eye tracking, pupillometry, heart-rate variability, respiration, and electrodermal activity, as well as external collaborations to support functional magnetic resonance imaging (fMRI). In addition, the HFC Program also offers a course-based concentration in Cognitive Neuroscience with the following curriculum: A student who elects to complete the concentration must achieve a minimum grade of B- in each course. PSB 6328 - Psychophysiology 3 Credit Hours PSB 6348 - The Neuroanatomical Basis of Psychological Function 3 Credit Hours PSB 6352 - Neuroimaging Design and Analysis Methods 3 Credit Hours PSB 7349 - Advanced Topics in Cognitive Neuroscience 3 Credit Hours Select 6 credit hours of elective courses from the list above. Note: Admission to these courses is not guaranteed, but is contingent on the decision of the department, college, and instructor of record for the course.

Dissertation
15 Total Credits
- Earn at least 15 credits from the following types of courses:
  PSY 7980 Doctoral Dissertation

Grand Total Credits: 75

Financial Information
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Fellowship Information

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https://funding.graduate.ucf.edu

Industrial and Organizational Psychology MS

College
College of Sciences

Department
Department of Psychology

Program Website
http://sciences.ucf.edu/psychology/graduate/ms-io/

Program Handbook Link
Industrial and Organizational Psychology MS

Program Contact Information
Michael Chetta, PhD
Lecturer
michael.chetta@ucf.edu
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OTC 600 Bldg, Office 259

Dani Draper
danielle.draper@ucf.edu
Telephone: 407-823-2458
PSY 301G

Is this program available 100% online?
No

Program Description
The Master of Science in Industrial and Organizational Psychology program focuses on the application of psychological principles to organizations and emphasizes the major areas of selection and training of employees, applied theories of organizational behavior including models of motivation, job satisfaction, and productivity; test theory and construction; assessment center technology; statistics and experimental design and a variety of current topics. Industrial and Organizational Psychology graduates are involved in many issues of critical importance to society including fairness in the selection and treatment of employees, the creation of work environments that maximize the satisfaction and productivity of employees, and the study of technological influences on human performance.

The MS degree program in Industrial and Organizational Psychology is a four-semester program for full-time students. Both thesis and nonthesis options are offered and both consist of a minimum of 38 semester hours of work.

Total Credit Hours Required: 38 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites
A bachelor's degree with a major in psychology or allied area, or a baccalaureate degree with the completion of undergraduate courses in statistics and research methods, and preference of four additional upper-division psychology courses (12 credit hours)
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
26 Total Credits

- Complete the following:
  - INP6005 - Overview of Research in Industrial and Organizational Psychology (3)
  - INP6058 - Job Analysis and Performance Appraisal (3)
  - INP6080 - Ethical, Legal, and Professional Issues in Industrial and Organizational Psychology (3)
  - INP6317 - Work Motivation and Job Attitudes (3)
  - INP6318 - Recruitment, Placement and Selection (3)
  - PSY6216C - Research Methodology (4)
  - PSY6308C - Psychological Testing (4)
  - INP6072 - Survey Research Methods and Program Evaluation in Indust. and Org. Psychology (3)

Electives
6 Total Credits

- Complete at least 2 of the following:
  - INP6215 - Assessment Centers and Leadership (3)
  - INP6605 - Training and Team Performance (3)
  - SOP5059 - Advanced Social Psychology (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - INP 6971
  - Nonthesis Option (Restricted Electives: Students will select with their adviser)
    - Complete at least 2 of the following:
      - INP6933 - Seminar in Industrial and Organizational Psychology (3)
      - INP6945C - Industrial Psychology Practicum (3)
      - INP6091 - Industrial and Organizational Psychology Consulting Practice (3)

Grand Total Credits: 38

Industrial and Organizational Psychology PhD

College

College of Sciences

Department

Department of Psychology

Program Website

https://sciences.ucf.edu/psychology/graduate/ph-d-io/
Program Handbook Link

Industrial and Organizational Psychology PhD

Program Contact Information

Mark Ehrhart, PhD
Professor
mark.ehrhart@ucf.edu
Telephone: 407-823-1314
PSY 329

Is this program available 100% online?

No

Program Description

The Industrial and Organizational Psychology track in the Psychology PhD program develops competency through research and training for the application of psychological principles to organizations. The degree is patterned on the scientist-practitioner model of the American Psychological Association (APA).

Program graduates are involved in many issues of critical importance to society, including fairness in the selection and treatment of employees, the creation of work environments that maximize the satisfaction and productivity of employees, and the study of technological influences on human performance.

The doctoral program provides students with training consistent with the scientist-practitioner model. A key assumption of the program is that every graduate must be a highly competent scientist who can contribute to both the science and practice of the discipline.

You can view our Industrial and Organizational Psychology Doctoral Program Handbook in the link above.

The Psychology PhD program in Industrial and Organizational Psychology (I/O) requires four to five years of full-time study beyond the baccalaureate and three to four years beyond the masters. The first few years are devoted to course work and the final year to the doctoral dissertation.

The I/O program requires a minimum of 75 credit hours of graduate study for students who enter the program with a baccalaureate degree. The nature of this study is determined by the I/O Area Program Committee.

Total Credit Hours Required: 75 Credit Hours Minimum beyond the Bachelor’s Degree

Program Prerequisites

Bachelor's or master's degree in Psychology or another allied area.

Evidence of successful completion of undergraduate courses in statistics and in the general area of experimental psychology.

College of Graduate Studies Contact Information

ggradadmissions@ucf.edu
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
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ETS PPI: 5233

Degree Requirements

I/O Area Courses
30 Total Credits

- Complete the following:
  - INP6005 - Overview of Research in Industrial and Organizational Psychology (3)
  - INP7214 - Industrial Psychology I (3)
  - INP7310 - Organizational Psychology I (3)
  - INP7081 - Professional Issues in Industrial and Organizational Psychology (3)
  - PSY7315 - Psychometric Theory and Practice (3)
  - PSY7217C - Advanced Research Methodology I (4)
Psychology Field Courses
6 Total Credits
- Complete the following:
  - SOP5059 - Advanced Social Psychology (3)
  - EXP6506 - Human Cognition and Learning (3)

Research Courses
6 Total Credits
- Earn at least 6 credits from the following types of courses:
  - INP 6933 - Seminar in Industrial and Organizational Psychology 3 Credit Hours (taken twice) or INP 6971 - Thesis 3 Credit Hours (taken twice)

Teaching Experience
3 Total Credits
- Complete all of the following
  - Earn at least 3 credits from the following:
    - EXP6939 - Teaching Seminar (3 - 99)

  All students must successfully teach a minimum of one undergraduate course as instructor of record prior to completing the I/O Psychology PhD degree. Fulfillment of the Teaching requirement involves first taking the UCF College of Graduate Studies online and face-to-face GTA Training and EXP 6939 - Teaching Seminar. In addition, students need to serve as instructor of record for an undergraduate class at UCF. First-time students as instructor of record must submit a syllabus, lecture notes, examinations, two course evaluations (mid and end-of-semester), as well as written feedback from the student's major professor or members of the student's doctoral committee who directly observed or viewed videotapes of at least one lecture. Students will be required to administer student evaluations to their class mid-way through the semester so that they can receive feedback and make any necessary changes. The student's adviser will provide ratings of the student's performance as instructor of record at the end of the semester. If the adviser believes that the student has not performed satisfactorily, the adviser will determine remediation specific to the student's weakness (e.g., presentation skills). This remediation is not limited to, but may include, the following: serving as a guest lecturer for another instructor of record, taking a course or seminar, or teaching another semester, as determined by the student's adviser. Fulfillment of the traditional Teaching requirement is intended to provide students with (a) additional training and opportunities to develop instructional skills consistent with university-level instruction, (b) the opportunity to receive and react to constructive comments concerning their developing instructional skills, (c) additional opportunities to learn and develop expertise in using newly developed technology and methods relevant to university-level instruction (e.g., active learning groups, computer-assisted technology, software programs that facilitate and complement traditional instructional activities), and (d) additional expertise in select areas of psychology to prepare them for future professional instructional opportunities following graduation from the university.

Elective Courses
15 Total Credits
- Complete all of the following
  - Students must select five elective courses. These courses must be approved by the student's major adviser and the program director. The courses in this set are selected by the student in conjunction with his or her adviser. Note, however, that all courses in the set must be approved by the I/O Program Committee. The available elective courses include, but are not limited to, the following:
    - Complete at least 5 of the following:
      - MAN6311 - Advanced Topics in Human Resources Management (3)
      - MAN7207 - Organization Theory (3)
      - MAN6385 - Strategic Human Resources Management (3)
      - INP6605 - Training and Team Performance (3)
      - INP6215 - Assessment Centers and Leadership (3)
      - INP6058 - Job Analysis and Performance Appraisal (3)
      - INP6318 - Recruitment, Placement and Selection (3)
      - INP6933 - Seminar in Industrial and Organizational Psychology (3)
  - INP 6933 - Seminar in Industrial and Organizational Psychology: 3 Credit Hours (may be taken up to 6 times for credit)

Dissertation
15 Total Credits
- Earn at least 15 credits from the following types of courses:
  - PSY 7980 - Doctoral Dissertation

Candidacy Examination
0 Total Credits
- After completing all required courses, students must pass all four sections of the Candidacy Examination. This is a written
examination covering the content of the field and are graded by the I/O faculty. Candidacy Examinations may be taken a maximum of two times. Failure to pass the examination will result in the student being dismissed from the program.

Admission to Candidacy

0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: Completion of all course work, except for dissertation hours. Successful completion of the candidacy examination. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study.

Independent Learning

0 Total Credits

- Given the nature of graduate training and the pursuit of a doctoral degree, graduate students in industrial and organizational psychology are expected to engage in independent learning throughout their graduate career. The completion of the doctoral dissertation is an example of independent learning in which all graduate students participate. In addition, a master's thesis or other research projects will be undertaken by the students from the first year on. To facilitate this process, students are expected to attend weekly program-sponsored research presentations during the fall and spring semesters and will be required to give at least three of these presentations prior to graduation.

Grand Total Credits: 75

Integrative and Conservation Biology PhD

College

College of Sciences

Department

Department of Biology

Program Website

https://sciences.ucf.edu/biology/graduate/

Program Handbook Link

Integrative and Conservation Biology PhD

Program Contact Information

Kate Mansfield PhD
Associate Professor
Graduate Program Director
BioGradChair@ucf.edu
BIO 402B

Juana Pasco
Graduate Admissions Specialist
juanapasco@ucf.edu
Telephone: 407-823-6525
BL301

Is this program available 100% online?

No

Program Description

The Integrative and Conservation Biology PhD program prepares students for independent research and roles within industry, nongovernmental organizations, academia, or government sectors, combining biological sciences with a range of other disciplines.

The purpose of this interdisciplinary training is to produce scientists capable of doing independent research and the ability to communicate issues of biology and conservation to policymakers, the general public, and industry.

Students will choose one of two specializations: Conservation Biology or Integrative Biology. The Conservation Biology Track is intended to provide the academic background necessary to begin work in industry, non-governmental organizations, or government in a leadership role applying cutting-edge principles to problem-solving in conservation biology. The Integrative Biology Track embraces applied and basic research concerning ecology, evolution, physiology, genetics, behavior, and conservation. Students in either track would be prepared to pursue an academic career. Please scroll to the bottom of this page for further details on these tracks.
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Institution Codes

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Financial Information

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http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Integrative and Conservation Biology PhD - Integrative and Conservation Biology PhD, Conservation Biology Track

Track Website

http://sciences.ucf.edu/biology/graduate

Track Handbook

Integrative and Conservation Biology PhD, Conservation Biology Track

Track Contact Information

Kate Mansfield PhD
Associate Professor
Graduate Program Director
BioGradChair@ucf.edu
BIO 402B

Juana Pasco
Graduate Admissions Specialist
juana.pasco@ucf.edu
Telephone: 407-823-6525
BL301

2022-2023 Graduate Catalog
**Online Availability**
No

**Track Description**
The Conservation Biology track in the Integrative and Conservation Biology PhD program prepares students for independent research and roles within industry, nongovernmental organizations or government sectors combining traditional biological sciences with a range of other disciplines.

The Conservation Biology track within the Integrative and Conservation Biology PhD program is intended to provide the academic background necessary to begin work in industry, nongovernmental organizations, or government in a leadership role applying cutting-edge principles to problem solving in conservation biology. Students in this track would also be prepared to pursue an academic career.

The Conservation Biology Track in the Integrative and Conservation Biology PhD program requires 72 credit hours beyond the bachelor's degree, including a minimum of 27 hours of formal coursework excluding independent study. The formal coursework includes 15 credit hours of required core courses and at least 12 credit hours of additional graduate-level courses from Biology (or other departments) selected in consultation with the advisor and the dissertation committee (at least 4 of the 12 credit hours must be offered through the Biology Department). The remaining 45 credit hours may consist of additional electives, doctoral dissertation research (PCB 7980), and a maximum of 12 credit hours of combined directed research (PCB 6918, PCB 7919, and PCB 5917) and independent study (PCB 6908). In addition, at least 15 credit hours of the remaining 45 credit hours must be comprised of doctoral dissertation research (PCB 7980).

**Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**
Students entering the graduate program with regular status are normally expected to have completed course work generally required for a bachelor's degree in biology.

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**Degree Requirements**

**Required Courses**
15 Total Credits

- Complete all of the following
  - Complete the following:
    - PCB6042 - Conservation Biology Theory (4)
    - PCB6053C - Restoration Ecology (4)
    - PCB6466 - Methods in Experimental Ecology (3)
    - PCB6095 - Professional Development in Biology I (1)
    - PCB6096 - Professional Development in Biology II (1)
  - Earn at least 2 credits from the following:
    - BSC6935 - Seminar in Biology (1)
    - BSC 6935 - Seminar in Biology: Students will take 1 credit hour each of two semesters.

**Elective Courses**
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  A minimum of 12 credit hours of formal graduate-level courses from Biology, or other departments, are selected in consultation with the advisor and the dissertation committee. The goal is to tailor the program of study to the individual student's needs while maximizing exposure to a variety of disciplines including, among others, policy, economics, sociology, engineering, chemistry, statistics, or computer science.
**Dissertation**

15 Total Credits

- Complete all of the following
  - Earn at least 15 credits from the following types of courses:
    - PCB 7980 - Dissertation
      Advisory Committee
  - The Advisory Committee shall consist of a minimum of four members, including the dissertation advisor, with at least three members coming from the graduate faculty in the Biology Department. At least one member will be from a department other than Biology or from outside the university. The chair, or co-chair, must be a member of the program graduate faculty.

**Enrollment Requirements**

0 Total Credits

- Students are required to register for 9 credit hours in fall and spring before their candidacy exam, and 6 credit hours in summer if enrolled. After being admitted to candidacy, minimum enrollment is 3 credit hours of dissertation research each semester.

**Additional Electives**

30 Total Credits

- Earn at least 30 credits from the following types of courses:
  In addition to the above required, elective, and dissertation credits, the student must enroll in an additional 30 credit hours of electives. These electives may include additional formal coursework, additional dissertation research hours (PCB 7980), and a maximum of 12 credit hours combined of independent study (PCB 6908) and directed research (PCB 6918, PCB 7919, and PCB 5917). Professional internship hours can be substituted for directed research.

**Examinations**

0 Total Credits

- **Qualifying Examination**
  - The written qualifying examination should be completed within the first two years of the student's program. The exam seeks to cover areas of general knowledge and discipline-specific knowledge within the student's declared track. These questions could be related to the dissertation research proposal or designed to examine general knowledge and reasoning within the field. The candidate will meet with their advisory committee at least two months prior to the examination to discuss expectations. Committee members must clearly articulate in writing the general areas that may be examined. Any student failing the examination must repeat the examination within six calendar months of the date of the first examination and requires a majority vote by committee members to pass the exam. A second failed attempt will result in dismissal from the program.

- **Candidacy Examination**
  - Each student will be required to generate and orally defend a written proposal outlining their dissertation research to their dissertation advisory committee no later than 12 months after passing the Qualifying Examination. The oral Candidacy Examination will cover all areas within the scope of the student's doctoral program and requires that the student demonstrate knowledge of the theory, literature and research methodologies relevant to the proposed area of research as well as demonstrate an understanding of how their work relates to the field of biology as a whole. After passing the Candidacy Examination and meeting other requirements, the student will be deemed as having been admitted to candidacy and can register for dissertation hours. Once a student is admitted to candidacy, the focus will be on dissertation research. For most students, the research and writing of the dissertation will take two to three years after advancing to candidacy. During this time, students should remain in close contact with the dissertation advisor and advisory committee, and annual progress reports must be filed with the Graduate Program Director.

- **Candidacy Examination - Written Proposal**
  - A written dissertation proposal, already approved by the advisor, must be submitted to each committee member no later than two weeks prior to the Candidacy Examination. Typically, the proposal will be in the format described below. However, in cases where this format is not appropriate, an alternative format may be used with the approval of the dissertation advisor. The proposal should be approximately 10 to 15 pages in length not including references, single-spaced and typed in 12-point font with one-inch margins on all sides. The use of figures and tables is encouraged. With rare exceptions it is expected that dissertation research will be hypothesis-driven. Specific Aims: Describe concisely the problem(s) to be addressed and the specific goals of the dissertation research as they relate to the problem(s), including clear statements of hypotheses to be tested. Background and Significance: Review background literature relevant to the dissertation topic, indicating clearly where gaps in knowledge exist. Justify the need for the research by explaining its anticipated significance. Conclude by linking gaps in current knowledge to the proposed specific aims. Methodology: Outline carefully the study design (observations, experiments, models, statistical analysis, etc.) related to, and the methodology to be used for, each specific aim. Methodologies should be explained in sufficient detail to allow committee members to assess the validity of its use in the study. Potential outcomes and alternative approaches should be discussed. Literature Cited: References should be indicated in the main body of the proposal where appropriate and should follow the format of a peer-reviewed journal in a field of study appropriate to the research.
At least two weeks prior to the examination, an abstract describing the proposed research will be posted in the Biological Sciences Building and circulated by e-mail among faculty and graduate students. The candidate will present the research proposal in a forum open to all faculty, students, and visitors. The oral presentation should be approximately 30-45 minutes in length to be followed by a public question-and-answer period. Presentation of preliminary data is neither required nor expected, but should be provided if available and relevant. With the exception of the advisory committee and candidate, all faculty, students and visitors will leave at the conclusion of the public question-and-answer period. The committee will continue the exam in closed session with further questioning. Questions can be directed to any matter relevant to the research proposal and areas of weakness previously identified in the written (qualifying) exam. A majority vote is required to pass the examination; however, no more than one negative vote is permitted. The majority must include the dissertation advisor. Any student failing the examination must repeat the examination within six calendar months of the date of the first examination. A second failed attempt will result in dismissal from the program.

Admission to Candidacy
0 Total Credits

The following are required to be admitted to candidacy and enroll in dissertation hours: Program of study submitted and approved. Dissertation Committee formed (without external member) Successful completion of the qualifying exam. Completion of all coursework (except for dissertation hours) External member added to Dissertation Committee. Successful completion of candidacy exam.

Dissertation Defense
0 Total Credits

The dissertation is expected to represent an original and significant contribution to the discipline. Upon completion and approval of the doctoral dissertation by all appropriate faculty and university offices, the student will make a formal presentation of the research findings in seminar format to the dissertation committee and other university faculty and students who may wish to attend. The dissertation should be in a format appropriate for publication and should be “tightened” to a readiness for submittal by use of appendices for nonessential information. The major role of the student’s advisory committee is to offer guidance on study design and interpretation of results. A polished draft must be delivered to the advisory committee for review after the student and dissertation advisor have agreed upon editorial changes; this should occur well before the anticipated date of the final defense. Committee members have the right to reject documents that fail to meet these guidelines. Committee members should be given at least two weeks to review the draft before the student attempts to schedule the final defense. The final defense is to be scheduled only after the advisory committee agrees that the dissertation is ready for defense. Committee members should return the corrected dissertation to the student two weeks after receipt and the candidate should check with committee members to ensure they have the time to review the document. For example, if the student delivers the final draft to the committee one month prior to the proposed defense date, that would allow two weeks before the scheduled defense date for the student to make recommended changes. At least two weeks prior to the defense, an abstract describing the research conducted and conclusions reached will be posted in the Biological Sciences Building, circulated by e-mail among faculty and graduate students, and posted at the College of Graduate Studies Events Calendar. The candidate will present the research in a forum open to all faculty, students, and visitors. The oral presentation should be approximately 45-50 minutes in length to be followed by a question-and-answer period. In the presentation the candidate should focus on background information, describe the research performed, and draw attention to the significance of the conclusions reached. With the exception of the committee and candidate, all faculty, students, and visitors will leave at the conclusion of the question-and-answer period. The committee will continue the defense and the candidate will answer questions about the subject matter presented and defend the conclusions drawn. The committee will ask questions of the process used and assess the candidate’s level of competency with the research topic. A majority vote is required to pass the examination; however, no more than one negative vote is permitted. The majority must include the dissertation advisor.

Student Orientation
0 Total Credits

An orientation for all incoming students will be scheduled one week prior to each fall semester. The orientation will include tours of the program facilities, a session on registration, university policies and procedures, and expectations of doctoral study. Further, Environmental Health and Safety will present a program on topics such as laboratory safety, chemical and fire safety, biohazard training, and radioisotope handling. Expectations for Graduate Teaching Assistants (GTA) and Graduate Research Assistants (GRA) will be fully covered. In addition, students will be required to participate in the program for GTAs offered by the UCF Faculty Teaching and Learning Center and the College of Sciences. Students are strongly encouraged to attend the university’s orientation also, held approximately one week before classes begin in the Fall semester.

Independent Learning
0 Total Credits

The dissertation satisfies the independent learning experience.

Grand Total Credits: 72
Track Details

A student is required to establish a program of study before the completion of nine credit hours of coursework, in conjunction with their dissertation advisor and advisory committee. A student's advisory committee may require the candidate to take any graduate course taught at UCF if deemed appropriate for the student's area of emphasis. Students entering with a master's degree may request up to 30 semester credit hours of previous work be waived toward the requirements for this degree with approval from the advisory committee. Students who transfer 30 credit hours must still take 2 credit hours of Biology Seminar (BSC 6935) and Professional Development I (PCB 6095) and II (PCB 6096). Students may register for dissertation research only after passing the candidacy exam.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

Millican Hall 120
Telephone: 407-823-2927
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Integrative and Conservation Biology PhD - Integrative and Conservation Biology PhD, Integrative Biology Track

Track Website

https://sciences.ucf.edu/biology/graduate/

Track Handbook

Integrative and Conservation Biology PhD, Integrative Biology Track

Track Contact Information

Kate Mansfield PhD
Associate Professor
Graduate Program Director
BioGradChair@ucf.edu
BIO 402B

Juana Pasco
Graduate Admissions Specialist
juana.pasco@ucf.edu
Telephone: 407-823-6525
BL301

Online Availability

No
**Track Description**

The Integrative Biology track in the Integrative and Conservation Biology PhD program prepares students for independent research and roles within industry, nongovernmental organizations or government sectors combining traditional biological sciences with a range of other disciplines.

The Integrative Biology track within the Integrative and Conservation Biology PhD program embraces applied and basic research concerning ecology, evolution, physiology, genetics, behavior, and conservation. Students taking this track will be prepared to pursue an academic career.

The Integrative Biology Track requires 72 credit hours beyond the bachelor's degree, including a minimum of 27 hours of formal coursework excluding independent study. The formal coursework includes 7 credit hours of required core courses and at least 20 credit hours of graduate-level courses from Biology (or other departments) selected in consultation with the advisor and the dissertation committee (at least 12 of the 20 credit hours must be offered through the Biology Department). The remaining 45 credit hours may consist of additional electives, doctoral dissertation research (PCB 7980), and a maximum of 12 credit hours of combined directed research (PCB 6918, PCB 7919, and PCB 5917) and independent study (PCB 6908). In addition, at least 15 credit hours of the remaining 45 credit hours must be comprised of doctoral dissertation research (PCB 7980).

**Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

Students entering the graduate program with regular status are normally expected to have completed coursework generally required for a bachelor's degree in biology.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

**Required Courses**

7 Total Credits

- Complete all of the following
  - Complete the following:
    - PCB6466 - Methods in Experimental Ecology (3)
    - PCB6095 - Professional Development in Biology I (1)
    - PCB6096 - Professional Development in Biology II (1)
  - Earn at least 2 credits from the following:
    - BSC6935 - Seminar in Biology (1)
    - BSC 6935 - Seminar in Biology: Students will take 1 credit hour each of two semesters.

**Elective Courses**

20 Total Credits

- Earn at least 20 credits from the following types of courses:
  A minimum of 20 credit hours of formal graduate-level courses from Biology, or other departments, are selected in consultation with the advisor and the dissertation committee. The goal is to tailor the program of study to the individual student's needs while maximizing exposure to a variety of disciplines including, among others, policy, economics, sociology, engineering, chemistry, statistics, or computer science.

**Dissertation**

15 Total Credits

- Complete all of the following
  - Earn at least 15 credits from the following types of courses:
    - PCB 7980 - Dissertation
    - Advisory Committee
The Advisory Committee shall consist of a minimum of four members, including the dissertation advisor, with at least three members coming from the graduate faculty of the Biology Department. At least one member will be from a department other than Biology or from outside the university. The chair, or co-chair, must be a member of the program graduate faculty.

Enrollment Requirements

0 Total Credits

- Students are required to register for 9 credit hours in fall and spring before their candidacy exam, and 6 credit hours in summer if enrolled. After being admitted to candidacy, minimum enrollment is 3 credit hours of dissertation research each semester.

Additional Electives

30 Total Credits

- Earn at least 30 credits from the following types of courses:
  In addition to the above required, elective, and dissertation credits, the student must enroll in an additional 30 credit hours of electives. These electives may include additional formal coursework, additional dissertation research hours (PCB 7980), and a maximum of 12 credit hours combined of independent study (PCB 6908) and directed research (PCB 6918, PCB 7919, and PCB 5917). Professional internship hours can be substituted for directed research.

Examinations

0 Total Credits

- Details

Qualifying Examination

0 Total Credits

- The written qualifying examination should be completed within the first two years of the student's program. The exam seeks to cover areas of general knowledge and discipline-specific knowledge within the student's declared track. These questions could be related to the dissertation research proposal or designed to examine general knowledge and reasoning within the field. The candidate will meet with their advisory committee at least two months prior to the examination to discuss expectations. Committee members must clearly articulate in writing the general areas that may be examined. Any student failing the examination must repeat the examination within six calendar months of the date of the first examination and the examination requires a majority vote by committee members. A second failed attempt will result in dismissal from the program.

Candidacy Examination

0 Total Credits

- Each student will be required to generate and orally defend a written proposal outlining their dissertation research to their dissertation advisory committee no later than 12 months after passing the Qualifying Examination. The oral Candidacy Examination will cover all areas within the scope of the student's doctoral program and requires that the student demonstrate knowledge of the theory, literature, and research methodologies relevant to the proposed area of research as well as demonstrate an understanding of how their work relates to the field of biology as a whole. After passing the Candidacy Examination and meeting other requirements, the student will be deemed as having been admitted to candidacy and can register for dissertation hours. Once a student is admitted to candidacy, the focus will be on dissertation research. For most students, the research and writing of the dissertation will take two to three years after advancing to candidacy. During this time, students should remain in close contact with the dissertation advisor and advisory committee and annual progress reports must be filed with the Graduate Program Director.

Candidacy Examination - Written Proposal

0 Total Credits

- A written dissertation proposal, already approved by the advisor, must be submitted to each committee member no later than two weeks prior to the Candidacy Examination. Typically, the proposal will be in the format described below. However, in cases where this format is not appropriate, an alternative format may be used with the approval of the dissertation advisor. The proposal should be approximately 10 to 15 pages in length not including references, single-spaced and typed in 12-point font with one-inch margins on all sides. The use of figures and tables is encouraged. With rare exceptions it is expected that dissertation research will be hypothesis-driven. Specific Aims: Describe concisely the problem(s) to be addressed and the specific goals of the dissertation research as they relate to the problem(s), including clear statements of hypotheses to be tested. Background and Significance: Review background literature relevant to the dissertation topic, indicating clearly where gaps in knowledge exist. Justify the need for the research by explaining its anticipated significance. Conclude by linking gaps in current knowledge to the proposed specific aims. Methodology: Outline carefully the study design (observations, experiments, models, statistical analysis, etc.) related to, and the methodology to be used for, each specific aim. Methodologies should be explained in sufficient detail to allow committee members to assess the validity of its use in the study. Potential outcomes and alternative approaches should be discussed. Literature Cited: References should be indicated in the main body of the proposal wherever appropriate and should follow the format of a peer-reviewed journal in a field of study appropriate to the research. This section can be as long as necessary.

Candidacy Examination – Oral Component

0 Total Credits

- At least two weeks prior to the examination, an abstract describing the proposed research will be posted in the Biological Sciences Building and circulated by e-mail among faculty and graduate students. The candidate will present the research proposal in a forum open to all faculty, students, and visitors. The oral presentation should be approximately 30-45 minutes in...
length to be followed by a public question-and-answer period. Presentation of preliminary data is neither required nor expected, but should be provided if available and relevant. With the exception of the advisory committee and candidate, all faculty, students and visitors will leave at the conclusion of the public question-and-answer period. The committee will continue the exam in closed session with further questioning. Questions can be directed to any matter relevant to the research proposal and areas of weakness previously identified in the written (qualifying) exam. A majority vote is required to pass the examination; however, no more than one negative vote is permitted. The majority must include the dissertation advisor. Any student failing the examination must repeat the examination within six calendar months of the date of the first examination. A second failed attempt will result in dismissal from the program.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: Program of study submitted and approved. Dissertation Committee formed (without external member). Successful completion of qualifying exam. Completion of all coursework (except for dissertation hours). External member added to Dissertation Committee. Successful completion of candidacy exam.

Dissertation Defense
0 Total Credits

- The dissertation is expected to represent an original and significant contribution to the discipline. Upon completion and approval of the doctoral dissertation by all appropriate faculty and university offices, the student will make a formal presentation of the research findings in seminar format to the dissertation committee and other university faculty and students who may wish to attend. The dissertation should be in a format appropriate for publication and should be "tightened" to a readiness for submittal by use of appendixes for nonessential information. The major role of the student's advisory committee is to offer guidance on study design and interpretation of results. A polished draft must be delivered to the advisory committee for review after the student and dissertation advisor have agreed upon editorial changes; this should occur well before the anticipated date of the final defense. Committee members have the right to reject documents that fail to meet these guidelines. Committee members should be given at least two weeks to review the draft before the student attempts to schedule the final defense. The final defense is to be scheduled only after the advisory committee agrees that the dissertation is ready for defense. Committee members should return the corrected dissertation to the student two weeks after receipt and the candidate should check with committee members to ensure they have the time to review the document. For example, if the student delivers the final draft to the committee one month prior to the proposed defense date, that would allow two weeks before the scheduled defense date for the student to make recommended changes. At least two weeks prior to the defense, an abstract describing the research conducted and conclusions reached will be posted in the Biological Sciences Building, circulated by e-mail among faculty and graduate students, and posted on the College of Graduate Studies Events Calendar. The candidate will present the research in a forum open to all faculty, students, and visitors. The oral presentation should be approximately 45-50 minutes in length to be followed by a question-and-answer period. In the presentation the candidate should focus on background information, describe the research performed, and draw attention to the significance of the conclusions reached. With the exception of the committee and candidate, all faculty, students, and visitors will leave at the conclusion of the question-and-answer period. The committee will continue the defense and the candidate will answer questions about the subject matter presented and defend the conclusions drawn. The committee will ask questions of the process used and assess the candidate's level of competency with the research topic. A majority vote is required to pass the examination; however, no more than one negative vote is permitted. The majority must include the dissertation advisor.

Student Orientation
0 Total Credits

- An orientation for all incoming students will be scheduled one week prior to each fall semester. The orientation will include tours of the program facilities, a session on registration, university policies and procedures, and expectations of doctoral study. Further, Environmental Health and Safety will present a program on topics such as laboratory safety, chemical and fire safety, biohazard training, and radioisotope handling. Expectations for Graduate Teaching Assistants (GTA) and Graduate Research Assistants (GRA) will be fully covered. In addition, students will be required to participate in the program for GTAs offered by the UCF Faculty Center for Teaching and Learning and the College of Sciences. Students are strongly encouraged to attend the university orientation as well, held approximately one week prior to each fall semester.

Independent Learning
0 Total Credits

- The dissertation satisfies the independent learning experience.

Grand Total Credits: 72

**Track Details**

A student is required to establish a program of study before the completion of nine credit hours of coursework, in conjunction with their dissertation advisor and advisory committee. A student's advisory committee may require the candidate to take any graduate course taught at UCF if deemed appropriate for the student's area of emphasis. Students entering with a master's degree may request up to 30 semester credit hours of previous work be waived toward the requirements for this degree with approval from the advisory committee. Students who transfer 30 credit hours must still take 2 credit hours of Biology Seminar (BSC 6935) and Professional Development I (PCB 6095) and II (PCB 6096). Students may register for dissertation research only after passing the candidacy exam.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Integrative Anthropological Sciences PhD

College
College of Sciences

Department
Department of Anthropology

Program Website
https://sciences.ucf.edu/anthropology/

Program Handbook Link
Integrative Anthropological Sciences PhD

Program Contact Information

Beatriz Reyes-Foster PhD
Associate Professor
beatriz.reyes-foster@ucf.edu
Telephone: 407-823-2206
HPH RM 309

Is this program available 100% online?
No

Program Description

The Integrative Anthropological Sciences PhD emphasizes cross-disciplinary empirical research on the dynamics of transformation and change in societies past and present. The program integrates methodologies from the science and technology components of Science, Technology, Engineering, and Math (STEM) with the theoretical and analytical strengths of social science to address critical social challenges.

The curriculum is comprised of the following basic elements: 1) a core curriculum focused on methodological expertise; 2) a topical curriculum covering the dynamics of transformation in human societies; 3) professional competence in workplace skills embedded into all courses; and 4) experiential learning via independent research. The central purpose of the program is to produce graduates with the necessary methodological expertise and analytical skills to create innovative solutions to the ongoing challenges of local and global disparities, environmental and anthropogenic crises, and the resilience and vulnerability of human populations.

The Integrative Anthropological Sciences PhD requires 51 credit hours beyond an earned master's degree. Required coursework minimally includes 12 credit hours of core courses, 24 credit hours of elective courses, and 15 hours of dissertation research. If foundational or theoretical coursework is not present in the earned master's, remaining credit hours may consist of additional electives, doctoral research, and a maximum of 9 credit hours of directed research and independent study.

Total Credit Hours Required: 51 Credit Hours Minimum beyond the Master's Degree
Program Prerequisites
A master’s degree or its equivalent in Anthropology or a closely related discipline.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Courses
12 Total Credits
No Rules
Core
9 Total Credits
• Complete the following:
  • ANG6002 - Proseminar in Anthropology (3)
  • ANG6931 - Science, Technology, and the Transformation of Human Societies (3)
  • ANG7075 - Advanced Anthropological Topics in Geospatial Analysis (3)

Research Methods
3 Total Credits
• Complete at least 1 of the following:
  • ANG6498 - Advanced Qualitative Methods in Anthropology (3)
  • ANG7496 - Advanced Quantitative Methods in Anthropology (3)

Elective Courses
24 Total Credits
• All students in the doctoral program must complete 24 hours of unrestricted electives. The unrestricted electives offer the student the opportunity to explore their interests, further advance their methodological skills, and gain interdisciplinary experience. To fulfill their unrestricted electives requirement, students may also take graduate-level courses in programs outside the department, particularly in Biology, Sociology, Political Science, History, and the College of Health and Public Affairs but, outside courses must not exceed 12 credit hours. The student's faculty advisor and the Graduate Program Coordinator must approval all graduate courses taken outside the department. The student may also use the second methods course identified in the Core requirement as an Unrestricted Elective. The departmental course options for the Unrestricted Electives include the following:

Unrestricted Electives
24 Total Credits
• Earn at least 24 credits from the following:
  • ANG5094 - Writing in Anthropology (3)
  • ANG5166 - Problems in Maya Studies (3)
  • Course Not Found
  • ANG5191 - Mortuary Archaeology (3)
  • ANG5228 - Maya Iconography (3)
  • Course Not Found
  • Course Not Found
  • Course Not Found
  • ANG5486 - Quantitative Research in Anthropology (3)
  • ANG5525C - Human Osteology (4)
  • ANG5531 - Nutritional Anthropology (3)
  • Course Not Found
  • ANG5738 - Advanced Medical Anthropology (3)
  • ANG5742 - Problems in Forensic Anthropology (3)
  • ANG5822 - Maya Field Research (3)
Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  ANG 7980 Dissertation Research -15 credit hours In consultation with the advisor, each student must secure qualified members of their dissertation committee. The dissertation committee will consist of a minimum four members. At least three members must be Anthropology Graduate Faculty, and the student's advisor will serve as the committee chair. One member must be from either outside the student's department or UCF. Graduate faculty members must form the majority of any given committee. A Dissertation Committee must be formed prior to enrollment in dissertation hours. A student who passes their candidacy exam (proposal defense) will begin the dissertation process. The dissertation serves as the culmination of the coursework that comprises this research-based degree. It must make a significant original theoretical, intellectual, practical, creative, or research contribution to the student's area within the discipline. Dissertations will be theoretically grounded, show expertise in the topic area, and utilize methodologically sound analysis of either quantitative data, qualitative data or mixed-methods data. The dissertation will be completed through a minimum of 15 hours of dissertation credit, which students will use to conduct original research.

Examinations
0 Total Credits
No Rules
Qualifying Exam
0 Total Credits

- Students are expected to form their dissertation committee by the beginning of their third semester. The Qualifying Exam will consist of a collection of research statements written by the PhD student in consultation with their committee and an oral defense of the statements. The number and topics of the statements will be determined by the advisor in consultation with the student and the dissertation committee. Passing the qualifying exam is necessary before a student can schedule their Candidacy Exam.

Candidacy Examination—Written Proposal and Oral Defense
0 Total Credits

- Advancement to candidacy requires a successful defense of the student's dissertation grant proposal. This defense takes place in the semester prior to the one in which the student intends to enroll in dissertation hours, normally during the 4th semester. The proposal defense is based on a research proposal that follows the guidelines and format of a major external grant agreed upon by the dissertation committee.

Independent Learning
0 Total Credits

- As with all graduate programs, independent learning is an important component in the IAS doctoral program. Students will demonstrate independent learning through research seminars, directed research and the dissertation. Doctoral students are also expected to pursue additional independent reading beyond formal coursework relevant to their research and career direction.

Grand Total Credits: 51
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Intelligence and National Security Graduate Certificate

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Program Website
https://sciences.ucf.edu/politics/graduate/

Program Contact Information

Andrew Boutton PhD
Associate Professor
andrew.boutton@ucf.edu
Telephone: 407-823-2608
HPH 305C

Kyrie Ottaviani
Graduate Admissions Coordinator
graduatepolisci@ucf.edu

Is this program available 100% online?
No
Program Description

The Graduate Certificate in Intelligence and National Security provides an interdisciplinary graduate education for people engaged in or seeking professional careers in intelligence policy with a focus on analysis of security threats or crises, both domestic and international, through use of human, electronic and public domain intelligence sources.

In addition, students will be introduced to various analytic approaches including game theory, network analysis, nonintrusive measurement, geospatial approaches and quantitative analysis.

Graduates are prepared to perform "key functions including conducting research and gathering information, identifying intelligence gaps, interpreting and evaluating information from multiple (and sometimes contradictory) sources, monitoring trends and events related to a particular country or issue, and preparing written and oral assessments." This expectation comes from the job description for an intelligence analyst established by the federal government posted here.

The certificate in Intelligence and National Security consists of 18 credit hours at the graduate level, including two required core courses and four electives.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Students who have been admitted to a degree-seeking graduate program at UCF may apply for admission to the certificate program. Other interested applicants may also apply, but must first contact the certificate advisor (Andrew Boutton) to inquire about admission to the certificate program prior to applying.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
### Degree Requirements

#### Required Courses

6 Total Credits

- Complete all of the following
  - Complete at least 1 of the following:
    - POS6736 - Conduct of Political Inquiry (3)
    - POS6746 - Quantitative Methods in Political Research (3)
    - POS7745 - Advanced Quantitative Methods in Political Research (3)
    - CCJ6704 - Research Methods in Criminal Justice (3)
    - CCJ7708 - Advanced Quantitative Methods for Criminal Justice Research (3)
  - Complete at least 1 of the following:
    - INR6365 - Seminar on Intelligence (3)
    - INR6366 - The Intelligence Community (3)

#### Restricted Electives

12 Total Credits

- Complete all of the following
  - All students take four of the following courses. Students can substitute up to two geographic area courses as part of their four-course elective area with approval of the certificate program director.
  - Complete at least 4 of the following:
    - POS6686 - National Security Law (3)
    - POS6743 - Geographic Tools for Political Science Research (3)
    - CPO6058 - Revolution and Political Violence (3)
    - CPO6206 - Comparative Politics of Africa (3)
    - CPO6307 - Issues in Latin American Politics (3)
    - CPO6407 - Comparative Politics of the Middle East (3)
    - CPO6729 - Global Security in the Age of Migration (3)
    - INR6062 - Peace Studies (3)
    - INR6065 - Seminar on War (3)
    - INR6066 - Politics of Civil Wars (3)
    - INR6108 - Seminar in American Foreign Policy (3)
    - INR6136 - Seminar in American Security Policy (3)
    - INR6137 - Terrorism and Politics (3)
    - INR6257 - International Relations of Africa (3)
    - INR6275 - International Politics of the Middle East (3)
    - INR6339 - Strategic Warning Analysis (3)
    - INR6346 - Politics of International Terrorism (3)
    - INR6356 - Environmental Security (3)
    - INR6726 - Political Behavior in International Conflict (3)
    - CCJ6027 - Criminal Justice Responses to Terrorism (3)
    - CCJ6027 - Criminal Justice Responses to Terrorism (3)
    - CCJ6074 - Investigative and Intelligence Analysis: Theory and Methods (3)
    - CJE6688 - Cyber Crime and Criminal Justice (3)

Grand Total Credits: **18**

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### Interactive Entertainment MS

**College**

College of Sciences

**Department**

Nicholson School of Communication and Media

**Program Website**

https://fiea.ucf.edu/

**Program Handbook Link**

Interactive Entertainment MS
Program Contact Information

Benjamin Noel  
benjamin.noel@ucf.edu  
Telephone: 407-235-3612  
CMB 115N  

FIEA Admissions  
fieaadmission@ucf.edu  
Telephone: 407-235-3580  
CMB 115F

Is this program available 100% online?  
No

Program Description

The Master's of Science in Interactive Entertainment at UCF's Florida Interactive Entertainment Academy (FIEA) teaches artists, programmers, and producers the techniques, tools, and skills to succeed in the gaming industry. The program provides specific skills in the area of game design, programming, 3-D artistry, as well as essential skills such as problem solving, teamwork, and project management.

FIEA provides a team-based, industry-oriented education in a world-class facility located at the UCF Downtown campus in Orlando. Student production teams are mentored by industry trained faculty who provide instruction in game design, level design, technical design, creative collaboration, rapid prototyping, 3-D animation and modeling, technical art, motion capture, software engineering, legal and ethical issues, preproduction, and postmortems. Graduates have access to internship and venture opportunities and job interviews with game and media companies from across the country.

The Interactive Entertainment MS degree requires a minimum of 30 credit hours beyond the bachelor's degree including 12 credit hours of core courses, 9 credit hours of specialization, a practicum and a capstone experience.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

Mailing Address

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Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

Institution Codes

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

Degree Requirements

Core

12 Total Credits

- Complete all of the following
  - Complete the following:
    - DIG5529C - Production for Media (3)
    - DIG5548C - Rapid Prototype Production I (3)
    - DIG5856 - Experimentation, Application and Innovation in Games (3)
    - DIG6547C - Preproduction and Prototyping (3)
  - The foundation of the degree is the four-course core sequence that focuses on team-based learning. This sequence is designed to provide declarative, procedural, and strategic knowledge in a variety of issues related to game design. These include creative collaboration, rapid prototyping, 3-D animation and modeling, documentation, software engineering, legal and ethical issues, preproduction, and postmortems.

Specialization

9 Total Credits

- Complete 1 of the following
  - Specialization courses help prepare students in their chosen field (Art, Production or Programming) by covering the details of each discipline. Art classes help students develop aesthetic and technical skills necessary to create
compelling visuals for the entertainment industry. Programming classes focus on software engineering techniques as they apply to interactive entertainment products, while production classes focus on the specifics of game design as well as project management. Students take all three courses in their chosen specialization. Courses are listed in order of term offered: Fall Spring Summer

Art Specialization
- Complete the following:
  - DIG5348C - Digital Asset Creation (3)
  - DIG6559C - Advanced Digital Asset Creation (3)
  - DIG6589C - Digital Asset Portfolio Development (3)

Production Specialization
- Complete the following:
  - DIG5557C - Production and Design I (3)
  - DIG6558 - Production and Design II (3)
  - DIG6099C - Media Distribution (3)

Programming Specialization
- Complete the following:
  - DIG5637 - Game Programming Fundamentals (3)
  - DIG6638 - Advanced Game Programming (3)
  - DIG6635 - Applied Programming Mechanics (3)

Capstone
3 Total Credits
- Complete all of the following
  - The capstone experience applies the concepts and theories learned to produce a large-scale project. The target deliverable is a playable demonstration of a game that simulates the core experience and demonstrates the key features of the project's vision. The course concludes with a special event premiering the final project to the FIEA community and invited guests.
  - Complete the following:
    - DIG6718C - Interactive Entertainment Project (3)

Practicum
6 Total Credits
- Complete all of the following
  - The practicum is supervised training supplementing theoretical and practical experiences involving new research developments or partnerships within the gaming industry. Students may participate on a research team exploring new ideas in interactive entertainment with industry partners, working at an on-site internship with a game company, developing a start-up entity, or working with a faculty member on research in an area of interest.
  - Complete at least 1 of the following:
    - DIG6944C - Game Design Practicum (6)
    - DIG6947C - Digital Venture Practicum (6)

Independent Learning
0 Total Credits
- Both the capstone course and the practicum provide independent learning experiences. The capstone experience is a project-based class that features a game demonstration. The practicum allows students to work with industry partners, in an internship, starting a new venture, or to conduct research with a faculty member.

Grand Total Credits: 30

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Mathematical Science Graduate Certificate

College
College of Sciences

Department
Department of Mathematics

Program Website
https://sciences.ucf.edu/math/graduate/

Program Contact Information
Qiyu Sun
Professor
qiyu.sun@ucf.edu
Telephone: 407-823-4839
PO Box 161364

Is this program available 100% online?
Yes

UCF Online

Please note: Mathematical Science Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Mathematical Science is designed to prepare students to teach college-level mathematics in high schools or colleges.

All required courses will be offered to accommodate distance learning by posting recorded lectures and offering scheduled online problem sessions and office hours.

The Mathematical Science certificate requires six graduate courses (18 credit hours), including 9 credit hours of required courses and 9 credit hours of elective courses.

Total Credit Hours Required: 18 Credit Hours Minimum beyond the Bachelor's Degree
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

Required Courses  
9 Total Credits

- Complete at least 3 of the following:
  - MAA5210 - Topics in Advanced Calculus (3)
  - MAA5145 - Advanced Linear Algebra and Matrix Theory (3)
  - MTG5253 - Introduction to Differential Geometry (3)
  - MAA6405 - Complex Variables (3)
  - MAT5712 - Scientific Computing (3)
  - MAP5426 - Special Functions (3)

Elective Courses  
9 Total Credits

- Earn at least 9 credits from the following types of courses:  
  Students should take three graduate-level courses offered by the Department of Mathematics and/or the Department of Statistics at UCF, with at most two elective courses from the Department of Statistics.

Grand Total Credits: **18**

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**Mathematical Science MS**

**College**

College of Sciences

**Department**

Department of Mathematics

**Program Website**

https://math.cos.ucf.edu/graduate/

**Program Handbook Link**

Mathematical Science MS

**Program Contact Information**

Qiyu Sun  
Professor  
qiyu.sun@ucf.edu  
Telephone: 407-823-4839  
PO Box 161364

**Is this program available 100% online?**

No
Program Description

The Master of Science in Mathematical Science provides a broad base in applied, financial and industrial mathematics.

Students in the program can specialize in one of many aspects of mathematics, including Approximation Theory, Applied and Computational Harmonic Analysis, Big Data and Mathematical Statistics, Combinatorics and Graph Theory, Commutative Algebra and Algebraic Geometry, Control and Optimization, Differential and Symplectic Geometry, Fluid and Plasma Dynamics, Functional Analysis, Inverse and Ill-posed Problems, Mathematical Biology, Mathematical Finance, Nonlinear Waves and Nonlinear Dynamics, Numerical Analysis, Orthogonal Polynomials, Partial Differential Equations, Probability and Stochastic Analysis, and Tomography and Medical Imaging.

This degree has 2 tracks: Financial Mathematics Track and Industrial Mathematics Track. Please scroll to the bottom of this page for further details on these Tracks.

The Mathematical Science MS program requires 30 credit hours minimum beyond the bachelor's degree. There are two options for the master's degree: thesis and nonthesis.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

A working knowledge of undergraduate calculus, differential equations, linear algebra (or matrix theory), and maturity in the language of advanced calculus (at the level of MAA 4226).

College of Graduate Studies Contact Information

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - MAA5210 - Topics in Advanced Calculus (3)
  - MAP6385 - Applied Numerical Mathematics (3)
  - MAS5145 - Advanced Linear Algebra and Matrix Theory (3)
  - MAT5712 - Scientific Computing (3)

Restricted Elective Sequences
6 Total Credits

- Complete 1 of the following:
  - After the completion of the core courses, the program requires all students to complete one of the following two-semester sequences. The following shows examples of acceptable sequences using current courses. We expect that other sequences will be developed as our program grows. Note that some sequences consist of a core course plus one elective, while others consist of two electives. Thus, the credit hours in this requirement are variable (3 to 6 credit hours).
  - Complete the following:
    - MAA6405 - Complex Variables (3)
    - MAA6404 - Complex Analysis (3)
  - Complete the following:
    - MAD5205 - Graph Theory I (3)
    - MAD6309 - Graph Theory II (3)
  - Complete the following:
    - MAP5336 - Ordinary Differential Equations and Applications (3)
    - MAP6356 - Partial Differential Equations (3)
  - Complete the following:
Complete the following:

- MAA6238 - Measure and Probability I (3)
- MAA6245 - Measure and Probability II (3)

Complete the following:

- MAP6111 - Mathematical Statistics (3)
- MAA7239 - Asymptotic Methods in Mathematical Statistics (3)

Complete the following:

- MAS5311 - Algebra I (3)
- MAS6312 - Algebra II (3)

Complete the following:

- MTG256 - Differential Geometry (3)
- MTG6345 - Algebraic Topology (3)

Complete the following:

- MAP6197 - Mathematical Introduction to Deep Learning (3)
- MAP6195 - Mathematical Foundations for Massive Data Modeling and Analysis (3)

Unrestricted Electives

6 Total Credits

- Earn at least 6 credits from the following types of courses:
  Unrestricted electives should be chosen in consultation with the graduate program director or the student's thesis adviser and may be chosen from the suggested options: Approximation Theory, Applied and Computational Harmonic Analysis, Big Data and Mathematical Statistics, Combinatorics and Graph Theory, Commutative Algebra and Algebraic Geometry, Control and Optimization, Differential and Symplectic Geometry, Fluid and Plasma Dynamics, Functional Analysis, Inverse and Ill-posed Problems, Mathematical Biology, Mathematical Finance, Nonlinear Waves and Nonlinear Dynamics, Numerical Analysis, Orthogonal Polynomials, Partial Differential Equations, Probability and Stochastic Analysis, and Tomography and Medical Imaging. A list of courses for these elective options can be obtained from the graduate program director. Approved graduate courses outside the department may also be used.

Thesis/Nonthesis Option

6 Total Credits

- Complete 1 of the following

  Thesis Option

  Earn at least 6 credits from the following types of courses:

  MAP 6971 - Thesis n this option, the MS degree requires a total of at least 30 credit hours comprised of at least 24 credit hours of course work and 6 credit hours of thesis. This includes the 15 credit hours of the core courses and 3-6 credit hours of a two-course sequence. No more than 6 credit hours of independent study or directed research may be credited toward the degree. It is strongly recommended that the student select a thesis adviser and establish a program of study by the completion of the core courses. With the help of a thesis adviser, the student will form a thesis committee of three members, of which at least two must be from the Department of Mathematics. It is recommended that the thesis topic have potential for industrial applications. An oral defense of the thesis will be required.

  Nonthesis Option

  Earn at least 6 credits from the following types of courses:

  Nonthesis students will take an additional 6 credit hours of electives. The electives should be chosen in consultation with the graduate program director. Nonthesis students will receive independent learning experiences by taking one of the two-semester sequences, where they apply mathematical principles to independent projects. Other courses that also have substantial research projects include MAP 5117 - Mathematical Modeling, MAT 5712 - Scientific Computing and MAP 6111 - Mathematical Statistics, MAP 6195, MAP 6197, and may be taken as electives. No more than 3 credit hours of independent study may be credited toward the degree. It is strongly recommended that the student select an academic adviser and establish a program of study by the completion of the core courses. In addition, the nonthesis student must pass a comprehensive written examination (by passing the qualifying/comprehensive examination at or above the MS level) based on the core courses. Two attempts at the examination are permitted.

Independent Learning

0 Total Credits

- In the Mathematical Science MS program, the thesis option provides an independent learning experience through directed research, reading published research papers, and writing and defending the thesis. The nonthesis option requires students to take one of the two-semester sequences, where they apply mathematical principles to independent projects.

Grand Total Credits: 30

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Mathematical Science MS - Mathematical Science MS, Financial Mathematics Track

Track Website

https://math.cos.ucf.edu/graduate/

Track Handbook

Mathematical Science MS

Track Contact Information

Qiyu Sun

Professor

qiyu.sun@ucf.edu

Telephone: 407-823-4839

PO Box 161364

Online Availability

No

Track Description

The Financial Mathematics track in the Mathematical Science MS program prepares graduate students to pursue careers in the finance industry by providing them with high quality professional training in of mathematics applicable to finance.

This track has three components: training in the necessary mathematics to pursue a career in financial mathematics, professional training in financial mathematics, and a required experiential component.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites

Working knowledge of undergraduate calculus, differential equations, linear algebra (or matrix theory), proficiency in a modern computer language, elementary probability, and statistics.

The following courses are required as prerequisites to this track: Calculus with Analytic Geometry I, II, and III; Differential Equations; Linear and Matrix Algebra (or a course equivalent); proficiency in a computer language; Elementary Probability and Statistics. A summer program of two courses, which cannot be used as part of the program of study for this degree, is available for students who have deficiencies in these prerequisite areas.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu

Telephone: 407-823-2766

Millican Hall 230

Online Application

Graduate Admissions

Mailing Address

UCF College of Graduate Studies

Millican Hall 230

PO Box 160112

Orlando, FL 32816-0112

Institution Codes

GRE: 5233

GMAT: RZT-HT-58

TOEFL: 5233

ETS PPI: 5233
**Degree Requirements**

**Required Courses**
21 Total Credits

- Complete the following:
  - MAP5606 - Differential Equations for Financial Mathematics (3)
  - MAP5612 - Computational Methods for Financial Mathematics I (3)
  - MAP5641 - Financial Mathematics I (3)
  - MAP5931 - Proseminar for Financial Mathematics (1)
  - MAP5933 - Seminar in Financial Mathematics (2)
  - MAP6616 - Computational Methods for Financial Mathematics II (3)
  - MAP6642 - Financial Mathematics II (3)
  - MAP6646 - Risk Management for Financial Mathematics (3)

**Restricted Electives**
6 Total Credits

- Complete at least 2 of the following:
  - FIN6406 - Strategic Financial Management (3)
  - FIN6515 - Analysis of Investment Opportunities (3)
  - MAP6207 - Optimization Theory (3)
  - STA6857 - Applied Time Series Analysis (3)
  - STA5703 - Data Mining Methodology I (3)
  - STA5825 - Stochastic Processes and Applied Probability Theory (3)

**Experiential Requirement**
3 Total Credits

- Earn at least 3 credits from the following types of courses:
  - Students will demonstrate experience in the application of mathematics to industrial problems. This demonstration can be accomplished either through the satisfactory completion of an internship in financial mathematics (MAP 6946), or through satisfactory performance at an approved external/internal workshop in financial mathematics (MAP 6946). Students are required as part of the experiential requirement to deliver an oral presentation on the experience. Students are very strongly encouraged to fulfill this requirement through an internship experience.

**Grand Total Credits:** 30

**Track Details**
The Financial Mathematics program consists of 30 credit hours of courses and internship. Students will work with an adviser to design a program of study, which will be presented to the program director for approval. If a student has an industrial sponsor, the student's program of study will be developed in consultation with a representative from the student's sponsoring company. Students are expected to obtain hands-on experience. The capstone requirement for this track is fulfilled by students completing an experiential learning requirement (3 credit hours). At least one-half of the program courses must be taken at the 6000 level.

**Financial Information**
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
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http://finaid.ucf.edu

**Fellowship Information**
Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu
Track Website
https://math.cos.ucf.edu/graduate/

Track Handbook
Mathematical Science MS

Track Contact Information
Qiyu Sun
Professor
qiyu.sun@ucf.edu
Telephone: 407-823-4839
PO Box 161364

Online Availability
No

Track Description
The Industrial Mathematics track in the Mathematical Science MS program prepares graduate students to pursue careers in industry by providing them with high quality professional training in branches of mathematics valuable to high-technology industries. This track has three components: training in the necessary mathematics to pursue a career in industrial mathematics, professional training to prepare for the environment of the industrial workplace, and a required experiential component.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Track Prerequisites
The following courses are required as prerequisites to this track: Calculus with Analytic Geometry I, II, and III; Differential Equations; Linear and Matrix Algebra (or a course equivalent); proficiency in a computer language (C or MatLab); Advanced Calculus and Statistics.

A working knowledge of undergraduate calculus, differential equations, linear algebra (or matrix theory), and maturity in the language of advanced calculus (at the level of MAA 4226).

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Institution Codes
GRE: 5233
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ETS PPI: 5233
Degree Requirements

Required Courses
12 Total Credits

- Complete the following:
  - MAA5210 - Topics in Advanced Calculus (3)
  - MAS5145 - Advanced Linear Algebra and Matrix Theory (3)
  - MAT5712 - Scientific Computing (3)
  - MAP6385 - Applied Numerical Mathematics (3)

Mathematics Restricted Electives
12 Total Credits

- Complete at least 4 of the following:
  - MAA6508 - Hilbert Spaces with Applications (3)
  - MAD5205 - Graph Theory I (3)
  - MAP5117 - Mathematical Modeling (3)
  - MAP5336 - Ordinary Differential Equations and Applications (3)
  - MAP6111 - Mathematical Statistics (3)
  - MAP6197 - Mathematical Introduction to Deep Learning (3)
  - MAP6195 - Mathematical Foundations for Massive Data Modeling and Analysis (3)
  - MAP6207 - Optimization Theory (3)
  - MAP6356 - Partial Differential Equations (3)

Professional Development Restricted Electives and Internship
6 Total Credits

- Complete 1 of the following
  
  Option 1
  - Complete at least 2 of the following:
    - ENT5016 - New Venture Design (3)
    - ENT6617 - Innovation and Entrepreneurship Strategy (3)
    - ENT5946 - Small Business Consulting (3)
    - MAN6245 - Organizational Behavior and Development (3)

  Option 2
  - Complete all of the following
    - Complete at least 1 of the following:
      - ENT5016 - New Venture Design (3)
      - ENT6617 - Innovation and Entrepreneurship Strategy (3)
      - ENT5946 - Small Business Consulting (3)
      - MAN6245 - Organizational Behavior and Development (3)

- Earn at least 3 credits from the following types of courses:
  - An industrial internship (MAP 6946) with satisfactory completion

Option 3
- Complete all of the following
  - Complete at least 1 of the following:
    - ENT5016 - New Venture Design (3)
    - ENT6617 - Innovation and Entrepreneurship Strategy (3)
    - ENT5946 - Small Business Consulting (3)
    - MAN6245 - Organizational Behavior and Development (3)
  - Complete at least 1 of the following:
    - MAP5117 - Mathematical Modeling (3)
    - MAP6197 - Mathematical Introduction to Deep Learning (3)
    - MAP6195 - Mathematical Foundations for Massive Data Modeling and Analysis (3)

Grand Total Credits: 30

Track Details

The program consists of 30 credit hours of courses and internship. Students will work with an adviser to design a program of study, which will be presented to the program director for approval. If a student has an industrial sponsor, the student's program of study will be developed in consultation with a representative from his sponsoring company. Students are expected to obtain hands-on experience. The capstone requirement for this track is fulfilled by students completing an experiential learning requirement (3 credit hours). At least one-half of the program courses must be taken at the 6000 level.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Mathematics PhD

College

College of Sciences

Department

Department of Mathematics

Program Website

https://math.cos.ucf.edu/graduate/

Program Handbook Link

Mathematics PhD

Program Contact Information

Qiyu Sun
Professor
qiyu.sun@ucf.edu
Telephone: 407-823-4839
PO Box 161364

Is this program available 100% online?

No
Program Description

The Mathematics PhD program prepares students with a broad base in pure, applied and industrial mathematics.

The Doctor of Philosophy degree in Mathematics is intended to provide a broad base in applied and industrial mathematics. The goal of the program is to produce students who will attain distinction in their fields of research. In order to achieve this, the program has required core courses as well as a set of electives providing cross-disciplinary subjects.

Students in the program can specialize in one of many aspects of mathematics, including Approximation Theory, Applied and Computational Harmonic Analysis, Big Data and Mathematical Statistics, Combinatorics and Graph Theory, Commutative Algebra and Algebraic Geometry, Control and Optimization, Differential and Symplectic Geometry, Fluid and Plasma Dynamics, Functional Analysis, Inverse and Ill-posed Problems, Mathematical Biology, Mathematical Finance, Nonlinear Waves and Nonlinear Dynamics, Numerical Analysis, Orthogonal Polynomials, Partial Differential Equations, Probability and Stochastic Analysis, and Tomography and Medical Imaging. Responding to this wide variety of interests, the program offers flexibility in the composition of the core courses as well as the candidacy examination. The program is comprehensive with opportunities for students to pursue research in a variety of disciplines.

This degree has 1 track: Financial Mathematics Track. Please scroll to the bottom of this page for further details on this Track.

The Mathematics PhD program consists of at least 75 credit hours of course work beyond the bachelor's degree, of which a minimum of 39 hours of formal course work, exclusive of independent study, and 15 credit hours of dissertation research (7980) are required. The program requires 18 credit hours of core courses, and 6 to 12 credit hours in two 2-semester sequences.

Total Credit Hours Required: 75 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites

Bachelor's degree in related field.

Students entering the graduate program with regular status are assumed to have a working knowledge of undergraduate calculus, differential equations, linear algebra (or matrix theory), and maturity in the language of advanced calculus (at the level of MAA 4226).

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses

18 Total Credits

- Complete all of the following
  - All students are required to complete the following courses with grade of "B" or better.
- Complete the following:
  - MAA5237 - Mathematical Analysis (3)
  - MAT5712 - Scientific Computing (3)
  - MAS5145 - Advanced Linear Algebra and Matrix Theory (3)
  - MAP6385 - Applied Numerical Mathematics (3)
  - MAA6306 - Real Analysis (3)
- Complete at least 1 of the following:
  - MAA6405 - Complex Variables (3)
  - MAP5336 - Ordinary Differential Equations and Applications (3)
  - MAA6506 - Functional Analysis (3)
  - MAP6111 - Mathematical Statistics (3)

Restricted Electives

12 Total Credits

- Complete 2 of the following
  - All students are required to complete two 2-semester sequences. Sequences are pairs of related courses that give
advanced knowledge in an area of mathematics. Each sequence must be approved by the dissertation adviser, dissertation committee, and the graduate program director. The following shows examples of acceptable sequences using current courses. We expect that other sequences will be developed as our program grows. Note that some sequences consist of a core course plus one elective, while others consist of two electives. Thus, the credit hours in this requirement are variable (6 to 12 credit hours). A written examination on two such sequences will be required as part of the candidacy examination (see more details in Candidacy Examination section).

- Complete the following:
  - MAA6405 - Complex Variables (3)
  - MAA6404 - Complex Analysis (3)

- Complete the following:
  - MAD5205 - Graph Theory I (3)
  - MAD5205 - Graph Theory I (3)

- Complete the following:
  - MAP5336 - Ordinary Differential Equations and Applications (3)
  - MAP6356 - Partial Differential Equations (3)

- Complete the following:
  - MAA6238 - Measure and Probability I (3)
  - MAA6245 - Measure and Probability II (3)

- Complete the following:
  - MAP6111 - Mathematical Statistics (3)
  - MAA7239 - Asymptotic Methods in Mathematical Statistics (3)

- Complete the following:
  - MAA6306 - Real Analysis (3)
  - MAA6506 - Functional Analysis (3)

- Complete the following:
  - MAS5311 - Algebra I (3)
  - MAS6312 - Algebra II (3)

- Complete the following:
  - MAP6195 - Mathematical Foundations for Massive Data Modeling and Analysis (3)
  - MAP6197 - Mathematical Introduction to Deep Learning (3)

- Complete the following:
  - MTG5256 - Differential Geometry (3)
  - MTG6345 - Algebraic Topology (3)

Unrestricted Electives
30 Total Credits

- Earn at least 30 credits from the following types of courses:
  Electives are chosen in consultation with the student's advisory committee and may be chosen from the suggested options: Discrete Mathematics, General Applied Mathematics, Mathematical Computer Tomography, Image Processing and Computer Graphics, Mathematical Finance, Mathematical Physics, Pure Mathematics, and Mathematical Statistics. A list of elective course options can be obtained from the graduate program director. Courses taken outside the Mathematics department must be approved by the adviser and graduate program director. These courses are selected in consultation with the student's advisory committee.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  XXXX 7980 Dissertation Research 15 Credit Hours (minimum)

Examinations
0 Total Credits
No Rules
Qualifying Examination
0 Total Credits

- The qualifying/comprehensive examination is based on the core course work (MAA 5237 and MAS 5145 - Advanced Linear Algebra and Matrix Theory). To continue in the PhD program students must pass the examination at the PhD level. Two attempts are permitted. The examination will be administered twice a year: one in the Fall semester and the other in the Spring semester. To take the examination, students must have earned a “B” or better in each core course, must have a minimum grade point average of 3.0 (out of 4.0) in the program, or must obtain permission from the graduate program director. Students will normally take the examination after taking the core courses MAA 5237 and MAS 5145, and are expected to have passed it by the end of the second year of study unless a written request for a postponement has been approved by the Graduate Committee at least two months before the examination date. The student must pass the Qualifying Examination in at most two attempts. It is strongly recommended that the student select a dissertation adviser by the completion of 18 credit hours of course work, and it is strongly recommended that the student works with the dissertation adviser to form a dissertation committee within two semesters of passing the Qualifying Examination.
The Candidacy Examination consists of a written examination based on the materials from two of the selected two-semester sequence courses taken by the students beyond the core courses on Mathematical Analysis and Advanced Linear Algebra (MAA 5237, MAS 5145). A committee formed or selected by the Graduate Committee or the graduate program director is responsible for preparing and grading the written examinations. After passing the candidacy examination and meeting other requirements, the student can register for Doctoral Dissertation (MAP 7980 or MAA 7980). A minimum of 15 Doctoral Dissertation credit hours are required. The Candidacy Examination can be attempted after passing the qualifying examination. The Candidacy Examination must be completed within three years after passing the qualifying examination. A student must successfully pass the Candidacy Examination within at most two attempts.

The following are required to be admitted to candidacy and enroll in dissertation hours: Completion of all course work, except for dissertation hours. Successful completion of the candidacy examination. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study.

After passing the candidacy examination, the student will prepare a dissertation proposal and orally present it to the dissertation advisory committee for approval. The proposal will include a description of the research performed to date and an agenda for the research planned to be completed for the dissertation. In addition to standards of correctness, indicating a suitable level of mastery of the material of the area of the dissertation, and suitability of the proposed dissertation topic, the presentation must meet current standards for professional presentations within the discipline of mathematics. For the successful completion of the Dissertation Proposal Examination the presentation must be judged as passing the requirements for the examination by the majority of the dissertation committee. This exam must be passed within 18 months of passing the candidacy examination and not later than the end of the sixth year of graduate study. A candidate must pass this examination within at most two attempts.

Upon completion of a student’s research, the student’s committee schedules an oral defense of the dissertation. Most students complete the program within five years after obtaining their bachelor’s degree. Students are expected to complete the dissertation in no more than seven years from the date of admission to the program.

The required 15 credit hours of dissertation will provide ample opportunities for students to gain the independent learning experience through studying published research papers and deriving, on their own, new and meaningful research results.

Grand Total Credits: 75

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student’s graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

The department offers over 20 Graduate Teaching Assistantships every year on a competitive basis. A few Graduate Research Assistantships are also available for qualified students.

**Grad Fellowships**

Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

**Mathematics PhD - Mathematics PhD, Financial Mathematics Track**

**Track Website**

https://math.cos.ucf.edu/graduate/

**Track Handbook**

Mathematics PhD

**Track Contact Information**

Qiyu Sun
Professor
qiyu.sun@ucf.edu
Telephone: 407-823-4839
PO Box 161364

**Online Availability**

No

**Track Description**

The Financial Mathematics track in the Mathematics PhD program is designed to prepare students for research and leadership positions in industry, government, non-governmental organizations, and academia requiring employment of financial mathematics.

The Mathematics PhD program consists of at least 75 credit hours of course work beyond the bachelor's degree, of which a minimum of 48 hours of formal course work, exclusive of independent study, are required. The program requires 36 credit hours of core courses and 15 credit hours of dissertation research (7980).

**Total Credit Hours Required: 75 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

Bachelor's degree in related field.

Students entering the graduate program with regular status are assumed to have a working knowledge of undergraduate calculus, differential equations, linear algebra (or matrix theory), boundary value problems, statistics, computer programming, and maturity in the language of advanced calculus (at the level of MAA 4226).

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**Institution Codes**

GRE: 5233
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Degree Requirements

Required Courses
36 Total Credits

- Complete all of the following
  - All students are required to complete the following courses with grade of "B" or better.
  - Complete the following:
    - MAA5237 - Mathematical Analysis (3)
    - MAS5145 - Advanced Linear Algebra and Matrix Theory (3)
    - MAP5641 - Financial Mathematics I (3)
    - MAP6642 - Financial Mathematics II (3)
    - MAP5612 - Computational Methods for Financial Mathematics I (3)
    - MAP6616 - Computational Methods for Financial Mathematics II (3)
    - MAP6646 - Risk Management for Financial Mathematics (3)
    - MAP606 - Differential Equations for Financial Mathematics (3)
    - MAP6195 - Mathematical Foundations for Massive Data Modeling and Analysis (3)
    - MAP6207 - Optimization Theory (3)
    - STA6857 - Applied Time Series Analysis (3)
    - MAP5931 - Proseminar for Financial Mathematics (1)
    - MAP5933 - Seminar in Financial Mathematics (2)

- The remaining credit hours consist of additional dissertation research (7980 or 7919), at least 15 credit hours of regular classroom elective courses, and at most 12 credit hours of independent study or independent directed research. Students who pass the qualifying examination may substitute some of the core courses with the approval of the adviser and the graduate program director.

Elective Courses
24 Total Credits

- Earn at least 24 credits from the following types of courses:
  - Elective courses require the approval of the adviser and the graduate program director; up to 12 credit hours of elective courses may be taken outside the department. At least one-half of the program courses must be taken at the 6000 level. At least 12 hours of elective course work must be formal course work, exclusive of independent study. Electives are chosen in consultation with the student’s advisory committee and may be chosen from the suggested options: Discrete Mathematics, General Applied Mathematics, Mathematical Computer Tomography, Image Processing and Computer Graphics, Mathematical Finance, Mathematical Physics, Pure Mathematics, Data Science, and Mathematical Statistics. A list of elective course options can be obtained from the graduate program director.
  - Courses that are taken outside the Mathematics department must be approved by both the adviser and graduate program director. These courses are selected in consultation with the student's advisory committee.

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - MAP 7980 - Dissertation Research 15 Credit Hours (minimum) After passing the candidacy examination and meeting the other requirements that are required for admission to candidacy, the student can register for Doctoral Dissertation (MAP 7980). A minimum of 15 Doctoral Dissertation credit hours are required for the degree.

Examinations
0 Total Credits
No Rules
Qualifying Examination
0 Total Credits

- The qualifying/comprehensive examination is based on the core course work. To continue in the PhD program, students must pass the examination at the PhD level. Two attempts are permitted. The examination will be administered twice a year: one in the Fall semester and the other in the Spring semester. To take the examination, students must have earned a "B" or better in each core course, must have a minimum grade point average of 3.0 (out of 4.0) in the program, or must obtain permission from the graduate program director. Students will normally take the examination after the first year and are expected to have passed it by the end of the second year of study, unless a written request for a postponement has been approved by the Graduate Committee at least two months before the examination date. The student must pass the Qualifying Examination in at most two attempts. It is strongly recommended that the student select a dissertation adviser by the completion of 18 credit hours of course work, and it is strongly recommended that the student works with the dissertation adviser to form a dissertation committee within two semesters of passing the Qualifying Examination.

Candidacy Examination
0 Total Credits

- The Candidacy Examination consists of a written examination based on the materials from two selected two-semester sequence courses taken by the students. A committee formed or selected by the Graduate Committee or the graduate program director is responsible for preparing and grading the written examinations. Each sequence that is selected for the candidacy examination must be approved by the dissertation adviser, the dissertation committee, and the graduate program director. Students in the Financial Mathematics Track will ordinarily select one of the sequences for their candidacy examination to be MAP 5641/MAP6642 Financial Mathematics I and II, and MAP5612/MAP6616 Computational Methods for Financial Mathematics I and II. The Candidacy Examination can be attempted after passing the qualifying examination. The
Candidacy Examination must be completed within three years after passing the qualifying examination. A student must successfully pass the Candidacy Examination within at most two attempts.

Admission to Candidacy
0 Total Credits
- The following are required to be admitted to candidacy and enroll in dissertation hours: Completion of all course work, except for dissertation hours. Successful completion of the candidacy examination. The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study.

Dissertation
0 Total Credits
Dissertation Proposal Examination
0 Total Credits
- After passing the candidacy examination, the student will prepare a dissertation proposal and orally present it to the dissertation advisory committee for approval. The proposal will include a description of the research performed to date and an agenda for the research planned to be completed for the dissertation. In addition to standards of correctness, indicating a suitable level of mastery of the material of the area of the dissertation, and suitability of the proposed dissertation topic, the presentation must meet current standards for professional presentations within the discipline of mathematics. For the successful completion of the Dissertation Proposal Examination, the presentation must be judged as passing the requirements for the examination by the majority of the dissertation committee. This exam must be passed within 18 months of passing the candidacy examination and not later than the end of the sixth year of graduate study. A candidate must pass this examination within at most two attempts.

Dissertation Defense
0 Total Credits
- Upon completion of a student's research, the student's committee schedules an oral defense of the dissertation. Most students complete the program within five years after obtaining their bachelor's degree. Students are expected to complete the dissertation in no more than seven years from the date of admission to the program.

Independent Learning
0 Total Credits
- The required 15 credit hours of dissertation will provide ample opportunities for students to gain the independent learning experience through studying published research papers and deriving, on their own, new and meaningful research results.

Grand Total Credits: 75

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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http://finaid.ucf.edu

Fellowship Information
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The department offers over 20 Graduate Teaching Assistantships every year on a competitive basis. A few Graduate Research Assistantships are also available for qualified students.

Grad Fellowships
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gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Network Analysis and Applications Graduate Certificate
College
College of Sciences

Department
School of Politics, Security, and International Affairs

Program Website
https://sciences.ucf.edu/politics/

Program Contact Information
Jacopo Baggio
Associate Professor
jacopo.baggio@ucf.edu
Telephone: 407-823-2608
HPH 302

Is this program available 100% online?
No

Program Description
The School of Politics, Security and International Affairs, the School of Public Administration, and the Department of Computer Science, offer a Graduate Certificate in Network Analysis and Applications that consists of 12 credit hours at the graduate level. Upon completing the certificate, students will be able to analyze networks either via pre-determined network analysis programs, by implementing the analysis via packages available in libraries in a suitable programming language, or by programming the analysis from scratch.

The Graduate Certificate in Network Analysis and Applications consists of 12 credit hours at the graduate level. Of these, 3 credit-hours are acquired via the core-course, 6 credit hours must be chosen from the list of restricted electives (see below). 3 additional credit hours are elective courses that can include a) one more of the courses listed as restricted electives; b) another elective course to be approved by the program advisor; c) independent studies with an affiliated faculty member to be chosen with approval from the program advisor and the selected faculty member.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Course
3 Total Credits

- Complete the following:
  - IDS6606 - Approaches to Network Analysis and Applications (3)

Restricted Electives
9 Total Credits

- Complete all of the following
  - Students can substitute one restricted elective with another elective course to be approved by the program advisor; or
    with an independent study course with an affiliated faculty member to be chosen with approval from the program
    advisor and the selected faculty member.
  - Complete at least 3 of the following:
    - COP5537 - Network Optimization (3)
    - CNT5805 - Network Science (3)
    - CAP6315 - Social Media and Network Analysis (3)
    - POS6729 - Political Network Analysis (3)
    - PAD6829 - Network Analysis in Public Policy and Management (3)
    - PAD7827 - Network Governance (3)
  - Students may also take XXX 6908 Independent Study

Grand Total Credits: 12

Physics MS

College
College of Sciences

Department
Department of Physics

Program Website
https://sciences.ucf.edu/physics/

Program Handbook Link

Physics MS

Program Contact Information

Abdelkader Kara PhD
Professor
Abdelkader.Kara@ucf.edu
Telephone: 407-823-5146
PSB 303

Esperanza Soto Arcino
Graduate Admissions Coordinator
soto@ucf.edu
Telephone: 407-823-5146
PSB 432

Is this program available 100% online?
No
Program Description

The University of Central Florida offers a Master of Science in Physics. Research opportunities are available in condensed matter physics, nanostructure devices, surface science, optical physics, complex systems, biophysics, atomic and molecular physics, physics education and planetary/ space science.

This degree has 1 track: Planetary Sciences Track. Please scroll to the bottom of this page for further details on this Track.

The Physics MS program requires a minimum of 30 credit hours beyond the bachelor's degree and offers students a thesis and nonthesis option. All students take 12 credit hours of core courses, and then the remaining 18 credit hours consist of both electives and thesis or directed research according to the option chosen.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

The Master of Science in Physics program is flexibly designed to prepare students for the widest possible range of industrial careers or for further study at the doctoral level.

Program Prerequisites

Students entering the Physics graduate program with regular status are normally expected to have completed coursework generally required for a bachelor's degree in physics, including classical mechanics, electricity and magnetism, thermal and statistical physics, and quantum mechanics.

College of Graduate Studies Contact Information

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Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses

12 Total Credits

- Complete the following:
  - PHY5606 - Quantum Mechanics I (3)
  - PHY5346 - Electrodynamics I (3)
  - PHY5524 - Statistical Physics (3)
  - PHY6246 - Classical Mechanics (3)

Elective Courses

12 Total Credits

- Complete 1 of the following
  - Both thesis and nonthesis students take electives in consultation with their advisers. Out of the 18 elective credit hours at least 12 credit hours of formal course work are required and not more than 6 credit hours of 5000-level elective courses are counted toward the degree. At least 6 credit hours of thesis or 3 credit hours of directed research for the nonthesis option are required. Otherwise, elective selection is intended to be very flexible to meet student needs and interests. Electives may be chosen following one of the suggested specializations below, or a different program of study may be followed with academic adviser approval.

  - Materials Physics Specialization
    - Complete all of the following
      - Earn at least 12 credits from the following:
        - PHY6624 - Quantum Mechanics II (3)
        - PHY6347 - Electrodynamics II (3)
        - PHZ6426 - Condensed Matter Physics I (3)
        - PHZ6428 - Condensed Matter Physics II (3)
        - PHZ5505 - Plasma Physics (3)
        - PHZ5432 - Introduction to Soft Condensed Matter Physics (3)
        - PHY5715 - Physical Basis of Life (3)
        - PHY5933 - Selected topics in biophysics of macromolecules (3)
- PHZ6420 - First Principles Computational Methods in Condensed Matter Physics (3)
- PHY6938 - Special Topics (3)
- EEE5356C - Fabrication of Solid-State Devices (4)

- Other graduate courses from Physics, Math, Optics, Materials Science, Engineering require approval by the student's adviser and the Graduate Program Director.

### Optical Physics Specialization
- Complete all of the following
  - Earn at least 12 credits from the following:
    - PHY6624 - Quantum Mechanics II (3)
    - PHY6347 - Electrodynamics II (3)
    - PHY6938 - Special Topics (3)
    - OSE6111 - Optical Wave Propagation (3)
    - OSE5115 - Interference and Diffraction (3)
    - OSE6526C - Laser Engineering Laboratory (3)
    - OSE6455C - Photonics Laboratory (3)
    - OSE6347 - Quantum Optics (3)
    - OSE5312 - Light Matter Interaction (3)

- Other graduate courses from Physics, Math, Optics, Materials Science, Engineering require approval by the student's adviser and the Graduate Program Director.

### Space Physics Specialization
- Complete all of the following
  - Earn at least 12 credits from the following:
    - PHY6624 - Quantum Mechanics II (3)
    - PHY6347 - Electrodynamics II (3)
    - PHZ5505 - Plasma Physics (3)
    - AST5334 - Extrasolar Planets and Brown Dwarfs (3)
    - EAS5315 - Rocket Propulsion (3)
    - EAS6405 - Advanced Flight Dynamics (3)
    - EAS6507 - Topics of Astrodynamics (3)
    - OSE5041 - Introduction to Wave Optics (3)
    - EEL5820 - Image Processing (3)

- Other graduate courses from Physics, Math, Optics, Materials Science, Engineering require approval by the student's adviser and the Graduate Program Director.

### Theory/Computational Physics Specialization
- Complete all of the following
  - Earn at least 12 credits from the following:
    - PHY6624 - Quantum Mechanics II (3)
    - PHY6347 - Electrodynamics II (3)
    - PHZ6420 - First Principles Computational Methods in Condensed Matter Physics (3)
    - PHY6938 - Special Topics (3)
    - PHZ6426 - Condensed Matter Physics I (3)
    - PHZ6428 - Condensed Matter Physics II (3)
    - PHY6667 - Quantum Field Theory I (3)
    - PHY7669 - Quantum Field Theory II (3)
    - PHZ5505 - Plasma Physics (3)
    - OSE6347 - Quantum Optics (3)
    - OSE5312 - Light Matter Interaction (3)

- Other graduate courses from Physics, Math, Optics, Materials Science, Engineering require approval by the student's adviser and the Graduate Program Director.

### Thesis/Nonthesis Option

**Thesis Option**
- Complete 1 of the following
  - Thesis Students who choose the thesis option are required to conduct a program of original scientific research or some investigation involving a creative element and to submit a written thesis detailing these investigations. An oral defense and examination of the thesis is required. These six credit hours count towards the 18 hours of required electives for the degree (12 required hours as specified above). An exit interview conducted by the Graduate Program Director is required after passing the thesis defense.

**Nonthesis Option**
- Complete all of the following
  - Nonthesis students are required to take 15 total credit hours of electives from the list of elective specializations shown above (12 required for all students, 3 additional for Nonthesis). In addition, they must take a minimum of 3 credit hours of directed research. The three credit hours of directed research count towards the 18 hours of required electives for the degree. In the directed research course, students work on a research project under the supervision of a faculty member and are required to present a final report as well as a written comprehensive exit examination*. The Graduate Program Director will arrange this exam. The exit exam is followed by an exit interview.
  - Earn at least 3 credits from the following types of courses:
Additional Elective Course from their specialization

- Earn at least 3 credits from the following:
  - PHY6918 - Directed Research (1 - 99)

- *Note: When applicable, students in the non-thesis MS degree program may request the Graduate Program Director’s approval to satisfy the MS exit exam and final report with the completion of the Physics PhD written candidacy exam.

Independent Learning
0 Total Credits

- Students pursuing a nonthesis master's degree must take at least one directed research course as part of their elective work. In this course, students will work on a research project under the supervision of a faculty member and present a final report.

Grand Total Credits: **30**

**Physics MS - Physics MS, Planetary Sciences Track**

**Track Website**
https://sciences.ucf.edu/physics/graduate/planetary-sciences-program

**Track Handbook**
Physics MS, Planetary Sciences Track

**Track Contact Information**

- **Daniel Britt**
  Pegasus Professor
dbritt@ucf.edu
  PSB 442

- **Esperanza Soto Arcino**
  Graduate Admissions Coordinator
  soto@ucf.edu
  Telephone: 407-823-5146
  PSB 432

**Online Availability**
No

**Track Description**

The goal of the Planetary Sciences Track of the Physics MS program is to foster a vibrant Planetary Science research environment that can attract top students, researchers, and faculty and contribute significantly to the exploration of space. The Planetary Sciences track is designed to prepare students to be competitive in the global planetary sciences research community.

The Planetary Sciences track of the Physics MS program requires a minimum of 33 hours of graduate course work as directed by the student's Supervisory Committee. This must include at least 15 credit hours of required courses, 6 hours of thesis preparation, with the remainder being elective courses and directed research chosen in consultation with the Supervisory Committee. At least half of the total credits must be at the 6000 level. No more than 6 hours of independent study may be credited toward the master's degree. The master's degree in Planetary Sciences includes a thesis and its defense. There is no nonthesis master's degree in the Planetary Sciences track.

**Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree**

**Track Prerequisites**

A bachelor's degree in a closely related science field such as physics, chemistry, geology, geophysics, geochemistry, atmospheric sciences biology, mathematics or planetary sciences.
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Degree Requirements

Required Courses
15 Total Credits

- Complete all of the following
  - The core is designed to give students a broad foundation in the planetary sciences and rapid training in the data analysis techniques that will be necessary for successful research and publications. Students choose 5 out of the 6 core courses listed below:
  - Complete at least 5 of the following:
    - AST5151 - Physics of Planetary Processes (3)
    - PHY6246 - Classical Mechanics (3)
    - AST5765C - Advanced Astronomical Data Analysis (3)
    - AST5263 - Advanced Observational Astronomy (3)
    - AST5154 - Advanced Planetary Geophysics (3)
    - AST6165 - Planetary Atmospheres (3)

Elective Courses
12 Total Credits

- Complete all of the following
  - Students may enroll in elective formal courses relevant to their program, as approved by their Supervisory Committees. Suggestions include:
  - Earn at least 12 credits from the following:
    - AST5145 - Advanced Asteroids, Comets, and Meteorites (3)
    - AST5334 - Extrasolar Planets and Brown Dwarfs (3)
    - PHY5937 - Special Topics (3)
    - AST6112 - Origin and Evolution of Planetary Systems (3)
    - AST6156 - Current Topics in Planetary Sciences (3)

Thesis
6 Total Credits

- Earn at least 6 credits from the following types of courses:
  - AST or PHY 6971 - Thesis

Supervisory Committee
0 Total Credits

- Within the first half-semester of admission to the Planetary Sciences Track, each student must select, by mutual agreement, a faculty adviser and at least two other faculty members to serve on his or her Supervisory Committee. UCF graduate faculty and self-funded research scientists who are Graduate Faculty Scholars are eligible to serve on Supervisory Committees. Creation of and changes in the membership of a Supervisory Committee must be approved by the Planetary Sciences Graduate Committee. The adviser is expected to meet regularly with the student. The full committee shall meet with the student at least once per year to review and make recommendations regarding the student's academic progress.

Master's Defense
0 Total Credits

- The written thesis and oral defense is the final requirement for the master's degree. The thesis is a journal-level research paper. The oral defense is in two parts: (1) A public presentation of the research contained in the paper; and (2) private questioning on the detail of the presented research as well as the topics covered in the student's preparation and coursework. The written and oral components will be administrated by the student's Supervisory Committee.

Independent Learning
0 Total Credits

- A thesis is required in this program.

Grand Total Credits: 33

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

2022-2023 Graduate Catalog
Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Physics PhD

College

College of Sciences

Department

Department of Physics

Program Website

https://sciences.ucf.edu/physics/graduate/

Program Handbook Link

Physics PhD

Program Contact Information

Abdelkader Kara PhD
Professor
Abdelkader.Kara@ucf.edu
Telephone: 407-823-5146
PSB 303

Esperanza Soto Arcino
Graduate Admissions Coordinator
soto@ucf.edu
Telephone: 407-823-5146
PSB 432

Is this program available 100% online?

No

Program Description

The Physics doctoral program offers research opportunities in condensed matter physics, physics of nanostructured devices, surface science, optical physics, complex systems, biophysics, atomic and molecular physics, physics education and planetary/space science. The program intends to provide a broad base in experimental and theoretical physics.

The rules and recommendations below do not apply to the Planetary Sciences track of the Physics PhD program. Please scroll to the bottom of this page for further details on this Track.

The Physics PhD program requires a total of 72 credit hours beyond the bachelor’s degree for completion. A specific set of six required core courses (18 credit hours), thirteen elective courses (39 credit hours, which may include directed research), and a minimum of 15 credit hours of dissertation are part of the 72 hours.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree. 42 Credit Hours Minimum beyond the Master's Degree.

Program Prerequisites

Students entering the Physics graduate program with regular status are normally expected to have completed course work generally required for a bachelor's degree in physics, including classical mechanics, electricity and magnetism, thermal and statistical physics, and quantum mechanics.
College of Graduate Studies Contact Information

Anthony Tufano
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Core Courses
18 Total Credits

- Complete the following:
  - PHY5606 - Quantum Mechanics I (3)
  - PHY6624 - Quantum Mechanics II (3)
  - PHY5346 - Electrodynamics I (3)
  - PHY6347 - Electrodynamics II (3)
  - PHY5524 - Statistical Physics (3)
  - PHY6246 - Classical Mechanics (3)

Elective Courses
39 Total Credits

- Methods Course - 3 Credit Hours Formal Course - 9 Credits Hours Remaining Electives - 27 Hours

Methods Course
3 Total Credits

- Complete at least 1 of the following:
  - PHZ5156 - Computational Physics (3)
  - AST5765C - Advanced Astronomical Data Analysis (3)
  - PHY5937 - Special Topics (3)

Formal Courses
9 Total Credits

- Complete 1 of the following
  - Students must complete three formal courses (9 credit hours) from the "List of Specialization Courses".
    General Physics Specialization
  - Complete all of the following
    - The General Physics Specialization emphasizes strong preparation in physics fundamentals. It is intended to prepare students for careers in theoretical physics or teaching at the college level. Several active research programs exist in the department to accommodate such students.
    - Complete at least 3 of the following:
      - COT5600 - Quantum Computing (3)
      - PHY5933 - Selected topics in biophysics of macromolecules (3)
      - PHZ5156 - Computational Physics (3)
      - PHZ5405 - Condensed Matter Physics (3)
      - PHZ6426 - Condensed Matter Physics I (3)
      - PHZ6428 - Condensed Matter Physics II (3)
      - PHY6667 - Quantum Field Theory I (3)
      - PHY7669 - Quantum Field Theory II (3)
      - PHZ5505 - Plasma Physics (3)
      - PHZ5304 - Nuclear and Particle Physics (3)
      - PHZ6234 - Atomic Physics (3)
      - PHZ6420 - First Principles Computational Methods in Condensed Matter Physics (3)
      - PHY6600C - Theory and Computations of Molecular Wavefunctions (3)
      - PHY6938 - Special Topics (3)
      - OSE5312 - Light Matter Interaction (3)
      - OSE6347 - Quantum Optics (3)
 PHY 7919 - Doctoral Directed Research may also be used

Condensed Matter Physics Specialization

- Complete all of the following:
  - The Condensed Matter Physics Specialization is intended to prepare students for careers in materials physics, nanoscale science and technology, semiconductors, and soft condensed matter physics. It emphasizes strong experimental preparation with hands-on courses in advanced materials characterization and processing instrumentation. Related research programs at UCF include magnetic nanostructures, soft condensed matter, electronic and optoelectronic devices, and nanoscale characterization.
  - Complete at least 3 of the following:
    - PHZ5405 - Condensed Matter Physics (3)
    - PHZ6426 - Condensed Matter Physics I (3)
    - PHZ6428 - Condensed Matter Physics II (3)
    - PHZ5156 - Computational Physics (3)
    - PHZ6420 - First Principles Computational Methods in Condensed Matter Physics (3)
    - PHZ5432 - Introduction to Soft Condensed Matter Physics (3)
    - PHY5933 - Selected topics in biophysics of macromolecules (3)
    - PHY6667 - Quantum Field Theory I (3)
    - PHY7669 - Quantum Field Theory II (3)
    - COT5600 - Quantum Computing (3)
    - PHY6938 - Special Topics (3)

Optical Physics Specialization

- Complete all of the following:
  - The Optics Specialization coordinator is David Hagan, PhD, College of Optics and Photonics.
  - Complete at least 1 of the following:
    - OSE6111 - Optical Wave Propagation (3)
    - OSE5115 - Interference and Diffraction (3)
  - Complete at least 1 of the following:
    - OSE6526C - Laser Engineering Laboratory (3)
    - OSE6455C - Photonics Laboratory (3)
  - Earn at least 3 credits from the following types of courses:
    - The remaining courses (up to three) may be selected from other graduate courses in Optics (see https://creol.ucf.edu/academics/courses/).

Remaining Electives

27 Total Credits

- Earn at least 27 credits from the following types of courses:
  - Students must complete 27 credit hours of unrestricted electives, which may consist of formal courses, directed research, and/or doctoral research hours. Students should consult with their adviser about selections for the remaining unrestricted electives.

Dissertation

15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - PHY 7980 - Dissertation Research All students must complete a minimum of 15 credit hours of dissertation prepared in consultation with a dissertation adviser. A fifteen-page written proposal is presented orally to the student's dissertation committee by the summer of the student’s third year in the doctoral program, after successful completion of the written candidacy exam requirement. The Department Chair may grant extensions for documented exceptional reasons. The final oral defense of the dissertation is administered by the student's dissertation committee following completion of a written dissertation describing the student's research.

Seminar Attendance

0 Total Credits

- Students in their fourth semester and beyond will be required to attend a major fraction of seminars and colloquia hosted by the Physics Department, as well as to make an annual presentation of their research work or independent study.

Examinations

0 Total Credits

- Details

Placement Exam

0 Total Credits

- All incoming Physics PhD students will be required to take a diagnostic test like the Physics subject GRE. This test has placement purposes only, allowing the Graduate Program Director and academic adviser to identify possible weaknesses in the student's background and help devise a suitable plan of study. There is no passing or failure.

Candidacy Exam

0 Total Credits

- The candidacy exam consists of two parts. Part 1 is a written exam covering 4 subjects: Quantum Mechanics,
Electromagnetism, Statistical Physics, and Classical Mechanics. Students are expected to show mastering of these topics at or above the undergraduate level. The written candidacy exam is offered at least twice per year. The exam is offered over four separate days: one subject per day. Students will be allowed to attempt each subject within two years of joining the PhD program. After passing the written exam, the student should identify a research supervisor and a dissertation committee must be put in place with the approval of the graduate program director. Part 2 is an oral exam that combines an examination of the student’s command of Physics and a written dissertation proposal. The oral exam should be completed by the summer of the student’s third year in the doctoral program. The Department Chair may grant extensions for documented exceptional reasons.

Admission to Candidacy

The following are required to obtain candidacy status and enroll in dissertation hours: Students must complete the majority of all course work prior to entering Candidacy Status. This includes: 18 Credit hours of Required Core Courses, 3 credit hours of a Methods course, 9 credit hours of Formal coursework, and 27 credit hours of Remaining Electives. Students can have no more than 6 credit hours of remaining coursework (outside of Dissertation hours) when applying for Candidacy. Successful completion of both part I (written exam) and part II (oral exam) of the candidacy exam. The dissertation advisory committee is formed, consisting of a chair, approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study. Completion of CITI and RCR Workshops

Independent Learning

The Physics PhD program requires a doctoral dissertation. This will provide ample opportunities for students to gain independent learning experience through studying published research papers, conducting research, and presenting their results in conferences and in peer-reviewed scientific journals.

Grand Total Credits: 72

Physics PhD - Physics PhD, Planetary Sciences Track

Track Website

https://sciences.ucf.edu/physics/graduate/planetary-sciences-program/

Track Handbook

Physics PhD, Planetary Sciences Track

Track Contact Information

Daniel Britt PhD
Pegasus Professor
dbritt@ucf.edu
PSB 442

Esperanza Soto Arcino
Graduate Admissions Coordinator
soto@ucf.edu
Telephone: 407-823-5146
PSB 432

Online Availability

No

Track Description

The goal of the Planetary Sciences Track of the Physics PhD program is to foster a vibrant Planetary Science research environment that can attract top students, researchers, and faculty and contribute significantly to the exploration of space. The Planetary Sciences track is designed to prepare students to be competitive in the global planetary sciences research community.

Total Credit Hours Required: 72 Credit Hours Minimum beyond the Bachelor's Degree. 42 Credit Hours Minimum beyond the Master's Degree.

This includes completion of 6 required courses (18 credit hours), 5 elective courses (15 credit hours) of regular course work, and a minimum of 15 credit hours of dissertation. Courses must be selected so that at least 36 of the 72 hours are at 6000 level or higher. No more than 12 hours of independent study may be credited toward the PhD degree. The PhD includes a Candidacy Exam to be taken after the completion of the core and elective courses, a written dissertation, and a dissertation defense before the student's Supervisory Committee.
**Track Prerequisites**

Students entering the Planetary Sciences graduate track program with regular status are normally expected to have completed coursework generally required for a bachelor's degree in a closely related science field such as physics, astronomy, geology, geophysics, atmospheric sciences, chemistry, biology, mathematics or planetary sciences.

**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

**Required Courses**  
18 Total Credits

- Complete all of the following
  - The core is designed to give students a broad foundation in the planetary sciences and a rapid training in the data analysis techniques that will be necessary for a successful research and publications.
  - Complete the following:
    - AST5151 - Physics of Planetary Processes (3)
    - PHY6246 - Classical Mechanics (3)
    - AST5765C - Advanced Astronomical Data Analysis (3)
    - AST5263 - Advanced Observational Astronomy (3)
    - AST5154 - Advanced Planetary Geophysics (3)
    - AST6165 - Planetary Atmospheres (3)

**Elective Courses**  
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - Students may enroll in elective formal courses relevant to their program, as approved by their Supervisory Committees.
  - Suggestions include:
    - AST 5145 - Advanced Asteroids, Comets, and Meteorites 3 Credit Hours
    - AST 5334 - Extrasolar Planets and Brown Dwarfs 3 Credit Hours
    - AST 5038 - Astrobiology 3 Credit Hours
    - AST 6112 - Origin and Evolution of Planetary Systems 3 Credit Hours
    - AST 6156 - Current Topics in Planetary Sciences 3 Credit Hours

**Other Electives**  
24 Total Credits

- Earn at least 24 credits from the following types of courses:
  - A range of graduate physics, chemistry, optical sciences, and mathematics courses useful for the student’s area of research can be taken as electives. Electives should be chosen with the advice and consent of the student's advisor and Supervisory Committee.

**Dissertation**  
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - AST or PHY 7980 - Dissertation

**Supervisory Committee**  
0 Total Credits

- Within the first half-semester of admission to the Planetary Sciences Track, each student must select, by mutual agreement, a faculty advisor and at least two other faculty members to serve on the Supervisory Committee. UCF graduate faculty and UCF self-funded research scientists who are Graduate Faculty Scholars are eligible to serve on Supervisory Committees. Creation of and changes in the membership of a Supervisory Committee must be approved by the Planetary Sciences Graduate Committee. The adviser is expected to meet regularly with the student. The full committee shall meet with the student at least once per year to review and make recommendations regarding the student's academic progress.

**Candidacy Examination**
The Planetary Sciences Track requires a Candidacy Exam to be taken after the completion of the core courses. This examination is composed of written and oral components. The written component is a journal-level research paper. The oral component has two parts: (1) A public presentation of the research contained in the paper, including the traditional question-and-answer period of a scientific presentation; and (2) private questioning on the detail of the presented research as well as the topics covered in the student’s preparation, coursework and dissertation direction. The Supervisory Committee administers the Candidacy Examination.

Dissertation Advisory Committee
0 Total Credits

- After passing the Candidacy Examination, a non-UCF member shall be added to the Supervisory Committee by mutual agreement of the student and Supervisory Committee. This becomes the Dissertation Advisory Committee. The committee continues to meet with the student annually.

Dissertation Proposal
0 Total Credits

- The dissertation proposal may be presented immediately after the Candidacy Examination or in a separate meeting not more than one semester thereafter. Before substantial work is done on the dissertation, the Dissertation Advisory Committee must approve the proposal and must also assess whether additional coursework is necessary to begin the dissertation. Such coursework should be completed at the earliest opportunity.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: Completion of all required and formal elective course work, except for research hours. Successful completion of the Candidacy Examination. The Dissertation Advisory Committee is formed, consisting of approved graduate faculty and graduate faculty scholars. Submittal of an approved program of study. Completion of CITI and RCR Workshops.

Dissertation Defense
0 Total Credits

- The dissertation defense is the final requirement for the PhD. It consists of a public presentation of the dissertation, typically lasting 45-60 minutes including the traditional question-and-answer period of a scientific presentation, followed by private questioning by the Dissertation Advisory Committee.

Independent Learning
0 Total Credits

- A dissertation is required.

Grand Total Credits: 72

Track Details

All courses must be selected in consultation with and with the approval of the Supervisory Committee (before candidacy) or Dissertation Advisory Committee (after candidacy).

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fellowship Information

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Grad Fellowships
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https://funding.graduate.ucf.edu
Political Science MA

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Program Website
https://sciences.ucf.edu/politics/graduate/political-science-ma/

Program Handbook Link
Political Science MA

Program Contact Information
Andrew Boutton PhD
Associate Professor and MA program coordinator
Andrew.Boutton@ucf.edu
Telephone: 407-823-3330
HPH 302

Kyrie Ottaviani
Graduate Admissions Coordinator
graduatepolisci@ucf.edu

Is this program available 100% online?
No

Program Description
The Master of Arts in Political Science program prepares students to enter positions in government and the private sector, advance their professional careers in a variety of fields including consultation, defense, environment, and philanthropy, and pursue more advanced graduate degrees such as a PhD in which the analytical ability to comprehend, influence, and respond to policies and initiatives is critical. The program also provides a well-rounded substantive curriculum for secondary school teachers seeking higher degrees and for teachers in community colleges. As such, the Master of Arts in Political Science program is designed to accommodate a range of professional and intellectual needs.

A Program of Study in the Master of Arts in Political Science consists of the following coursework. Students have the option of completing a thesis with 27 hours of coursework or choosing the nonthesis option with 33 hours of coursework.

Total Credit Hours Required: 33 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
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PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements
Required Core Courses
12 Total Credits

- Complete all of the following
- Complete the following:
- POS6736 - Conduct of Political Inquiry (3)
- POS6746 - Quantitative Methods in Political Research (3)

- Complete at least 2 of the following:
  - CPO6091 - Seminar in Comparative Politics (3)
  - INR6007 - Seminar in International Politics (3)
  - POS6045 - Seminar in American National Politics (3)
  - POT6007 - Seminar in Political Theory (3)

Elective Courses
15 Total Credits

- Complete all of the following
- Students will complete 15 hours of coursework at the 5000 or 6000 level. All 5000 or 6000 level courses offered by the SPSIA can be used to meet this requirement, with the exception of those courses used to complete core course requirements. Up to 6 credit hours of 5000 and 6000 level courses coursework from other departments/schools may also be used as electives with the prior approval of the MA program coordinator. Students may use up to 6 hours of independent study and up to 6 hours of internship credit for the elective credits requirement, but no more than 6 hours total can be from coursework outside the SPSIA, independent study, or internship credit.
- Complete at least 5 of the following:
  - CPO6038 - Political Development (3)
  - CPO6058 - Revolution and Political Violence (3)
  - CPO6206 - Comparative Politics of Africa (3)
  - CPO6307 - Issues in Latin American Politics (3)
  - CPO6407 - Comparative Politics of the Middle East (3)
  - CPO6729 - Global Security in the Age of Migration (3)
  - INR6039 - International Political Economy (3)
  - INR6062 - Peace Studies (3)
  - INR6065 - Seminar on War (3)
  - INR6067 - Human Rights and Security (3)
  - INR6068 - Politics of Civil Wars (3)
  - INR6108 - Seminar in American Foreign Policy (3)
  - INR6136 - Seminar in American Security Policy (3)
  - INR6137 - Terrorism and Politics (3)
  - INR6257 - International Relations of Africa (3)
  - INR6275 - International Politics of the Middle East (3)
  - INR6339 - Strategic Warning Analysis (3)
  - INR6346 - Politics of International Terrorism (3)
  - INR6352 - Global Environmental Politics (3)
  - INR6356 - Environmental Security (3)
  - INR6365 - Seminar on Intelligence (3)
  - INR6366 - The Intelligence Community (3)
  - INR6726 - Political Behavior in International Conflict (3)
  - POS6207 - Political Behavior (3)
  - POS6415 - The American Presidency (3)
  - POS6427 - Congress and the Legislative Process (3)
  - POS6686 - National Security Law (3)
  - POS6729 - Political Network Analysis (3)
  - POS6743 - Geographic Tools for Political Science Research (3)
  - POS6747 - Advanced Topics in Quantitative Political Analysis (3)
  - POS6757 - Survey Design for Political Science Research (3)
  - Course Not Found
  - PUP6208 - Environmental Politics (3)
  - PUP6247 - Contemporary Issues in Environmental Politics (3)
  - Course Not Found
  - PUP6607 - Politics of Health (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      All MA students are automatically placed in the nontesis option. Students wishing to write a thesis must get approval to do so. POS 6971 Thesis After completion of the required coursework and the passing of comprehensive exams, the student must have a thesis committee approved by the School of Politics, Security, and International Affairs (SPSIA)and Graduate Studies. The thesis committee consists of a chair and two other faculty members from the SPSIA who are members of the Graduate Faculty. On the approval of the thesis chair and Graduate Program Director, one of the committee members (but not the chair) may come from outside the SPSIA. When a thesis topic has been selected, students, in conjunction with their thesis committee, will develop a thesis proposal. Copies of the proposal will be sent to members of their thesis committee and a proposal hearing scheduled in the first semester the student enrolls for thesis hours. All students must pass a proposal hearing as well as a final oral defense of their thesis. Once enrolled in thesis hours, students should maintain continuous enrollment (3 credit hours) each semester up to and including the semester in which they defend the thesis. In addition to SPSIA guidelines for the thesis, students should also become
familiar with the UCF’s requirements and deadlines for organizing and submitting the thesis.

Nonthesis Option

- Earn at least 6 credits from the following types of courses:
  - The student must complete 6 additional credit hours of course electives in their respective areas. Thesis hours, if already taken, will not count for course credit for the 6 additional credit hours of coursework. Electives 6 Credit Hours
  - Complete an independent research project/paper During the final semester of coursework, the student must have a nonthesis committee approved by the SPSIA and Graduate Studies. The nonthesis committee consists of a chair and one other faculty member from the SPSIA. On the approval of the thesis chair and Graduate Program Director, the committee member (but not the chair) may come from outside the SPSIA. The student must complete an approved article-length independent research paper. The project/paper must have a component of original, independent research; it cannot be a literature review or research design only. The project/paper can be a product of a graduate research seminar and/or independent study paper. The student will present their research publicly at a SPSIA or UCF research colloquium or another public academic forum such as an academic conference. The project/paper must be evaluated by the nonthesis committee and receive formal confirmation of completion from the committee, and the MA program coordinator. If the paper is to be presented at a SPSIA research colloquium, the student is responsible for scheduling the presentation in consultation with the nonthesis committee.

Comprehensive Examination

0 Total Credits

- All candidates for the MA degree must take a comprehensive written examination. The examination will be administered after satisfactory completion of the required course work and must be taken prior to enrollment in thesis hours. The exam is designed to demonstrate proficiency in research methods and will consist of two parts. Part I will involve the critique of an article from a political science journal. The article will be assigned by the SPSIA's Graduate Methods Committee in consultation with the student and where possible will be based on the student's substantive areas of interest. Part II will involve questions based on data analysis using either SPSS or STATA. The examination will be offered once semester. Dates will be set by the SPSIA. Students must register to take the exam at least six weeks prior to its scheduled date and take the exam within six months after they complete POS 6736 and POS 6746. Students not passing any part of the examination may take this part a second time within nine months on the dates that comprehensive exams are regularly scheduled. However, no student will be allowed to take the examination more than twice.

Equipment Fee

0 Total Credits

- Full-time students in the Political Science MA program pay a $39 equipment fee each semester that they are enrolled. Part-time students pay $19.50 per semester.

Grand Total Credits: 33

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance

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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
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http://finaid.ucf.edu

Fellowship Information

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

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https://funding.graduate.ucf.edu

Research Smarts Graduate Certificate

College

College of Sciences
**Department**
Department of Sociology

**Program Website**
https://sciences.ucf.edu/sociology/graduate/programs/

**Program Contact Information**
Timothy L. Hawthorne, PhD  
Associate Professor  
Department of Sociology  
Timothy.Hawthorne@ucf.edu  
Telephone: 407-823-3744  
HPH, RM 403

Bridgett Burk  
Graduate Admissions Coordinator  
Department of Sociology  
HPH, RM 403  
407-823-3744

**Is this program available 100% online?**
No

**Program Description**
The Graduate Certificate in Research Smarts provides students with the essential skills and critical thinking needed by today's consumers of news and information.

Increasing one's Research Smarts will provide students with the practical skills and critical thinking necessary to produce and to consume findings, facts, and information with the assurance that it was arrived at systematically. These skills are not only useful in daily life, as we wade through the mass of news and information that comes our way, but also in private business, nonprofit organizations, government agencies, and other employment opportunities. Students seeking employment, those with jobs currently, or those working toward advancement can benefit from a critical examination of how knowledge is gained and which sources of information can be trusted. This is because nearly all employers value employees who are confident in their understanding and use of scientific research skills.

Students earning the Graduate Certificate in Research Smarts will acquire the following skills:

1. Be able to define knowledge, social science research, and research methods.
2. Summarize why understanding research methods is important.
3. Evaluate and describe each of the major steps taken to conduct research as well as the importance of each step.
4. Develop research questions and compare the different types of research questions.
5. Understand why ethics are an important consideration during research.
6. Understand a variety of ways to analyze data.
7. Understand the relationship between research methods and data analysis.
8. Be able to design a sound research project from developing the research question to collecting the data, to selecting the best analysis strategy to making strategic conclusions.
9. Use the above skills to critically assess news and information as well as evaluate the claims and assertions of others.

The Research Smarts Graduate Certificate consists of three required courses.

**Total Credit Hours Required: 9 Credit Hours Minimum beyond the Bachelor's Degree**

**Program Prerequisites**
Admission is open to those with a bachelor's degree from an accredited institution recognized by UCF and at least one statistics course or math course.
**College of Graduate Studies Contact Information**

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

**Mailing Address**  
UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

**Institution Codes**  
GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**Degree Requirements**

**Required Courses**

- Complete at least 3 of the following:
  - SYA6305 - Quantitative Social Research Methods (3)
  - SYA6315 - Qualitative Research Methods (3)
  - SYA6356 - Geographic Information Systems in Society (3)
  - SYA6425 - Design and Conduct of Social Surveys (3)
  - SYA6452 - GIS Applications (3)
  - SYA6455 - Research Analysis (3)
  - SYA6458 - Advanced Topics in Geographic Information Systems in Society (3)
  - SYA6657 - Program Design and Evaluation (3)
  - SYA7309 - Advanced Sociological Research Methods (3)
  - SYA7407 - Advanced Quantitative Data Analysis (3)
  - SYA7457 - Topics in Data Analysis (3)
  - SYA7658 - Social Policy and Research Analysis (3)

Grand Total Credits: 9

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**SAS Data Mining Graduate Certificate**

**College**

College of Sciences

**Department**

Department of Statistics

**Program Website**

https://sciences.ucf.edu/statistics/

**Program Handbook Link**

SAS Data Mining Graduate Certificate Handbook

**Program Contact Information**

Edgard Maboudou, PhD  
Professor  
Edgard.Maboudou@ucf.edu  
Telephone: 407-823-2695  
TC2 201

**Is this program available 100% online?**

No
**Program Description**

The Graduate Certificate in SAS Data Mining is designed to provide students with the knowledge of using statistical, data presentation and data visualization tools needed for data mining with SAS/Enterprise Miner and SAS/Warehouse Administrator software.

The Graduate Certificate in SAS Data Mining provides students the knowledge to use statistical, data presentation, and data visualization tools needed for data mining with SAS/Enterprise Miner and SAS/Warehouse Administrator software. The program welcomes interested UCF students and those already employed full-time but wishing to advance their careers. Basic familiarity with the web and computer programming is required.

The program requires five courses and is set up so that students begin the program in the fall semester. Applicants contemplating applying for spring and summer terms should first contact the program coordinator for advisement.

**Total Credit Hours Required: 15 Credit Hours Minimum beyond the Bachelor's Degree**

**Program Prerequisites**

Basic familiarity with the web and computer programming is required.

**College of Graduate Studies Contact Information**

ggradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

**Degree Requirements**

Required Courses

15 Total Credits

- Complete the following:
  - STA5104 - Advanced Computer Processing of Statistical Data (3)
  - STA5206 - Statistical Analysis (3)
  - STA6714 - Data Preparation (3)
  - STA5703 - Data Mining Methodology I (3)
  - STA6704 - Data Mining Methodology II (3)

Grand Total Credits: 15

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**Security Studies PhD**

**College**

College of Sciences

**Department**

School of Politics, Security, and International Affairs

**Program Website**

https://www.ucf.edu/degree/security-studies-phd/

**Program Handbook Link**

Security Studies PhD
Is this program available 100% online?
No

Program Description
The Security Studies doctoral program is designed to produce specialists capable of analyzing and communicating security issues to policymakers, the general public, the government, and academia.

Many graduates will work in military and other governmental organizations, international corporations, and agencies that deal with security. Others will seek employment in research and teaching in institutions of higher education.

The PhD degree consists of 56 credit hours beyond the master’s degree. A master’s degree is required for admission to the program with at least 30 credit hours of master’s level work (including both coursework and thesis hours). The 59 credit hours consist of 17 credit hours of required courses, 15 credit hours of restricted electives, 9 hours of unrestricted electives (including courses offered in other departments, research, independent study, and internship), and a minimum of 15 credit hours of dissertation work.

Total Credit Hours Required: 56 Credit Hours Minimum beyond the Master’s Degree

Program Prerequisites
An earned master’s degree or its equivalent in Political Science, International Politics or International Relations, or related discipline. The Graduate Program Director will evaluate the suitability and applicability of MA degrees in other disciplines for admission purposes.

College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
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Institution Codes
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Degree Requirements
Required Courses
17 Total Credits

Details

Core Courses
15 Total Credits

Complete the following:
- INR7139 - Issues in Domestic Security (3)
- INR7332 - Scientific Study of Security (3)
- INR7337 - Issues in International Security (3)
- POS7745 - Advanced Quantitative Methods in Political Research (3)
- POS7707 - Advanced Qualitative Methods in Political Research (3)
Professional Development Courses
2 Total Credits
- Complete the following:
  - POS7930 - Professional Development: Academic Careers in Security Studies (1)
  - POS7267 - Professional Development: The Practice of Security Studies (1)

Elective Course
24 Total Credits
- Details

Restricted Electives
15 Total Credits
- Complete all of the following
  - All students in the doctoral program must complete a minimum of 15 hours of course work in approved restricted elective graduate seminars. The choice of specific courses will be based on the research interests of students and made in conjunction with their faculty advisor. In this way, students achieve two distinct but related goals: a broad competence in the variety of methodological, theoretical, and substantive approaches to security studies and advanced proficiency in the areas that are most germane to their research interests. Approved restricted electives include:
- Complete at least 5 of the following:
  - CPO6038 - Political Development (3)
  - CPO6058 - Revolution and Political Violence (3)
  - CPO6091 - Seminar in Comparative Politics (3)
  - CPO6206 - Comparative Politics of Africa (3)
  - CPO6307 - Issues in Latin American Politics (3)
  - CPO6407 - Comparative Politics of the Middle East (3)
  - CPO6729 - Global Security in the Age of Migration (3)
  - CPO6776 - Comparative Rising Powers (3)
  - Course Not Found
  - INR6039 - International Political Economy (3)
  - INR6062 - Peace Studies (3)
  - INR6065 - Seminar on War (3)
  - INR6067 - Human Rights and Security (3)
  - INR6068 - Politics of Civil Wars (3)
  - INR6136 - Seminar in American Security Policy (3)
  - INR6137 - Terrorism and Politics (3)
  - INR6108 - Seminar in American Foreign Policy (3)
  - INR6257 - International Relations of Africa (3)
  - INR6275 - International Politics of the Middle East (3)
  - INR6339 - Strategic Warning Analysis (3)
  - INR6346 - Politics of International Terrorism (3)
  - INR6356 - Environmental Security (3)
  - INR6365 - Seminar on Intelligence (3)
  - INR6366 - The Intelligence Community (3)
  - INR6507 - International Organization (3)
  - INR6726 - Political Behavior in International Conflict (3)
  - POS6207 - Political Behavior (3)
  - POS6415 - The American Presidency (3)
  - POS6427 - Congress and the Legislative Process (3)
  - POS6686 - National Security Law (3)
  - POS6729 - Political Network Analysis (3)
  - POS6743 - Geographic Tools for Political Science Research (3)
  - POS6747 - Advanced Topics in Quantitative Political Analysis (3)
  - POS6757 - Survey Design for Political Science Research (3)
  - POS6938 - Special Topics/Psychological Analysis (3)
  - CPO6056 - Politics of Authoritarian Regimes (3)
  - INR6007 - Seminar in International Politics (3)
  - INR6352 - Global Environmental Politics (3)
  - POS6747 - Advanced Topics in Quantitative Political Analysis (3)
  - POS6174 - Seminar in Southern Politics (3)
  - POS6736 - Conduct of Political Inquiry (3)
  - POS6045 - Seminar in American National Politics (3)
  - POS6079 - The Politics of Race, Ethnicity, Gender, and Class in the United States (3)

Unrestricted Electives
9 Total Credits
- Earn at least 9 credits from the following types of courses:
  - The unrestricted electives provide students with an opportunity to further expand their doctoral training beyond the program's core courses and the restricted electives. Unrestricted electives may include regularly scheduled graduate courses in political science, graduate-level courses in programs outside the department, independent study courses, doctoral research courses
with a highly focused student/faculty research component, and internships that enable students to gain valuable experience in a non-academic setting. Unrestricted electives may be taken at any point in the student's program of study; however, no more than a total of twelve hours of graduate course work can be from outside of the department, dissertation research, independent study, or internship combined; in addition, no more than a total of six hours can be from either independent study or internship. Students with suitable academic backgrounds may work in areas such as cyber security or science and technology taking courses in relevant departments. A student's faculty advisor and the department's Graduate Program Director must approve all graduate courses taken outside of the department as well as any internships.

Modern Language or Methods Requirement
0 Total Credits

- Prior to enrollment in dissertation hours, students are required to demonstrate proficiency in one modern language (other than English) or an additional methodological course dependent on the student's intended research area. The language requirement is two years (four semesters) of a single college-level modern language, which should normally be in an area relevant to the student's research. Students may meet the requirement by providing evidence of four semesters of enrollment or by passing a university-administered equivalent proficiency examination. The methods requirement is met by taking a methods course as part of the elective course requirements, with the approval of the Graduate Program Director.

Preliminary Advisory Committee Meeting
0 Total Credits

- No earlier than April 1 and not later than June 1, of their first year in the program, students will assemble and meet with a Preliminary Advisory Committee of no fewer than three full-time Political Science faculty members, all of whom should have Graduate Faculty or Grad Faculty Scholar Status. Prior to this meeting, the student will present committee members with a written statement of their primary research interests. During this meeting faculty members provide feedback on the student's statement of research interests and will identify key literatures that the student will be expected to be familiar with as they pursue their dissertation. During this meeting faculty members provide feedback on the student's statement of research interests and will identify key literature that the student will be expected to be familiar with as they pursue their Dissertation Advisory Committee. Note that college approval for the committee is not required at this time and that students are able to change the composition of their committee at any time (subject to program and college approval). Students will not be permitted to take Candidacy Exam C until they have conducted their Preliminary Advisory Committee Meeting.

Written Candidacy Exams
0 Total Credits

- Each student will take the following exams: 1. An exam in qualitative methods, addressing the material taught in INR 7707. 2. An exam in quantitative methods, addressing the material taught in INR 7745. 3. An exam addressing the contemporary literature in security studies. Students must pass each part of each exam prior to enrollment in dissertation hours. If they fail any part(s) of any exam, they will have a second opportunity to take that part(s). If they fail the exam a second time, the student will be dismissed from the program.

Admission to Candidacy
0 Total Credits

- The following are required to be admitted to candidacy and enroll in dissertation hours: • Completion of all coursework, except for dissertation hours • Successful completion of all written candidacy exams • Formation of a dissertation advisory committee • Submittal of an approved program of study

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  POS 7980 - Dissertation Research The dissertation is the culmination of the coursework that comprises this research-based degree. It must make a significant theoretical, historical, intellectual, practical, creative, or research contribution to the student's area within the discipline. The dissertation will be completed through a minimum of 15 hours of dissertation credit, which students will use to accomplish original research. Students must maintain enrollment in dissertation hours until the degree is awarded. The dissertation must conform to standard disciplinary, institutional, and departmental practices. Consistent with College of Graduate Studies Policies, a dissertation can only be approved after the successful completion of a Dissertation Defense.

Grand Total Credits: 56

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu
Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Sociology, Applied MA

College
College of Sciences

Department
Department of Sociology

Program Website
https://sciences.ucf.edu/sociology/

Program Handbook Link
Sociology MA

Program Contact Information

Timothy L. Hawthorne, PhD
Graduate Director & Associate Professor of Geographic Information Systems
Department of Sociology
Timothy.Hawthorne@ucf.edu
Telephone: 407-823-4115
HPH, RM 403P

Bridgett J. Burke
UCF Sociology Graduate Admissions Coordinator
socadmissions@ucf.edu
Telephone: 407-823-1198
HPH, RM 403J

Is this program available 100% online?
No

Program Description

The Department of Sociology offers a graduate program leading to a Master of Arts degree in Applied Sociology. Beyond a curriculum appropriate for general applied sociology, the program includes a graduate track in Domestic Violence and a graduate track in Medical Sociology as well as instruction and opportunities pertaining to the study of crime and deviance; domestic violence; medical sociology; and social inequalities. Please scroll to the bottom of this page for further details on these Tracks.

A primary focus of the program is the variety of social problems in society. Toward this objective, the program promotes the application of sociological and social psychological knowledge, principles, and research skills in a variety of organizational, community, and institutional settings. Examples of competencies in applied sociology include effective skills in program design and evaluation research; planning, feasibility and needs assessment studies; data management, analysis and presentation; and the application of general systems and social conflict theories to organizational problems, community development and planned change.

Degree seeking students in the Applied Sociology Program may elect to follow either a thesis or a non-thesis course of study. The thesis option is typically designed for students who plan to enter doctoral programs. The non-thesis option is more appropriate for students entering or continuing professional careers following the MA degree.

The degree of Master of Arts is conferred when students have fulfilled the requirements for either the thesis or non-thesis option. Both options require 30 hours of course work.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
12 Total Credits

- Complete all of the following
  - Students receive an independent learning experience in the core by completing a research study in each of the 12 hours of required courses. SYA 5625 - ProSeminar Should be taken as early as possible in the program.
  - Complete the following:
    - SYA5625 - ProSeminar (3)
    - SYA6126 - Social Theory (3)
    - SYA6305 - Quantitative Social Research Methods (3)
    - SYA6455 - Research Analysis (3)

Elective Courses
12 Total Credits

- Earn at least 12 credits from the following types of courses:
  - Students will select a minimum of 12 credit hours of unrestricted electives in consultation with their faculty advisor. No more than 3 hours may be taken in UCF graduate programs outside the department. The department's graduate director must approve all courses taken outside the department prior to enrollment. A listing and description of courses offered by the Department of Sociology is found in the "Courses" section. Under special circumstances, students may enroll in a graduate-level Directed Independent Study course or a Directed Independent Research course to fulfill their nonrestricted elective course requirements. These courses, like most graduate seminars, require written research deliverables. Enrollment in these courses requires written approval from the student's advisor and graduate director. No more than 6 hours of graduate-level courses in Directed Independent Study or Directed Independent Research may be included in a student's program of study. Nonthesis students may substitute up to 6 hours of their elective course work by completing a graduate practicum/internship (SYA 6946). The practicum must be approved by the student's permanent adviser and the department's graduate program director.

Thesis/Nonthesis Option
6 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Earn at least 6 credits from the following types of courses:
      - The thesis option requires a minimum of 6 hours of thesis credit and a successful defense of a thesis. Students may enroll in thesis hours after they have successfully completed the four required courses and their thesis committee has been approved by the department, college, and Graduate Studies. The students' permanent faculty adviser will chair their committee, which also will include two additional graduate sociology faculty members in the department. The additional members of the thesis committee are selected in consultation with the student's permanent faculty adviser. When a topic has been selected, students, in conjunction with their permanent adviser, will develop a thesis proposal. Copies of the proposal will be routed to members of their thesis committee and a proposal hearing scheduled. All students must pass a proposal hearing as well as a final oral defense of their thesis. Students who elect to write a thesis should become familiar with the university's requirements and deadlines for organizing and submitting the thesis.

  - Nonthesis Option
    - Complete all of the following
      - The nonthesis option requires that students complete SYA 6657 - Program Design and Evaluation and 3 additional hours of SYA 6918 - Directed Research, SYA 6946 - Internship or Practicum, SYA 6909 - Research Report, or SYA 6908 - Directed Independent Studies. Both the Program Design and Evaluation course (SYA 6657) and "directed research or internship" courses require community-oriented research projects to develop research skills in sociology.
      - Complete the following:
Earn at least 3 credits from the following types of courses:
SYA 6918 Directed Research 3 Credit Hours SYA 6946 Internship or Practicum 3 Credit Hours SYA 6909 Research Report 3 Credit Hours SYA 6908 Directed Independent Studies 3 Credit Hours

Applied Project
Nonthesis students must complete an applied project. The nature and implementation of each project will be determined by the student and their advisor. Before students may begin the applied project, they must earn a grade of "B" (3.0) or better in each of the five core courses. An Applied Project evaluated by a three-person committee consists of: A 1-2 page proposal describing what the project and the final product will entail. A final product approved and evaluated by the committee. A brief statement submitted with the final product indicating how the project is sociologically grounded. The grading system for the project is Pass/No Pass. Students who receive a grade of Pass will be allowed to graduate assuming all other requirements are met.

Equipment Fee
0 Total Credits
- Full-time students in the Applied Sociology MA program pay a $39 equipment fee each semester that they are enrolled. Part-time students pay $19.50 per semester.

Independent Learning
0 Total Credits
- As with all graduate programs, independent learning is an important component in the Applied Sociology master's program. Students will demonstrate independent learning through research seminars and the thesis (thesis students only).

Grand Total Credits: 30

Financial Information
Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information
Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Sociology, Applied MA - Sociology, Applied MA, Domestic Violence Track

Track Website
https://sciences.ucf.edu/sociology/

Track Handbook
Sociology, Applied MA, Domestic Violence Track
Track Contact Information

Timothy L. Hawthorne, PhD  
Graduate Director & Associate Professor of Geographic Information Systems  
Department of Sociology  
Timothy.Hawthorne@ucf.edu  
Telephone: 407-823-4115  
HPH, RM 403P

Bridgett J. Burk  
Sociology Graduate Admissions Coordinator  
socadmissions@ucf.edu  
Telephone: 407-823-1198  
HPH, RM 403J

Online Availability

No

Track Description

The Department of Sociology offers a graduate program leading to a Master of Arts degree in Applied Sociology. Beyond a curriculum appropriate for general applied sociology, the program includes a graduate track in Domestic Violence as well as instruction and opportunities pertaining to the study of crime and deviance; social inequalities; and health, families and communities. A primary focus of the program is the variety of social problems in society. Toward this objective, the program promotes the application of sociological and social psychological knowledge, principles, and research skills in a variety of organizational, community, and institutional settings. Examples of competencies in applied sociology include effective skills in program design and evaluation research; planning, feasibility and needs assessment studies; data management, analysis and presentation; and the application of general systems and social conflict theories to organizational problems, community development and planned change.

Degree-seeking students in the Applied Sociology program may choose either the thesis or a nonthesis course of study. Both options require 30 hours of course work, at least half of which must be at the 6000 level or above.

Degree seeking students in the Applied Sociology Program may elect to follow either a thesis or a non-thesis course of study. The thesis option is typically designed for students who plan to enter doctoral programs. The non-thesis option is more appropriate for students entering or continuing professional careers following the MA degree.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu  
Telephone: 407-823-2766  
Millican Hall 230  
Online Application  
Graduate Admissions

Mailing Address

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

Institution Codes

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

Degree Requirements

Core  
12 Total Credits

- Complete all of the following
  - Please note that students in the nonthesis option are required to complete a research study in each of the 12 hours of required courses to provide an independent learning experience. SYA 5625 - ProSeminar Should be taken as early as possible in your program.
  - Complete the following:
    - SYA5625 - ProSeminar (3)
    - SYA6126 - Social Theory (3)
    - SYA6305 - Quantitative Social Research Methods (3)
    - SYA6455 - Research Analysis (3)

Specialization  
6 Total Credits
Complete the following:
- SYP5566 - Seminar on Domestic Violence: Theory, Research and Social Policy (3)
- SYP6563 - Reactions to Domestic Violence (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - SYA6128 - Theoretical Criminology (3)
  - SYA6657 - Program Design and Evaluation (3)
  - SYP6561 - Child Abuse in Society (3)
  - SYP6515 - Deviant Behavior Issues (3)
  - SYP6522 - Sociological Perspectives on Victims (3)
  - SYP6546 - Crime, Law, Inequality (3)
  - SYD6809 - Seminar in Gender Issues (3)

Thesis/Nonthesis Option
6 Total Credits

- Complete all of the following
  - Thesis Option
    - The thesis option requires a minimum of 6 hours of thesis credit and a successful defense of a thesis. Students may enroll in thesis hours after they have successfully completed the four required courses and their thesis committee has been approved by the department and college. The student's permanent faculty adviser will chair their committee, which also will include two additional graduate sociology faculty members in the department. The additional members of the thesis committee are selected in consultation with the student's permanent faculty adviser. When a topic has been selected, students, in conjunction with their permanent adviser, will develop a thesis proposal. Copies of the proposal will be routed to members of their thesis committee and a proposal hearing scheduled. All students must pass a proposal hearing as well as a final oral defense of their thesis. Students who elect to write a thesis should become familiar with the university's requirements and deadlines for organizing and submitting the thesis.
  - Nonthesis Option
    - Complete all of the following
      - SYA6657 - Program Design and Evaluation (3)

Earn at least 3 credits from the following types of courses:

- Directed Study for Applied Project
  - Nonthesis students must complete an applied project. The nature and implementation of each project will be determined by the student and her/his adviser. Before students may begin the applied project, they must earn a grade of "B" (3.0) or better in each of the five core courses. The grading system for the project is Pass/No Pass. Students who receive a grade of Pass will be allowed to graduate assuming all other requirements are met. An Applied Project evaluated by a three-person committee consists of: A 1-2 page proposal describing what the project and the final product will entail. A final product approved and evaluated by the committee. A brief statement submitted with the final product indicating how the project is sociologically grounded.

Equipment Fee
0 Total Credits
- Full-time students in the Applied Sociology MA program pay a $39 equipment fee each semester that they are enrolled. Part-time students pay $19.50 per semester.

Independent Learning
0 Total Credits
- As with all graduate programs, independent learning is an important component in the Applied Sociology master's program. Students will demonstrate independent learning through research seminars and the thesis (thesis students only).

Grand Total Credits: 30

Track Details

Students must earn a grade of "B" (3.0) or better in the program's core courses. Courses may be retaken to achieve a better grade; however, students must maintain a minimum GPA of 3.0 in their program of study.

By the end of their first year of course work in the program, students should select a permanent faculty advisor and determine their preliminary program of study, either in the thesis or nonthesis track. Students should maintain close contact with their faculty advisor in order to develop a viable program of study and avoid graduation delays.
Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Telephone: 407-823-0127
gradfellowship@ucf.edu
https://graduate.ucf.edu/funding/

Fellowship Information

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Sociology, Applied MA - Sociology, Applied MA, Medical Sociology Track

Track Website
https://sciences.ucf.edu/sociology/

Track Handbook
Sociology, Applied MA, Medical Sociology Track

Track Contact Information

Timothy L. Hawthorne, PhD
Graduate Director & Associate Professor of Geographic Information Systems
Department of Sociology
Timothy.Hawthorne@ucf.edu
Telephone: 407-823-4115
HPH, RM 403P

Bridgett J. Burke
UCF Sociology Graduate Admissions Coordinator
Department of Sociology
socadmissions@ucf.edu
Telephone: 407-823-1198
HPH, RM 403J

Online Availability

No
Track Description

The Department of Sociology offers a graduate program leading to a Master of Arts degree in Applied Sociology. Beyond a curriculum appropriate for general applied sociology, the program includes a graduate track in Medical Sociology as well as instruction and opportunities pertaining to the study of crime and deviance; domestic violence; and social inequalities.

Medical Sociology is an important subfield of Sociology that was developed and recognized in 1959 by the American Sociological Association (ASA). Medical sociology identifies the processes of health, illness, and medical care as social phenomena. The American Sociological Association identifies the following research topics under the field of medical sociology: the subjective experience of health and illness, the political, economic and environmental circumstances surrounding health and illness, the societal structures and forces that constrain the medical care system, individual responses to illness, and social movements related to health and healthcare. Having a deep understanding of how social processes work to affect an individual's health allows for many different careers. Medical sociologists use their knowledge to work for governmental and non-governmental organizations centered on health. They work for federal, state, and private health insurance plans. Medical sociologists conduct research and make policy that addresses public health problems. Many students who study medical sociology enter medical school to become clinicians and teachers of medical education. Still others enter dental school, physical therapy school, or other professional programs in the allied fields of health and apply knowledge gained from Medical Sociology to improve their patients' lives.

Degree-seeking students in the Applied Sociology program may choose either the thesis or a nonthesis course of study. Both options require 30 hours of course work, at least half of which must be at the 6000 level or above.

Degree seeking students in the Applied Sociology Program may elect to follow either a thesis or a non-thesis course of study. The thesis option is typically designed for students who plan to enter doctoral programs. The non-thesis option is more appropriate for students entering or continuing professional careers following the MA degree.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Core
12 Total Credits

- Complete all of the following
  - Please note that students in the nonthesis option are required to complete a research study in each of the 12 hours of required courses to provide an independent learning experience.
  - Complete the following:
    - SYA5625 - ProSeminar (3)
    - SYA6126 - Social Theory (3)
    - SYA6305 - Quantitative Social Research Methods (3)
    - SYA6455 - Research Analysis (3)

Specialization
6 Total Credits

- Complete the following:
  - SYO6406 - Medical Sociology (3)
  - SYO6405 - Sociology of Health and Illness (3)

Elective Courses
6 Total Credits

- Complete at least 2 of the following:
  - SYD6363 - Social Inequalities and Reproductive Health (3)
  - SYP6555 - Sociology of Alcohol and Drugs (3)
  - SYP6735 - Sociology of Health and Aging (3)
  - SYO6404 - Food Insecurity and Health (3)
Thesis Option

Complete 1 of the following

Thesis Option

- Earn at least 6 credits from the following types of courses:
  The thesis option requires a thesis proposal and defense, a minimum of 6 hours of thesis credit, and a written thesis along with a successful defense of a thesis. Students may enroll in thesis hours after they have successfully completed their core required courses, they have passed their thesis proposal defense, and their thesis committee has been approved by the department and college. The student's permanent faculty advisor will chair their committee, which also will include two additional graduate faculty members. The additional members of the thesis committee are selected in consultation with the student's permanent faculty advisor, and may include faculty from related disciplines in consultation with the faculty advisor. When a topic has been selected, students, in conjunction with their permanent advisor, will develop a thesis proposal. Copies of the proposal will be routed to members of their thesis committee and a proposal defense will be scheduled. All students must pass a proposal defense as well as a final oral defense of their thesis. Students who elect to write a thesis should become familiar with the university's requirements and deadlines for organizing and submitting the thesis.

Nonthesis Option

Complete all of the following

Nonthesis Option

- The nonthesis option requires that students complete SYA 6657 - Program Design and Evaluation and 3 additional hours of elective course work in their area of specialization. The Program Design and Evaluation course (SYA 6657) requires community-oriented research projects to develop research skills in sociology.

Earn at least 3 credits from the following types of courses:

- SYA6657 - Program Design and Evaluation (3)

- Directed Study for Applied Project Nonthesis students must complete an applied project. The nature and implementation of each project will be determined by the student and her/his adviser. Before students may begin the applied project, they must earn a grade of "B" (3.0) or better in each of the five core courses. An Applied Project evaluated by a three-person committee consists of: A 1-2 page proposal describing what the project and the final product will entail. A final product approved and evaluated by the committee. A brief statement submitted with the final product indicating how the project is sociologically grounded. The grading system for the project is Pass/No Pass. Students who receive a grade of Pass will be allowed to graduate assuming all other requirements are met.

Equipment Fee
0 Total Credits

- Full-time students in the Applied Sociology MA program pay a $39 equipment fee each semester that they are enrolled. Part-time students pay $19.50 per semester.

Independent Learning
0 Total Credits

- As with all graduate programs, independent learning is an important component in the Applied Sociology master's program. Students will demonstrate independent learning through research seminars and the thesis (thesis students only).

Grand Total Credits: 30

Track Details

Students must earn a grade of "B" (3.0) or better in the program's core courses. Courses may be retaken to achieve a better grade; however, students must maintain a minimum GPA of 3.0 in their program of study.

By the end of their first year of course work in the program, students should select a permanent faculty advisor and determine their preliminary program of study, either in the thesis or nonthesis track. Students should maintain close contact with their faculty advisor in order to develop a viable program of study and avoid graduation delays.

Financial Information

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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Telephone: 407-823-2827
Appointment Line: 407-823-5285
Fax: 407-823-5241
finaid@ucf.edu
finaid.ucf.edu
**Fellowship Information**

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

**Grad Fellowships**
Telephone: 407-823-0127
gradfellowship@ucf.edu
funding.graduate.ucf.edu

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**Sociology PhD**

**College**
College of Sciences

**Department**
Department of Sociology

**Program Prerequisites**
Master's degree in a related field from an accredited institution recognized by UCF.

**College of Graduate Studies Contact Information**
gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

**Mailing Address**
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

**Institution Codes**
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

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**Statistics and Data Science MS**

**College**
College of Sciences

**Department**
Department of Statistics

**Program Website**
https://sciences.ucf.edu/statistics/

**Program Handbook Link**
Statistics and Data Science MS

**Program Contact Information**
Edgard Maboudou, PhD
Professor
Edgard.Maboudou@ucf.edu
Telephone: 407-823-2695
TC2 201
Is this program available 100% online?
No

Program Description
The Master of Science in Statistics and Data Science provides a sound foundation in statistical theory, statistical methods, numerical methods in statistics, and the application of computer methodology to statistical analyses. The MS is particularly suited for individuals who have completed an undergraduate program in mathematics, statistics, or computer science, but is also available to those from other disciplines who wish to develop an expertise in statistics and data science.

This degree has 1 track: Data Science Track. For further details on the Data Science Track, please see the Statistics and Data Science MS, Data Science Track Catalog at the bottom of this page for further details on this Track.

The Statistics and Data Science MS program requires a minimum of 36 credit hours beyond the bachelor's degree. The degree in Statistics and Data Science includes 21 credit hours of required courses, 15 credit hours of restricted electives, and passing a comprehensive examination.

Students must maintain a minimum GPA of 3.0, as well as a "B" (3.0) in all courses completed toward the certificate and since admission to the program.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree

Program Prerequisites
Students must have the following background and courses completed before applying to the Statistics & Data Science MS program. These courses are: MAC 2311C: Calculus with Analytic Geometry I, MAC 2312: Calculus with Analytic Geometry II, MAC 2313: Calculus with Analytic Geometry III, MAS 3105: Matrix and Linear Algebra or MAS 3106: Linear Algebra. These pre-required courses are basic undergraduate courses from the Math department.

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
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ETS PPI: 5233

Degree Requirements

0 Total Credits

- All MS students must have an approved Plan of Study (POS) developed by the student and advisor that lists the specific courses to be taken as part of the degree. Students must maintain a minimum GPA of 3.0 in their POS, as well as a "B" (3.0) in all courses completed toward the degree and since admission to the program.

Required Courses
21 Total Credits

- Complete all of the following
  - Complete the following:
    - STA5205 - Experimental Design (3)
    - STA6106 - Statistical Computing I (3)
    - STA6236 - Regression Analysis (3)
    - STA6326 - Theoretical Statistics I (3)
    - STA6327 - Theoretical Statistics II (3)
    - STA6329 - Statistical Applications of Matrix Algebra (3)
  - Note: STA 6106 provides an independent learning experience for the program. It requires a research project that results in a written report or oral presentation.
  - Complete at least 1 of the following:
    - STA6246 - Linear Models (3)
    - STA6707 - Multivariate Statistical Methods (3)
Elective Courses
15 Total Credits

• Complete all of the following
  • Earn at least 15 credits from the following:
    ■ STA5505 - Categorical Data Methods  (3)
    ■ STA5825 - Stochastic Processes and Applied Probability Theory  (3)
    ■ STA6107 - Statistical Computing II  (3)
    ■ STA6226 - Sampling Theory and Applications  (3)
    ■ STA6224 - Bayesian Survey Methods  (3)
    ■ STA6237 - Nonlinear Regression  (3)
    ■ STA6346 - Advanced Statistical Inference I  (3)
    ■ STA6347 - Advanced Statistical Inference II  (3)
    ■ STA6507 - Nonparametric Statistics  (3)
    ■ STA6662 - Statistical Methods for Industrial Practice  (3)
    ■ STA6709 - Spatial Statistics  (3)
    ■ STA6857 - Applied Time Series Analysis  (3)
    ■ STA5104 - Advanced Computer Processing of Statistical Data  (3)
    ■ STA5703 - Data Mining Methodology I  (3)
    ■ STA6704 - Data Mining Methodology II  (3)
    ■ STA6705 - Data Mining Methodology III  (3)
    ■ STA6714 - Data Preparation  (3)
  • Course Not Found
  • COP5711 - Parallel and Distributed Database Systems  (3)
  • COP6730 - Transaction Processing  (3)
  • COP6731 - Advanced Database Systems  (3)
  • STA6238 - Logistic Regression  (3)
  • STA7722 - Statistical Learning Theory  (3)
  • STA7734 - Statistical Asymptotic Theory in Big Data  (3)
  • Course Not Found
  • STA5738 - Data and Analytical Methodology for Metropolitan and Regional Areas  (3)

• Students can also choose elective courses from these STA 7xxx courses.
  ■ STA7239 - Dimension Reduction in Regression  (3)
  ■ STA7348 - Bayesian Modeling and Computation  (3)
  ■ STA7729 - Survival Analysis  (3)
  ■ STA7935 - Current Topics in Big Data Analytics  (3)

Thesis/Nonthesis Option
0 Total Credits

• Complete all of the following
  • Thesis Option
    • Earn at least 6 credits from the following types of courses: STA 6971 - Thesis
    • Earn at least 6 credits from the following types of courses: STA 6971 - Thesis For this option, the MS degree requires a total of at least 36 credit hours comprised of at least 30 credit hours of course work and 6 credit hours of thesis. This includes the 21 credit hours of the core courses, 9 credit hours of ‘Elective’ courses, and 3-6 credit hours of a two-course sequence. No more than 6 credit hours of independent study or directed research may be credited toward the degree. It is strongly recommended that the student select a thesis adviser and establish a program of study by the completion of the core courses. With the help of a thesis adviser, the student will form a thesis committee of three members, of which at least two must be from the Department of Statistics. An oral defense of the thesis is required.
  • Nonthesis Option
    • Earn at least 6 credits from the following types of courses: Nonthesis students will take an additional 6 credit hours of electives. The electives should be chosen in consultation with the graduate program director. This will consist of 21 credit hours of the core courses and 15 credit hours of elective courses. It is strongly recommended that the student select an academic adviser and establish a program of study by the completion of the core courses. In addition, students in the nonthesis option are required to complete the research project/comprehensive written examination (by passing the qualifying/comprehensive examination at or above the MS level) based on the core courses. Two attempts at the examination are permitted.

Comprehensive Examination
0 Total Credits

• All nonthesis option students must take a comprehensive written examination covering the four courses STA 6326, STA 6327, STA 6236, and STA 5205. For full-time students, this examination will normally be taken just prior to the start of the second year of their graduate work. Students are allowed two attempts to pass the exam. Failure to pass after the second attempt will result in dismissal from the program.

Independent Learning
0 Total Credits

• STA 6106 provides the independent learning experience for the program. It requires a research project that results in a written report or oral presentation.

Grand Total Credits: 36
Program Details

Students who have a sufficient background in statistics, subject to the approval of the graduate program director, can take a higher-level course such as STA 6236 - Regression Analysis instead of STA 5206 - Statistical Analysis.

Financial Information

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finaid@ucf.edu
http://finaid.ucf.edu

Fellowship Information

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Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Statistics and Data Science MS - Statistics and Data Science MS, Data Science Track

Track Website
https://sciences.ucf.edu/statistics/

Track Handbook
Statistics and Data Science MS

Track Contact Information

Edgard Maboudou, PhD
Professor
Edgard.Maboudou@ucf.edu
Telephone: 407-823-2695
TC2 201

Online Availability

No

Track Description

The Master of Science in Statistics and Data Science, Data Science track focuses on data analytics and its application to business, social, and health problems.

The Data Science track in the Statistics and Data Science MS program focuses on data analytics and its application to business, social, and health problems.

The program is particularly suited for individuals who have completed an undergraduate program in mathematics, statistics, economics, business, or other related fields, and wish to pursue a career in data science. Data scientists analyze massive data sets to uncover trends and associations, and make theoretically sound decisions on, for example, business, social, and health subjects. Data scientists have one of the most coveted jobs, as the demand for them far exceeds the existing number of qualified persons in the area. Currently, the work force in the data science industry consists mainly of individuals trained with post college education. To date, very few university degree programs exist for training students for such a large and growing industry in the United States.

The Data Science track in the Statistics and Data Science MS program is composed of 24 credit hours of required courses and 12 credit hours of restricted electives. Students must also pass a comprehensive written examination.

Total Credit Hours Required: 36 Credit Hours Minimum beyond the Bachelor's Degree
Track Prerequisites

Students must have the following background and courses completed before applying to the Statistics & Data Science, Data Science track MS program. These courses are: MAC 2311C: Calculus with Analytic Geometry I, MAC 2312: Calculus with Analytic Geometry II, MAC 2313: Calculus with Analytic Geometry III, MAS 3105: Matrix and Linear Algebra or MAS 3106: Linear Algebra. These pre-required courses are basic undergraduate courses from the Math department.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
24 Total Credits

- Complete all of the following

  - Complete the following:
    - STA5104 - Advanced Computer Processing of Statistical Data (3)
    - STA6714 - Data Preparation (3)
    - STA6238 - Logistic Regression (3)
    - STA6326 - Theoretical Statistics I (3)
    - STA6327 - Theoretical Statistics II (3)
    - STA6236 - Regression Analysis (3)
    - STA5703 - Data Mining Methodology I (3)
    - STA6704 - Data Mining Methodology II (3)

  - Note: STA 5703 and STA 6704 both require research projects that fulfill the independent learning requirement for the program.

Elective Courses
12 Total Credits

- Complete all of the following

  - Select electives from the following courses. No more than one COP course can be selected.

  - Complete at least 4 of the following:
    - Course Not Found
    - COP5711 - Parallel and Distributed Database Systems (3)
    - COP6730 - Transaction Processing (3)
    - COP6731 - Advanced Database Systems (3)
    - STA5205 - Experimental Design (3)
    - STA5505 - Categorical Data Methods (3)
    - STA5825 - Stochastic Processes and Applied Probability Theory (3)
    - STA6106 - Statistical Computing I (3)
    - STA6226 - Sampling Theory and Applications (3)
    - STA6237 - Nonlinear Regression (3)
    - STA6507 - Nonparametric Statistics (3)
    - STA6707 - Multivariate Statistical Methods (3)
    - STA6857 - Applied Time Series Analysis (3)
    - STA6705 - Data Mining Methodology III (3)
    - FIN6406 - Strategic Financial Management (3)
    - STA6107 - Statistical Computing II (3)
    - STA6329 - Statistical Applications of Matrix Algebra (3)
    - STA6246 - Linear Models (3)
    - STA6346 - Advanced Statistical Inference I (3)
    - STA6347 - Advanced Statistical Inference II (3)
    - STA6662 - Statistical Methods for Industrial Practice (3)
    - STA6709 - Spatial Statistics (3)
    - STA7722 - Statistical Learning Theory (3)
Students can also choose elective courses from these STA 7xxx courses:

- STA7239 - Dimension Reduction in Regression (3)
- STA7348 - Bayesian Modeling and Computation (3)
- STA7719 - Survival Analysis (3)
- STA7935 - Current Topics in Big Data Analytics (3)

**Thesis/Nonthesis Option**

**0 Total Credits**

- Complete all of the following
  - 6 Total Credits • Complete 1 of the following Thesis Option
    - Earn at least 6 credits from the following types of courses: STA 6971 - Thesis
      - For this option, the MS degree requires a total of at least 36 credit hours comprised of at least 30 credit hours of course work and 6 credit hours of thesis. This includes the 24 credit hours of the core courses, 6 credit hours of "Elective" courses, and 3-6 credit hours of a two-course sequence. No more than 6 credit hours of independent study or directed research may be credited toward the degree. It is strongly recommended that the student select a thesis adviser and establish a program of study by the completion of the core courses. With the help of a thesis adviser, the student will form a thesis committee of three members, of which at least two must be from the Department of Statistics and Data Science. An oral defense of the thesis is required.

- Nonthesis Option
  - Earn at least 6 credits from the following types of courses: Nonthesis students will take an additional 6 credit hours of electives. The electives should be chosen in consultation with the graduate program director. This will consist of 24 credit hours of the core courses and 12 credit hours of elective courses. It is strongly recommended that the student contacts the academic adviser, Graduate Coordinator, and establish a program of study by the completion of the core courses. In addition, students in the nonthesis option are required to complete the research project/comprehensive written examination (by passing the qualifying/comprehensive examination at or above the MS level) based on the core courses. Two attempts at the examination are permitted.

**Comprehensive Examination**

**0 Total Credits**

- All students must take a comprehensive written examination covering the five courses STA 6326, STA 6327, STA 5104, STA 6714 and STA 6238. For full-time students, this examination will normally be taken just prior to the start of the second year of their graduate work. Students are allowed two attempts to pass the exam. Failure to pass after the second attempt will result in dismissal from the program.

**Independent Learning**

**0 Total Credits**

- STA 5703 and STA 6704 both require research projects that fulfill the independent learning requirement for the program. Both courses require students to build models for target variables of projects with very large sets of data, write a report, and then give an oral presentation on their independent learning experiences.

**Grand Total Credits: 36**

**Track Details**

All MS students must have an approved Plan of Study (POS) developed by the student and advisor that lists the specific courses to be taken as part of the degree. Students must maintain a minimum GPA of 3.0 in their POS, as well as a "B" (3.0) in all courses completed toward the degree and since admission to the program.

**Financial Information**

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

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- finaid@ucf.edu
- http://finaid.ucf.edu

**Fellowship Information**

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**Grad Fellowships**

- Telephone: 407-823-0127
- gradfellowship@ucf.edu
- https://funding.graduate.ucf.edu
Strategic Communication PhD

College
College of Sciences

Department
Nicholson School of Communication and Media

Program Website
https://communication.ucf.edu/degree/strategic-communication-ph-d/

Program Handbook Link
Strategic Communication PhD

Program Contact Information
Jennifer Sandoval, PhD
Associate Professor and Coordinator Strategic Communication PhD
jennifer.sandoval@ucf.edu
Telephone: 407-823-5502
CMB 202

NSCM Graduate Student Services Coordinator
nicholsongrad@ucf.edu
Telephone: 407-823-5595
NSCM 238/CMB 203

Is this program available 100% online?
No

Program Description
The PhD in Strategic Communication offers advanced instruction in health communication, instructional emergency risk communication, and crisis communication; it prepares students with the necessary knowledge and skills to pursue a successful, advanced career in communication and related fields in both academic and applied settings.

Strategic communication, one of the fastest-growing areas situated within the broader field of communication, is an innovative and unique subfield. It is distinct from other communication subfields in that it is intentionally goal-driven communication wherein communication scholars work in partnership with professionals in the public and private sectors to solve real-world problems.

The Nicholson School of Communication and Media’s communication and digital media programs joined the Florida Interactive Entertainment Academy (FIEA) at UCF Downtown, a 21st-century campus with access to arts, culture, nightlife, and business.

The Strategic Communication PhD requires a minimum of 60 credit hours beyond the master’s degree. The zero-hour Doctoral Colloquium will be required in the fall semesters of the first year. This course will introduce students to professional standards and practices associated with doctoral-level training in the field of Strategic Communication.

Total Credit Hours Required: 60 Credit Hours Minimum beyond the Master's Degree

Program Prerequisites
An earned master’s degree or its equivalent in Communication or a related field. The Director of Graduate Studies will evaluate the suitability and applicability of M.A. or M.S. degrees in other related disciplines for admission purposes.
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
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Institution Codes
GRE: 5233
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Degree Requirements

Colloquium
0 Total Credits

- Complete the following:
  - COM7920 - Doctoral Colloquium (99)

Core Requirements
9 Total Credits

- Complete the following:
  - COM7464 - Theory Building for Strategic Communication (3)
  - COM7529 - Strategic Communication (3)
  - COM7821 - Instructional Communication in Strategic Contexts (3)

Research Requirements
12 Total Credits

- Complete the following:
  - COM6303 - Qualitative Research Methods in Communication (3)
  - COM6304 - Quantitative Research Methods in Communication (3)
  - COM7325 - Seminar in Research Methods (3)
  - SPC7685 - Rhetorical Criticism of Strategic Communication (3)

Community Engagement Requirement
3 Total Credits

- Complete all of the following
  - Earn at least 3 credits from the following:
    - COM6918 - Directed Research (1 - 99)
    - COM7528 - Communication and Community Engagement (1 - 99)
  - COM 6946 Internship may also be taken

Restricted Elective Courses (Choose one)
6 Total Credits

- Complete 1 of the following
  - Concentration in Risk and Crisis Communication
    - Complete the following:
      - COM7236 - Seminar in Risk and Crisis Communication (3)
      - COM7815 - Risk Communication (3)
  - Concentration in Health Communication
    - Complete the following:
      - COM7025 - Health Communication (3)
      - COM7227 - Seminar in Health Communication (3)

Unrestricted Electives
15 Total Credits

- Complete all of the following
  - Upon consultation with, and approval of the student’s advisor, a student may complete up to 6 hours of elective courses from outside the NSCM (e.g., Emergency Management, Public Affairs). Note: Non-NSCM courses might not be...
offered on the Downtown campus and will require students to attend the course at the UCF Main campus.

- Earn at least 15 credits from the following:
  - COM6535 - Communication Campaigns (3)
  - COM6046 - Interpersonal Communication (3)
  - COM6145 - Organizational Communication (3)
  - COM6401 - Communication Theory (3)
  - COM6463 - Studies in Intercultural Communication (3)
  - COM6467 - Studies in Persuasion (3)
  - COM6918 - Directed Research (1 - 99)
  - COM7745 - Current Issues in Communication (3)
  - COM7815 - Risk Communication (3)
  - COM7025 - Health Communication (3)
  - MMC6567 - New Media (3)
  - MMC6600 - Media Effects and Audience Analysis (3)
  - PUR6005 - Theories of Public Relations (3)
  - PUR6403 - Crisis Public Relations (3)
  - COM7528 - Communication and Community Engagement (1 - 99)

- COM 6946 Internship may also be taken

Dissertation
15 Total Credits

- Earn at least 15 credits from the following types of courses:
  - COM 7980 Dissertation Research

Grand Total Credits: 60

Survey Research Graduate Certificate

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Program Contact Information

Jonathan Knuckey, PhD
Associate Professor
Jonathan.Knuckey@ucf.edu
407-823-2608
PHP 302L

Is this program available 100% online?

No

Program Description

The Survey Research Certificate will prepare students for work as a professional or academic survey researcher. Course requirements ensure that students are well-trained as designers and analysts for surveys, and that they have an understanding of the use and application of survey methods.

Total Credit Hours Required: 12 Credit Hours Minimum beyond the Bachelor's Degree
College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address
UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
**Degree Requirements**

**Required Courses**

<table>
<thead>
<tr>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 - 13</td>
</tr>
</tbody>
</table>

- In order to complete the certificate, students must complete one course in survey research methodology (Group 1), one course in research design (Group 2), an eligible advanced research methods course (Group 3), and an eligible course in which survey research is the principal mode of empirical inquiry (Group 4). Because survey research training is available in different departments, students may choose to fulfill these requirements using courses offered by a single department or by using courses offered by multiple departments (subject to availability). Certificate-only students will consult with the certificate program advisor in selecting their courses.

**Group 1: Survey Research Methods Course**

3 Total Credits

- Complete at least 1 of the following:
  - INP6072 - Survey Research Methods and Program Evaluation in Indust. and Org. Psychology (3)
  - POS6757 - Survey Design for Political Science Research (3)
  - STA6223 - Conventional Survey Methods (3)
  - SYA6425 - Design and Conduct of Social Surveys (3)

**Group 2: Quantitative Research Course**

3 - 4 Total Credits

- Complete at least 1 of the following:
  - CCJ6706 - Data Analysis in Criminal Justice I (3)
  - COM6304 - Quantitative Research Methods in Communication (3)
  - POS6746 - Quantitative Methods in Political Research (3)
  - POS7745 - Advanced Quantitative Methods in Political Research (3)
  - PSY6216C - Research Methodology (4)
  - STA5206 - Statistical Analysis (3)
  - SYA6305 - Quantitative Social Research Methods (3)

**Group 3: Advanced Methodological Course**

3 Total Credits

- Complete at least 1 of the following:
  - POS6729 - Political Network Analysis (3)
  - POS6743 - Geographic Tools for Political Science Research (3)
  - POS6747 - Advanced Topics in Quantitative Political Analysis (3)
  - STA6224 - Bayesian Survey Methods (3)
  - STA6226 - Sampling Theory and Applications (3)
  - SYA6452 - GIS Applications (3)
  - SYA7309 - Advanced Sociological Research Methods (3)
  - SYA7407 - Advanced Quantitative Data Analysis (3)

**Survey Research in Context**

3 Total Credits

- Complete at least 1 of the following:
  - MMC6567 - New Media (3)
  - MMC6600 - Media Effects and Audience Analysis (3)
  - MMC6735 - Social Media as Mass Communication (3)
  - POS6045 - Seminar in American National Politics (3)
  - POS6079 - The Politics of Race, Ethnicity, Gender, and Class in the United States (3)
  - POS6207 - Political Behavior (3)
  - SYD6705 - Seminar in Race and Ethnicity (3)
  - SYD6809 - Seminar in Gender Issues (3)
  - SYP5566 - Seminar on Domestic Violence: Theory, Research and Social Policy (3)

**Grand Total Credits: 12 - 13**

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**Rosen College of Hospitality Management**

**Destination Marketing and Management Graduate Certificate**

**College**

Rosen College of Hospitality Management
Is this program available 100% online?
Yes

UCF Online

Please note: Destination Marketing and Management Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Destination Marketing and Management provides knowledge and information that facilitates the effective marketing and management of tourist destinations. The certificate covers the strategies for creating integrated destination marketing and management systems, critically reviews those issues and techniques of international tourism management with a particular focus on the economic, socio-cultural and environmental impacts of tourist development at destinations, and analyzes the quantitative impact of tourism as an industry both within and beyond tourist destinations.

Students learn to synthesize theory and application at the graduate level in order to produce the knowledge base necessary to fully utilize available techniques and strategies for the effective marketing and management of tourist destinations. Students successfully completing this certificate may already be in destination marketing or management positions or seeking such roles in this exciting and growing field.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: (407) 823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

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Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
9 Total Credits

- Complete all of the following
  - There is no specific course sequence in that a number of sections of each course are available throughout the year with students able to commence in the Fall, Spring, or Summer semester. One course, and sometimes more, are offered each term.
  - Complete the following:
    - HMG6710 - International Tourism Management (3)
    - HMG6566 - Principles of Destination Marketing and Management (3)
    - HMG6738 - Tourism Industry Analysis (3)

Grand Total Credits: 9

Event Leadership MS

College
Rosen College of Hospitality Management

Department
Rosen College of Hospitality Management Dean's Office

Program Website
https://hospitality.ucf.edu/graduate-degree-programs/

Program Handbook Link
Event Leadership MS Handbook

Program Contact Information

David Kwun PhD
Associate Professor
MS Programs Coordinator
David.Kwun@ucf.edu
Telephone: 407-903-8190
RCHM 277

Kathy Henry MPA
Assistant Director, Graduate Program Academic Advisor
Kathy.Henry@ucf.edu
Telephone: 407-903-8024
RCHM 102C

Is this program available 100% online?
Yes

UCF Online

Please note: Event Leadership (MS) is a fully-online program. All courses are currently online courses. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students studying outside of the USA do not require a visa to complete this program. Fully online programs are not eligible for an F-1 or J-1 student visa. Please contact the Program Coordinator to discuss admission.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.
Program Description

The Master of Science in Event Leadership enables students to build on their strengths and interests, broaden their knowledge of the event industry, sharpen their management, leadership, and analytical skills, and incorporate their professional and extracurricular experiences.

This program prepares students for an industry that continues to evolve. From an industry traditionally focused on logistics to one requiring a broad range of leadership and managerial skills, including strategy formulation, relationship management, marketing, and risk management, this graduate degree program is designed with this paradigm in mind. It will prepare graduates for an ever-changing and challenging field that provides tremendous economic and social benefits to communities of all sizes.

The typical Event Leadership MS candidate:

- Is a professional working in a management or leadership position related to events.
- Holds an undergraduate degree in event management, hospitality management, business management, or a related discipline.
- Wishes to acquire advanced educational training to be competitive in the thriving event industry.

The Rosen College of Hospitality Management aims to provide students with an outstanding graduate educational experience and serve other stakeholders with continuing education, research, and service. The College is committed to UCF’s goals by providing intellectual leadership through quality graduate education and international prominence by means of educational and research programs nurturing inclusiveness and diversity, with a global perspective, and partnerships with local, national, and international constituencies.

Program Prerequisites

There are no undergraduate course prerequisites for this program, provided candidates have a degree in event management, hospitality management, business management, or a related discipline. Prospective students should have at least 3-5 years of experience within the event industry and interest in achieving senior-level leadership positions within the field.

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Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233
Degree Requirements

Required Courses
30 Total Credits

- Complete all of the following
  
  Year 1 - Fall
  - Complete the following:
    - HMG6507 - Event Trends, Technology and the Macroenvironment (3)
    - HMG6002 - Advanced Event Design (3)
  
  Year 1 - Spring
  - Complete the following:
    - HMG6563 - Marketing of Events (3)
    - HMG6568 - Destination Planning for Events (3)
  
  Year 1 - Summer
  - Complete the following:
    - HMG6012 - Events Across Borders (3)
    - HMG6010 - Relationship Management in Events (3)
  
  Year 2 - Fall
  - Complete the following:
    - HMG6584 - Event Analytics (3)
    - HMG6604 - Legal Environment of Events (3)
  
  Year 2 - Spring
  - Complete the following:
    - HMG6011 - Contemporary Issues in Event Management (3)
    - HMG6220 - The Reflective Leader (3)

Grand Total Credits: **30**

Event Management Graduate Certificate

**College**
Rosen College of Hospitality Management

**Department**
Rosen College of Hospitality Management Dean's Office

**Program Website**
https://hospitality.ucf.edu/graduate-degree-programs/

**Program Contact Information**

**David Kwun PhD**
Associate Professor
Master's Program Coordinator
David.Kwun@ucf.edu
Telephone: 407-903-8190
RCHM 277

**Kathy Henry MPA**
Assistant Director, Graduate Programs Academic Adviser
Kathy.Henry@ucf.edu
Telephone: 407-903-8024
RCHM 102

**Is this program available 100% online?**
Yes
Please note: Event Management Graduate Certificate may be completed fully online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Event Management provides knowledge and information that facilitates the effective organization and management of events in the public, private and third sector contexts.

The certificate covers the administration of events (e.g. promotion, budgeting, marketing, production, legal issues, customer service, ticketing and concession), the selling and marketing of conventions and conferences, and the organization and administration of mega-events. Events are such an integral component of many industries today that although with a strong focus on tourism and hospitality, the certificate incorporates a number of perspectives with event legacies being a particularly pertinent issue for all coursework.

Students learn to synthesize theory and application at the graduate level in order to produce the knowledge base necessary to fully utilize available techniques and strategies for the effective organization, marketing, and management of events, conventions, and conferences. Students successfully completing this certificate may already be in event management positions or seeking such roles in the public, private or third sectors.

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Institution Codes

GRE: 5233
GMAT: RZT-HT-58
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Degree Requirements

Required Courses

<table>
<thead>
<tr>
<th>9 Total Credits</th>
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<tbody>
<tr>
<td>Complete all of the following</td>
</tr>
<tr>
<td>There is no specific course sequence in that a number of sections of each course are offered every year, with students able to commence in the Fall, Spring, or Summer semester. One course, and sometimes more, are offered each term.</td>
</tr>
<tr>
<td>Complete the following:</td>
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<tr>
<td>HMG6797 - Event Administration (3)</td>
</tr>
<tr>
<td>HMG6528 - Convention and Conference Sales and Services (3)</td>
</tr>
<tr>
<td>HMG6756 - Mega-Events (3)</td>
</tr>
</tbody>
</table>

Grand Total Credits: 9
Financial Management for the Hospitality and Tourism Industry Graduate Certificate

College
Rosen College of Hospitality Management

Department
Rosen College of Hospitality Management Dean's Office

Program Handbook Link
https://hospitality.ucf.edu/graduate-degree-programs/

Program Prerequisites
Applicants should hold a bachelors degree in a business or related discipline and may have some practical work experience in hospitality financial management (financial/cost analysis, management evaluation/performance, etc.)

HFT 2401 Financial Accounting & HFT 3431 Managerial Accounting are the prerequisites for the graduate course HMG 6477 Financial Analysis.

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Institution Codes
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TOEFL: 5233
ETS PPI: 5233

Degree Requirements
9
9 Total Credits

- Take the following:
  - HMG6477 - Financial Analysis of Hospitality Enterprises (3)
  - HMG6476 - Feasibility Studies for the Hospitality/Tourism Enterprises (3)
  - HMG6466 - Applied Revenue Management Techniques in Hospitality (3)

Grand Total Credits: 9

Hospitality and Tourism Management MS

College
Rosen College of Hospitality Management

Department
Rosen College of Hospitality Management Dean's Office

Program Website
https://hospitality.ucf.edu/graduate-degree-programs/

Program Handbook Link
Hospitality and Tourism MS Handbook
Is this program available 100% online?

Yes

UCF Online

Please note: Hospitality and Tourism Management (MS) may be completed fully online. However, the thesis option is not available to students who study fully online, and not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Master of Science in Hospitality and Tourism Management enables students to build on their strengths and interests, broadens their knowledge of the industry, sharpens their management skills, and incorporates their professional and extracurricular experiences. The Rosen College of Hospitality Management candidates are especially attractive hires for hospitality and tourism organizations around the globe.

The typical Hospitality and Tourism Management MS candidate:

- Is a professional working in a position related to hospitality, tourism, or events.
- Holds an undergraduate degree in hospitality, business management, or a related discipline.
- Understands that advanced educational training is required to be competitive in the thriving hospitality, tourism, and event industry.

The program offers thesis and non-thesis options. The thesis option is intended for students who are interested in the scientific study of the various aspects of the hospitality and tourism industry and who may anticipate pursuing a doctoral degree or a professional research position. The non-thesis option is intended for students who anticipate a managerial and leadership position in the hospitality and tourism industry. The emphasis of the non-thesis option is on coursework, practical experience, and real-world insight. You can complete your degree either fully online, face-to-face, or customize it through a mix of both to fit your schedule and budget, although the thesis option is not available to students who study fully online. A maximum of three credit hours of restricted elective may be taken as an independent study.

The Rosen College of Hospitality Management aims to provide students with an outstanding graduate hospitality management educational experience and serve other stakeholders with continuing education, research, and service. The College is committed to UCF’s goals by providing intellectual leadership through quality hospitality education, international prominence by means of educational and research programs, promotion of a global perspective, nurturing inclusiveness and diversity, and partnerships with local, national, and international hospitality and tourism constituencies.

The MD Track is designed to accommodate UCF medical students who wish to pursue a Hospitality and Tourism MS concurrently while pursuing their medical degree. Please scroll to the bottom of this page for further details on this Track.
Program Prerequisites

For students with undergraduate majors in Hospitality Management or Business Administration, there will be no undergraduate course prerequisites, provided they have successfully completed an undergraduate course in statistics or applied quantitative analysis with a grade of "C" or higher.

For industry professionals with an undergraduate degree in a discipline other than Hospitality Management or Business Administration, the following two undergraduate courses "may" be required to be completed with a grade of "B" or higher within the first year of course work in the program (decisions are made at the discretion of the Graduate Recruitment Team).

- HFT 2401 - Hospitality Industry Financial Accounting
- HFT 3431 - Hospitality Industry Managerial Accounting

Students would also have to have successfully completed an undergraduate course in statistics or applied quantitative analysis with a grade of "C" or higher within the first year of course work in the program. The following undergraduate courses "may" be required to be completed with a grade of "B" or higher within the first year of course work in the program (decisions are made at the discretion of the Graduate Recruitment Team).

- STA 2401 or STA 2023 or
- HFT 3465 Applied Quantitative Analysis for the Hospitality and Tourism Industry

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Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
18 Total Credits

- Complete the following:
  - HMG6228 - Critical Issues in Hospitality Human Resources (3)
  - HMG6245 - Managing Hospitality and Guest Services Organizations (3)
  - HMG6477 - Financial Analysis of Hospitality Enterprises (3)
  - HMG6585 - Data Analysis in Hospitality and Tourism Research (3)
  - HMG6596 - Strategic Marketing in Hospitality and Tourism (3)
  - HMG6296 - Hospitality/Tourism Strategic Issues (3)

Thesis Option/Nonthesis Option
15 Total Credits

- Complete 1 of the following
  - Thesis Option
    - Complete all of the following
      - An appropriate culminating academic experience is required of all master's degree candidates. For those students in the thesis option, a thesis defense is required. Thesis defenses will be approved by a majority vote of the thesis advisory committee. Further approval is required by the Dean of the Rosen College of Hospitality Management and the UCF College of Graduate Studies before final acceptance of the thesis in fulfilling degree requirements.
      - Complete the following:
        - HMG6586 - Research Methods in Hospitality and Tourism (3)
        - Earn at least 6 credits from the following:
          - HMG6971 - Treatise (Thesis OF Research Report) (1 - 99)
        - Earn at least 6 credits from the following:
          - FSS6365 - Management of Food Service Operations (3)
          - HMG6227 - Advanced Training and Development in the Hospitality Industry (3)
          - HMG6251 - International Lodging Accommodations Analysis (3)
Independent Learning

Total Credits

In order to identify areas of concern encountered by managers responsible for formulating and implementing operational strategies in various sectors of the tourism and hospitality industry. Students are required to apply skills, knowledge, and understanding.

Candidates for the MS degree are constantly challenged with numerous requirements to engage in independent learning during the program of study through special projects and papers. For students in the non-thesis option, an appropriate culminating academic experience is the successful completion of HMG 6296 - Hospitality/Tourism Strategic Issues, a required capstone course. This capstone course acquaints students with the principles of strategic decision-making and enrollment is based on approval. This capstone course acquaints students with the principles of strategic decision-making in various sectors of the tourism and hospitality industry. Students are required to apply skills, knowledge, and understanding in order to identify areas of concern encountered by managers responsible for formulating and implementing operational strategies.

Earn at least 15 credits from the following:

- Case Studies in Restaurant Management (3)
- Hospitality Entrepreneurship: Concept Creation to Capitalization (3)
- Contemporary Issues in the Resort Industry (3)
- Hospitality/Tourism Information Technology (3)
- Feasibility Studies for the Hospitality/Tourism Enterprises (3)
- Convention and Conference Sales and Services (3)
- Contemporary Issues in Resort Sales Management (3)
- Hospitality/Tourism Industry Brand Management (3)
- Digital Marketing and Big Data Management for Hospitality and Tourism (3)
- Social Media in Hospitality and Tourism (3)
- Principles of Destination Marketing and Management (3)
- International Tourism Management (3)
- Tourism Industry Analysis (3)
- Mega-Events (3)
- Event Administration (3)
- Applied Revenue Management Techniques in Hospitality (3)
- Corporate Social Responsibility and Ethics in the Hospitality and Tourism Industry (3)
- Smart Travel and Tourism (3)
- Advanced Theme Park and Attraction Management (3)
- Food Supply Chain Management (3)
- Beverage Supply Chain Management (3)
- Leadership in Hospitality and Tourism (3)
- Leading Innovation and Change in Hospitality and Tourism (3)
- Contemporary Issues in Hospitality and Tourism Leadership (3)

Nonthesis Option

Complete all of the following:

- An appropriate culminating academic experience is required of all master's degree candidates. For students in the non-thesis option, an appropriate culminating academic experience is the successful completion of HMG 6296 - Hospitality/Tourism Strategic Issues, a required course in the curriculum that is designated as a capstone course. This capstone course acquaints students with the principles of strategic decision-making in various sectors of the tourism and hospitality industry. Students are required to apply skills, knowledge, and understanding in order to identify areas of concern encountered by managers responsible for formulating and implementing operational strategies.

- Earn at least 15 credits from the following:

  - Management of Food Service Operations (3)
  - Advanced Training and Development in the Hospitality Industry (3)
  - International Lodging Accommodations Analysis (3)
  - Case Studies in Restaurant Management (3)
  - Hospitality Entrepreneurship: Concept Creation to Capitalization (3)
  - Contemporary Issues in the Resort Industry (3)
  - Hospitality/Tourism Information Technology (3)
  - Feasibility Studies for the Hospitality/Tourism Enterprises (3)
  - Convention and Conference Sales and Services (3)
  - Contemporary Issues in Resort Sales Management (3)
  - Hospitality/Tourism Industry Brand Management (3)
  - Digital Marketing and Big Data Management for Hospitality and Tourism (3)
  - Social Media in Hospitality and Tourism (3)
  - Principles of Destination Marketing and Management (3)
  - International Tourism Management (3)
  - Tourism Industry Analysis (3)
  - Mega-Events (3)
  - Event Administration (3)
  - Applied Revenue Management Techniques in Hospitality (3)
  - Corporate Social Responsibility and Ethics in the Hospitality and Tourism Industry (3)
  - Smart Travel and Tourism (3)
  - Advanced Theme Park and Attraction Management (3)
  - Food Supply Chain Management (3)
  - Beverage Supply Chain Management (3)
  - Leadership in Hospitality and Tourism (3)
  - Leading Innovation and Change in Hospitality and Tourism (3)
  - Contemporary Issues in Hospitality and Tourism Leadership (3)

Independent Learning

0 Total Credits
strategies.

Grand Total Credits: 33

Hospitality and Tourism Management MS - Hospitality and Tourism Management MS, MD Track

Track Website
https://hospitality.ucf.edu/graduate-degree-programs/

Track Handbook
Hospitality and Tourism Management MS, MD Track Handbook

Track Contact Information
David Kwun PhD
MS Programs Coordinator
Associate Professor
David.Kwun@ucf.edu
Telephone: 407-903-8190
RCHM 277

Kathy Henry MPA
Assistant Director, Grad Program Academic Advisor
Kathy.Henry@ucf.edu
Telephone: 407-903-8024
RCHM 102

Online Availability
No

Track Description
The Master of Science in Hospitality and Tourism Management enables students to build on their strengths and interests; broadens their knowledge of the industry; sharpens their management skills; and incorporates their professional and extracurricular experiences.

The MD Track is designed to accommodate UCF medical students who wish to pursue a Hospitality and Tourism MS concurrently while pursuing their medical degree. Students enrolled in the MD track will witness and experience adaptable elements to effect a cultural change in the practice of medicine vis-a-vis the concept of hospitality and service-oriented business models.

Track Prerequisites
For students with undergraduate majors in Hospitality Management or Business Administration, there will be no undergraduate course prerequisites, provided they have successfully completed an undergraduate course in statistics or applied quantitative analysis with a grade of "C" or higher.

For industry professionals with an undergraduate degree in a discipline other than Hospitality Management or Business Administration, the following two undergraduate courses "may" be required to be completed with a grade of "B" or higher within the first year of course work in the program (decisions are made at the discretion of the Graduate Recruitment Team).

- STA 2014 - Principles of Statistics or STA 2023 Statistical Methods or
- HFT 3930 - Applied Quantitative Analysis for the Hospitality and Tourism Industry

Students would also have to have successfully completed an undergraduate course in statistics or applied quantitative analysis with a grade of "C" or higher within the first year of course work in the program. The following undergraduate courses "may" be required to be completed with a grade of "B" or higher within the first year of course work in the program (decisions are made at the discretion of the Graduate Recruitment Team).

- STA 2401 or STA 2023 Principles of Statistics or
- HFT 3930 Applied Quantitative Analysis for the Hospitality and Tourism Industry
College of Graduate Studies Contact Information
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Institution Codes
GRE: 5233
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ETS PPI: 5233

Degree Requirements

Required Courses
18 Total Credits

- Complete the following:
  - HMG6228 - Critical Issues in Hospitality Human Resources (3)
  - HMG6245 - Managing Hospitality and Guest Services Organizations (3)
  - HMG6477 - Financial Analysis of Hospitality Enterprises (3)
  - HMG6585 - Data Analysis in Hospitality and Tourism Research (3)
  - HMG6596 - Strategic Marketing in Hospitality and Tourism (3)
  - HMG6296 - Hospitality/Tourism Strategic Issues (3)

Electives
15 Total Credits

- Earn at least 15 credits from the following:
  - FSS6365 - Management of Food Service Operations (3)
  - HMG6227 - Advanced Training and Development in the Hospitality Industry (3)
  - HMG6251 - International Lodging Accommodations Analysis (3)
  - HMG6267 - Case Studies in Restaurant Management (3)
  - HMG6291 - Hospitality Entrepreneurship: Concept Creation to Capitalization (3)
  - HMG6347 - Contemporary Issues in the Resort Industry (3)
  - HMG6446 - Hospitality/Tourism Information Technology (3)
  - HMG6586 - Research Methods in Hospitality and Tourism (3)
  - HMG6476 - Feasibility Studies for the Hospitality/Tourism Enterprises (3)
  - HMG6528 - Convention and Conference Sales and Services (3)
  - HMG6529 - Contemporary Issues in Resort Sales Management (3)
  - HMG6946 - Internship (1 - 99)
  - HMG6556 - Digital Marketing and Big Data Management for Hospitality and Tourism (3)
  - HMG6565 - Social Media in Hospitality and Tourism (3)
  - HMG6566 - Principles of Destination Marketing and Management (3)
  - HMG6710 - International Tourism Management (3)
  - HMG6738 - Tourism Industry Analysis (3)
  - HMG6756 - Mega-Events (3)
  - HMG6797 - Event Administration (3)
  - BMS6050 - Psychosocial Issues in Healthcare (4)
  - BMS6911 - Focused Inquiry and Research Experience II (5)

Independent Learning
0 Total Credits

- Candidates for the MS degree are constantly challenged with numerous requirements to engage in independent learning during the program of study through special projects and papers. An appropriate culminating academic experience is the successful completion of HMG 6296 - Hospitality/Tourism Strategic Issues, a required course in the curriculum that is designated as a capstone course. HMG 6296 should be taken during the final term of study, and enrollment is based on approval. This capstone course acquaints students with the principles of strategic decision-making in various sectors of the tourism and hospitality industry. Students are required to apply skills, knowledge, and understanding in order to identify areas of concern encountered by managers responsible for formulating and implementing operational strategies.

Grand Total Credits: **33**
Candidates for the MS degree are constantly challenged with numerous requirements to engage in independent learning during the program of study through special projects and papers. For example, the capstone course (i.e., the last one that you complete prior to graduation), HMG 6296 - Hospitality/Tourism Strategic Issues, requires a critical strategic audit project and a reflective paper. The project demonstrates a range of cross-discipline knowledge and analytical skills to perform an executive-level analysis of an enterprise. The reflective paper has guiding questions that are subjective in nature and successful completion requires a thorough, insightful, and well-articulated document that describes the learner’s value proposition to industry and society.

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student’s graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.

Yes
Please note: Hospitality and Tourism Technologies Graduate Certificate, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees. See http://ucf.edu/online for more information.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit http://global.ucf.edu/. If you have questions, please consult UCF Global at (407) 823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

Program Description

The Graduate Certificate in Hospitality and Tourism Technologies provides knowledge and information that facilitates the effective use of existing and emerging technologies in the marketing and management of hospitality and tourism products, services, experiences and electronic channels of distribution. The certificate covers the development, use, and future of hospitality and tourism technologies, the critical role played by social media as a strategy for differentiation, business development and new product/experience development, and the major perspectives and concepts associated with digital marketing and big data management.

Students learn to synthesize theory and application at the graduate level in order to produce the knowledge base necessary to fully utilize available technological and social media techniques and strategies in the hospitality and tourism industries. Students successfully completing this certificate are likely to be employed in any area of hospitality and tourism that incorporates online booking and reservation systems, e-intermediaries, online travel agencies, digital marketing agencies, social media organizations, destination marketing, hospitality marketing etc.

College of Graduate Studies Contact Information

gradadmissions@ucf.edu
Telephone: 407-823-2766
Millican Hall 230
Online Application
Graduate Admissions

Mailing Address

UCF College of Graduate Studies
Millican Hall 230
PO Box 160112
Orlando, FL 32816-0112

Institution Codes

GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses

9 Total Credits

- Complete all of the following
  - Complete the following:
    - HMG6446 - Hospitality/Tourism Information Technology (3)
    - HMG6556 - Digital Marketing and Big Data Management for Hospitality and Tourism (3)
    - HMG6565 - Social Media in Hospitality and Tourism (3)
  - Although HMG 6446 - Hospitality/Tourism Information Technology may serve as a prerequisite for the two remaining courses that comprise the certificate, the order of courses taken is at the discretion of the Graduate Programs' Director and will be determined by the students' previous professional and academic experience. A number of sections of each course are available throughout the year with students able to commence in the Fall, Spring or Summer semester. One course, and sometimes more, are offered each term.

Grand Total Credits: 9

Hospitality Management, PhD

College

Rosen College of Hospitality Management
Is this program available 100% online?

No

Program Description

The PhD in Hospitality Management prepares individuals for teaching and research-based careers in academia or as practitioner researchers and field consultants in hospitality and tourism enterprises.

Program Prerequisites

Applicants to this program must have an earned Masters Degree. The total credit hours to complete this program are beyond the masters.

Degree Requirements

Required Courses

16 Total Credits

Core Courses

Complete all of the following

1. Complete the following:
   - HMG7587 - Foundations in Hospitality and Tourism Research (3)
   - HMG7589 - Advanced Research Methods in Hospitality and Tourism (3)
   - HMG7588 - Research Seminar in Hospitality and Tourism (1)
   - PAF7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis (3)
   - HMG7295 - Theories in Hospitality and Tourism (3)

2. Complete at least 1 of the following:
   - PAF7802 - Advanced Research Methodology for Public Affairs (3)
   - HMG6586 - Research Methods in Hospitality and Tourism (3)
Specialization
27 Total Credits

- Complete all of the following
  Strategies and Tactics
  - Complete at least 2 of the following:
    - HMG7258 - Strategies and Tactics: Lodging (3)
    - HMG7546 - Strategies and Tactics: Guest Service Management (3)
    - HMG7715 - Strategies and Tactics: Travel and Tourism (3)
    - HMG7876 - Strategies and Tactics: Foodservice (3)

Research Electives
- Earn at least 9 credits from the following:
  - HMG6918 - Directed Research (1 - 99)
  - PAF7805 - Advanced Statistics for Public Affairs II: Survey of Statistical Methods (3)
  - PAF7820 - Qualitative Methods for Public Affairs (3)
  - EDF7463 - Analysis of Survey, Record, and Other Qualitative Data (3)
  - EDF7406 - Multivariate Statistics in Education (3)

6000/7000 Level Electives
- Earn at least 12 credits from the following:
  - FSS6365 - Management of Food Service Operations (3)
  - HMG6227 - Advanced Training and Development in the Hospitality Industry (3)
  - HMG6228 - Critical Issues in Hospitality Human Resources (3)
  - HMG6245 - Managing Hospitality and Guest Services Organizations (3)
  - HMG6251 - International Lodging Accommodations Analysis (3)
  - HMG6267 - Case Studies in Restaurant Management (3)
  - HMG6296 - Hospitality/Tourism Strategic Issues (3)
  - HMG6347 - Contemporary Issues in the Resort Industry (3)
  - HMG6446 - Hospitality/Tourism Information Technology (3)
  - HMG6466 - Applied Revenue Management Techniques in Hospitality (3)
  - HMG6476 - Feasibility Studies for the Hospitality/Tourism Enterprises (3)
  - HMG6477 - Financial Analysis of Hospitality Enterprises (3)
  - HMG6528 - Convention and Conference Sales and Services (3)
  - HMG6529 - Contemporary Issues in Resort Sales Management (3)
  - HMG6533 - Hospitality/Tourism Industry Brand Management (3)
  - HMG6556 - Digital Marketing and Big Data Management for Hospitality and Tourism (3)
  - HMG6665 - Social Media in Hospitality and Tourism (3)
  - HMG6666 - Principles of Destination Marketing and Management (3)
  - HMG6585 - Data Analysis in Hospitality and Tourism Research (3)
  - HMG6596 - Strategic Marketing in Hospitality and Tourism (3)
  - HMG6710 - International Tourism Management (3)
  - HMG6738 - Tourism Industry Analysis (3)
  - HMG6756 - Mega-Events (3)
  - HMG6797 - Event Administration (3)

- At least 6 credit hours should be from HMG 7XXX level courses. Course selection should be based on the student's area of interest in consultation with the major adviser and approved by the PhD Program Coordinator.

Dissertation
15 Total Credits
- Complete all of the following
  - Earn at least 15 credits from the following:
    - HMG7980 - Dissertation (1 - 99)

- Doctoral students must present a prospectus for the dissertation to the doctoral adviser, prepare a proposal and present it to the dissertation committee, and defend the final research submission with the dissertation committee.

Grand Total Credits: 58
Leadership and Strategy in Hospitality and Tourism Graduate Certificate

College
Rosen College of Hospitality Management

Department
Rosen College of Hospitality Management Dean's Office

Program Handbook Link
https://www.ucf.edu/catalog/graduate/#/programs/r1khCx_s_?bc=true&bcCurrent=Hospitality%20and%20Tourism%20Management%20MS&bcItemType=programs

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Orlando, FL 32816-0112

Institution Codes
GRE: 5233
GMAT: RZT-HT-58
TOEFL: 5233
ETS PPI: 5233

Degree Requirements

Required Courses
9 Total Credits

- Complete at least 3 of the following:
  - HMG6291 - Hospitality Entrepreneurship: Concept Creation to Capitalization (3)
  - HMG6224 - Leadership in Hospitality and Tourism (3)
  - HMG6223 - Leading Innovation and Change in Hospitality and Tourism (3)
  - HMG6299 - Contemporary Issues in Hospitality and Tourism Leadership (3)

Grand Total Credits: 9
Courses

ACG - Accounting General

ACG5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

ACG5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

ACG6185 - Financial Statement Analysis

Course Title
Financial Statement Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master of Accounting and completion of all business and accounting foundation core courses.

Course Description
Analysis of business and financial information to develop financial analysis abilities and enhance understanding of the relationships between business strategies, processes, and financial information.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Spring
Fall
ACG6255 - International and Multinational Accounting

**Course Title**
International and Multinational Accounting

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Master of Accounting and completion of all business and accounting foundation core courses.

**Course Description**
An examination of the environmental factors affecting international accounting concepts and standards. Cross-country differences in accounting treatments are compared.

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

**Terms of Offering**
Occasional

ACG6305 - Advanced Managerial Accounting

**Course Title**
Advanced Managerial Accounting

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Master of Accounting and completion of all business and accounting foundation core courses.

**Course Description**
Advanced and current techniques for generation and use of accounting information in managerial decision-making.

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

**Terms of Offering**
Occasional
ACG6415 - Advanced Accounting Information Systems

Course Title
Advanced Accounting Information Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to the Master of Accounting and completion of all business and accounting foundation core courses.

Course Description
Evaluation of the overall risk to critical accounting and business processes posed by information technology.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Fall
Spring

ACG6425 - Managerial Accounting Analysis

Course Title
Managerial Accounting Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
CBA Master's Program of Study Foundation Core (not open to Accounting majors).

Course Description
Accounting as an information measurement system for internal planning and control.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Spring
Fall
ACG6519 - Governmental and Nonprofit Accounting

Course Title
Governmental and Nonprofit Accounting

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to the Master of Accounting and completion of all business and accounting foundation core courses.

Course Description
Examination of current issues and advanced topics in governmental and nonprofit accounting with emphasis on public policy issues and governmental budgeting.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Occasional

ACG6636 - Advanced Auditing

Course Title
Advanced Auditing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to the Master of Accounting and completion of all business and accounting foundation core courses.

Course Description
Advanced topics on independent, external auditing including internal control, evidence, reporting, and operational auditing.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Occasional
ACG6675 - Operational Auditing
Course Title
Operational Auditing
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the Master of Accounting and completion of all business and accounting foundation core courses.
Course Description
In depth study of the standards, principles, practices, and procedures followed in the internal audit function.
College
College of Business Administration
Department
Kenneth G Dixon School of Accounting
Terms of Offering
Occasional

ACG6685 - Fraud Auditing
Course Title
Fraud Auditing
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the Master of Accounting and completion of all business and accounting foundation core courses.
Course Description
Theory and techniques relating to fraud auditing and fraud examination.
College
College of Business Administration
Department
Kenneth G Dixon School of Accounting
Terms of Offering
Occasional
ACG6805 - Accounting Theory

Course Title
Accounting Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master of Accounting and completion of all business and accounting foundation core courses.

Course Description
An examination of the evolution of contemporary accounting theory with emphasis on current and future developments.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Fall
Spring

ACG6835 - Ethics and Professionalism in Accounting and Auditing

Course Title
Ethics and Professionalism in Accounting and Auditing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master of Accounting and completion of all business and accounting foundation core courses.

Course Description
Exploration on why and how theories of the professions and theories of individual ethical decision-making are applicable to the practice of accounting.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Fall
Spring
ACG6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

ACG6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

ACG6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting
ACG7157 - Seminar in Archival Research in Accounting

Course Title
Seminar in Archival Research in Accounting

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Approval of instructor and PhD program coordinator.

Course Description
Extensive coverage of archival literature dealing with auditing, financial accounting, accounting regulation, and related accounting research.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Occasional

ACG7390 - Seminar in Managerial Accounting Research

Course Title
Seminar in Managerial Accounting Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Instructor and PhD program coordinator consent.

Course Description
This course provides an in-depth understanding of the management accounting literature and the knowledge and skills needed to undertake scholarly research in this area.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Occasional
ACG7399 - Seminar in Behavioral Accounting Research

**Course Title**
Seminar in Behavioral Accounting Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Complete all of the following
  - Complete the following:
    - ACG7157 - Seminar in Archival Research in Accounting (3)
  - Admission to doctoral program and C.I.

**Course Description**
Extensive study of the theoretical aspects and empirical literature related to accounting-based judgement/decision processes and the behavioral implications of accounting.

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

**Terms of Offering**
Occasional

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ACG7826 - Seminar in the Social and Organizational Context of Accounting

**Course Title**
Seminar in the Social and Organizational Context of Accounting

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Instructor and PhD program coordinator consent.

**Course Description**
This course provides the student with an appreciation for the body of accounting knowledge that investigates accounting as a practice carried out within social and organizational contexts.

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

**Terms of Offering**
Occasional
ACG7837 - Foundations in Behavioral Accounting Research

Course Title
Foundations in Behavioral Accounting Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I. and PhD Program Coordinator Consent.

Course Description
Foundation in behavioral theory development and research design applicable to studying the individual and organizational aspects of accounting.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Odd Fall

ACG7885 - Research Foundations in Accounting

Course Title
Research Foundations in Accounting

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Instructor and PhD program coordinator consent.

Course Description
This course provides doctoral students with an intellectual foundation in research and research methods that are applicable in the study of accounting.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Occasional
ACG7887 - Accounting Research Forum

Course Title
Accounting Research Forum

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to doctoral program.

Course Description
Research and pedagogical issues in accounting, including research presentations by faculty, doctoral students, and invited scholars. May be taken for 4 hours credit.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Spring
Fall

ACG7888 - Seminar in Critical Accounting and AIS

Course Title
Seminar in Critical Accounting and AIS

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Instructor and PhD program coordinator consent.

Course Description
This course provides an in-depth understanding of the critical accounting and AIS literature and the knowledge and skills necessary to undertake scholarly research in the area.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Occasional
ACG7915 - Directed Research in Accounting

Course Title
Directed Research in Accounting

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- GEB 7910 and C.I.

Course Description
Advanced study in specialized areas of accounting research. Study designed to lead toward publishable research or student's dissertation. By definition, topical areas will vary.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Occasional

ACG7917 - Advanced Research Methods in Accounting and Accounting Information Systems Research

Course Title
Advanced Research Methods in Accounting and Accounting Information Systems Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Approval of instructor and PhD program coordinator.

Course Description
Advanced study in specialized areas of accounting and AIS research. By definition, topical areas will vary.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Occasional
ACG7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Kenneth G Dixon School of Accounting

ACG7939 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Kenneth G Dixon School of Accounting

ADE - Adult Education

ADE5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

ADE5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education
ADE6678 - The Socio-Historical Context of Adult Education

Course Title
The Socio-Historical Context of Adult Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Graduate standing or C.I.

Course Description
An overview of adult education examining the historical and philosophical roots, the current social context and the multiple disciplinary perspectives that inform the field.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Odd Fall

ADV - Advertising

ADV5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media

ADV5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Nicholson School of Communication and Media
ADV6209 - Advertising and Society

**Course Title**
Advertising and Society

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A study of the social and ethical impact of advertising focusing on the development and presentation of advertising messages.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional

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AFA - African American Studies

**AFA5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of History

**AFA5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
Department of History

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AFH - African History
AFH5259 - Colloquium in African History  
**Course Title**  
Colloquium in African History  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate standing or C.I.  

**Course Description**  
Readings on selected topics in African History. May be used in the degree program a maximum of 3 times.  

**College**  
College of Arts and Humanities  

**Department**  
Department of History  

**Terms of Offering**  
Odd Fall  

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AFH5806 - The Historiography of Slavery in Africa  
**Course Title**  
The Historiography of Slavery in Africa  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate standing or senior standing or C.I.  

**Course Description**  
Course covers the central issues and controversies in the historiography of slavery in Africa.  

**College**  
College of Arts and Humanities  

**Department**  
Department of History  

**Terms of Offering**  
Occasional
AFH5917 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Arts and Humanities  
**Department**  
Department of History  

AFH5937 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Arts and Humanities  
**Department**  
Department of History  

AFH6918 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Arts and Humanities  
**Department**  
Department of History  

**AMH - American History**
AMH5077 - Colloquium in Twentieth Century Tourism
Course Title
Colloquium in Twentieth Century Tourism
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Graduate standing or C.I. Examines the historiography and major themes in the history of tourism scholarship.
College
College of Arts and Humanities
Department
Department of History
Terms of Offering
Occasional

AMH5116 - Colloquium in Early American History
Course Title
Colloquium in Early American History
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or senior standing or C.I.
Course Description
Reading and discussion of the literature on selected topics in Early American history. May be used in the degree program a maximum of 3 times.
College
College of Arts and Humanities
Department
Department of History
Terms of Offering
Occasional
AMH5169 - Colloquium in the American Early Republic

**Course Title**
Colloquium in the American Early Republic

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or senior standing or C.I.

**Course Description**
Intensive reading and class discussion on selected topics of the Early American Republic.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

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AMH5176 - Colloquium in Civil War and Reconstruction

**Course Title**
Colloquium in Civil War and Reconstruction

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or senior standing or C.I.

**Course Description**
Intensive reading and class discussion on selected topics of the Civil War and Reconstruction era.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional
AMH5296 - Colloquium in 20th Century U.S.

**Course Title**
Colloquium in 20th Century U.S.

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or senior standing or C.I.

**Course Description**
Reading and class discussion on selected topics in 20th-century U.S. May be used in the degree program a maximum of 4 times.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

AMH5391 - Colloquium in U.S. Cultural History

**Course Title**
Colloquium in U.S. Cultural History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or senior standing or C.I.

**Course Description**
Students will read and discuss a common or diverse body of the significant literature in the field.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional
AMH5406 - Colloquium in American South

**Course Title**
Colloquium in American South

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or senior standing or C.I.

**Course Description**
Intensive reading and class discussion on selected topics of Southern history from colonial origins to the present.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

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AMH5636 - Colloquium in US Environmental History

**Course Title**
Colloquium in US Environmental History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Evolution of historical texts and methodologies for understanding nature-human interaction and how access to resources shaped human opportunity, from colonization to the present.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional
AMH5917 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Arts and Humanities  
**Department**  
Department of History  

AMH5925 - Colloquium in US Military History  
**Course Title**  
Colloquium in US Military History  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate standing or C.I.  
**Course Description**  
Selected topics in United States military history. May be used in the degree program a maximum of 3 times only when course content is different.  
**College**  
College of Arts and Humanities  
**Department**  
Department of History  
**Terms of Offering**  
Occasional
AMH6346 - Seminar in the History of American Automobility

**Course Title**
Seminar in the History of American Automobility

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Readings and research in the development of American automobility.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

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AMH6429 - Seminar in Community and Local History

**Course Title**
Seminar in Community and Local History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
This seminar will introduce students to historiography, methodology and first hand experience on conducting a community history based on local and church archives.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

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2022-2023 Graduate Catalog
AMH6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of History

AMH6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of History

AMH6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
Department of History
AMH6939 - Seminar in U.S. History

Course Title
Seminar in U.S. History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Research seminar on selected topics in U.S. history. May be repeated for credit only when course content is different.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

AML - American Literature

AML5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

AML5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of English
AML6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of English

AML6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of English

AML6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
Department of English

ANG - Anthropology/Graduate
ANG5094 - Writing in Anthropology

Course Title
Writing in Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to the Ph.D. in Integrative Anthropological Sciences or MA in Anthropology programs, or C.I. Develop scholarly writing skills specific to anthropology in terms of engagement with literature, crafting of arguments, as well as the style of expression and quoting.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Fall

ANG5128C - Lithic Analysis: The Archaeology of Stone Tools

Course Title
Lithic Analysis: The Archaeology of Stone Tools

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
Admission to the Anthropology MA program, Integrative Anthropological Sciences PhD program, or C.I.

Course Description
Introduces the manufacturing and analysis of flaked stone tools. Students will work with both archaeological and experimental collections, and manufacture stone tools.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Odd Spring

Current Fee Per Student
0
ANG5165 - Archaeology of Pre-Columbian South America

Course Title
Archaeology of Pre-Columbian South America

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Anthropology M.A. program, Integrative Anthropological Sciences PhD program, or C.I.

Course Description
Examines South American archaeology over fifteen thousand years, including but going beyond the Andes. Provides context for anthropological research throughout South America.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Even Spring
Odd Spring

ANG5166 - Problems in Maya Studies

Course Title
Problems in Maya Studies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Maya Studies GC, or C.I.

Course Description
In-depth study of current methodological, theoretical, and/or topical problems in Maya Studies.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Occasional
ANG5188C - Paleoethnobotany

**Course Title**
Paleoethnobotany

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Complete 1 of the following
  - Admitted to ANTMA
  - Admitted to ISPHD
  - Admitted to a program offered by Department of Anthropology

**Course Description**
Knowledge and understanding of paleoethnobotany sufficient to understand, interpret, and evaluate plant data in archaeological, paleoecological, and contemporary research.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Odd Spring

**Current Fee Per Student**
0

ANG5191 - Mortuary Archaeology

**Course Title**
Mortuary Archaeology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Anthropology MA, Maya Studies GC, or C.I.

**Course Description**
Funerary customs and human remains; basic data collection, skeletal analysis, and comparative study of mortuary ritual-ancient and modern.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Occasional
ANG5195C - A Pot for All Seasons: Archaeological Ceramic Analysis

**Course Title**
A Pot for All Seasons: Archaeological Ceramic Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.

**Course Description**
Provides students with the skills, knowledge and ability to classify, analyze, and interpret ceramic artifacts commonly recovered from archaeological sites.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Fall

**Current Fee Per Student**
$10

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ANG5228 - Maya Iconography

**Course Title**
Maya Iconography

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Anthropology MA, Maya Studies GC, or C.I.

**Course Description**
Study and interpretation of ancient Maya iconography as reflected in art, artifacts, and constructed features.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Odd Spring
ANG5441 - Anthropology of Cities
Course Title
Anthropology of Cities
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
• Admission to the Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.
Course Description
An anthropological exploration of cities and their social systems in the past and present.
College
College of Sciences
Department
Department of Anthropology
Terms of Offering
Spring

ANG5462 - Medical Anthropology
Course Title
Medical Anthropology
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
• Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.
Course Description
Topics in ethnography of medical traditions and anthropological approaches to the study of health and disease.
College
College of Sciences
Department
Department of Anthropology
Terms of Offering
Occasional
ANG5468 - Anthropology of the Body

Course Title
Anthropology of the Body

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.

Course Description
Critically examines the body from the perspective of cultural anthropology.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring

ANG5486 - Quantitative Research in Anthropology

Course Title
Quantitative Research in Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the MA in Anthropology program, admission to Integrative Anthropological Sciences PhD program, or C.I.

Course Description
Quantitative approaches to problems in anthropology, including multivariate systems, assessment of reliability, and approaches for small samples.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Fall
ANG5525C - Human Osteology  
**Course Title**  
Human Osteology  
**Credits Hours**  
4  
**Lab/Studio/Field Work Hours**  
1  
**Prerequisites**  
- Admission to the Anthropology M.A. program, Integrative Anthropological Sciences PhD or C.I.  
**Course Description**  
The human skeleton and the methodology and techniques involved in the anthropological assessment of skeleton remains.  
**College**  
College of Sciences  
**Department**  
Department of Anthropology  
**Terms of Offering**  
Fall  

ANG5531 - Nutritional Anthropology  
**Course Title**  
Nutritional Anthropology  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Course Description**  
The biological, social, cultural, psychological, and environmental influences of food consumption and physiological status. Perspectives are cross-cultural, evolutionary and ecological.  
**College**  
College of Sciences  
**Department**  
Department of Anthropology  
**Terms of Offering**  
Even Fall  
Odd Fall
ANG5535 - Scientific Prejudice and Anthropology

**Course Title**
Scientific Prejudice and Anthropology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Rule Not Selected

**Course Description**
Covers scientific prejudice and its effects through studying relevant research and extremists engaging with anthropological concepts to justify prejudicial beliefs.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Odd Spring

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ANG5738 - Advanced Medical Anthropology

**Course Title**
Advanced Medical Anthropology

**Credits Hours**
3

**Prerequisites**
- Admission to Anthropology MA, Maya Studies Graduate certificate, or C.I.

**Course Description**
Advanced topics in ethnography of medical traditions and anthropological approaches to the study of health and disease.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Occasional
ANG5742 - Problems in Forensic Anthropology

Course Title
Problems in Forensic Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.

Course Description
Current issues and topics in forensic anthropology.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring

ANG5822 - Maya Field Research

Course Title
Maya Field Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Maya Studies GC, or C.I.

Course Description
Practical application of method and theory during primary infield research in the Maya area.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring
ANG5852 - GIS Methods in Anthropology

Course Title
GIS Methods in Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Integrative Anthropological Sciences PhD or GIS certificate.

Course Description
Overview to Geographic Information Systems (GIS) methods from an anthropological perspective.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Fall

ANG5853 - Advanced GIS Methods in Anthropology

Course Title
Advanced GIS Methods in Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ANG 5852 and admission to Anthropology MA program, GIS graduate certificate, or C.I.

Course Description
Advanced methods to Geographic Information Systems (GIS) from an anthropological perspective.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring
ANG5854 - Digital Anthropology

**Course Title**

Digital Anthropology

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission to the Anthropology M.A. program, Integrative Anthropological Sciences PhD, or C.I.

**Course Description**

Explores how anthropology applies digital technologies to exploring humanity's past, present, and future. Grounded by developing anthropologically based, transferable methods and skills.

**College**

College of Sciences

**Department**

Department of Anthropology

**Terms of Offering**

Even Fall
Odd Fall

ANG5917 - Directed Research

**Course Title**

Directed Research

**Credits Hours**

1 - 99

**College**

College of Sciences

**Department**

Department of Anthropology

ANG5937 - Special Topics

**Course Title**

Special Topics

**Credits Hours**

3

**College**

College of Sciences

**Department**

Department of Anthropology
ANG5944 - Internship

Course Title
Internship

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Anthropology

ANG5950 - Geospatial and Archaeological Field School at Kerkenes

Course Title
Geospatial and Archaeological Field School at Kerkenes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Anthropology M.A. program, Integrative Anthropological Sciences PhD, GIS Graduate Certificate, or C.I.

Course Description
Provides hands-on experience using geospatial technologies and archaeological methodologies on an archaeological project through Study Abroad. Fulfills an elective requirement for GIS Graduate Certificate.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Even Summer
Odd Summer
ANG5951 - Geophysical Field School at Kerkenes

**Course Title**
Geophysical Field School at Kerkenes

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Provides hands-on experience using geophysical technologies on an archaeological project through Study Abroad. Fulfills an elective requirement for the GIS Graduate Certificate.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Even Summer
Odd Summer

ANG6002 - Proseminar in Anthropology

**Course Title**
Proseminar in Anthropology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Anthropology MA, Maya Studies GC, or C.I.

**Course Description**
Central concepts, theories, resources, and methods fundamental to cultural anthropology, human ecology, physical anthropology, and archaeology.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Occasional
ANG6003 - Ethics in Anthropology

Course Title
Ethics in Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to the Ph.D. in Integrative Anthropological Sciences or M.A. in Anthropology programs or C.I.

Course Description
Ethical issues and concepts practitioners of integrative anthropological sciences confront across various academic, research, and public domains.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Occasional

ANG6076 - Remote Sensing Methods in Anthropology

Course Title
Remote Sensing Methods in Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
ANT4852 and ANT4854 or ANG5852 and ANG5853 or ANG7075, or C.I.

Course Description
An introduction to remote sensing methods, applicable across a wide range disciplines, from an anthropological perspective. Fulfills an elective requirement for the GIS Graduate Certificate.

College
College of Sciences

Department
Department of Anthropology
ANG6110 - Archaeological Theory and Method

Course Title
Archaeological Theory and Method

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.

Course Description
History and current theory and methods used by archaeologists to interpret past behavior.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Fall

ANG6125C - Applied Materials Analysis in Anthropological Sciences

Course Title
Applied Materials Analysis in Anthropological Sciences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Techniques used for analysis of biological and man-made materials, the interpretation of results produced, and their impact on the reconstruction of human biology and history.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Even Fall

2022-2023 Graduate Catalog
ANG6168 - The Ancient Maya

Course Title
The Ancient Maya

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Integrative Anthropological Sciences Phd, or C.I.

Course Description
Overview of the archaeology of the ancient Maya of Mexico, Belize, Guatemala, and upper Mexico.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Fall

ANG6181C - GIS Applications in Anthropology

Course Title
GIS Applications in Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to Anthropology MA program, Maya Studies graduate certificate, or C.I.

Course Description
Application of geographic information systems methodology for the documentation and analysis of anthropological, archeological and forensic problems.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring
ANG6184 - Advances in Archaeological Practice

Course Title
Advances in Archaeological Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to the Ph.D. in Integrative Anthropological Sciences or M.A. in Anthropology programs or C.I. Topics concerning cultural resource management as a professional field within anthropology, and specifically, anthropological archaeology.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Occasional

ANG6189 - Integrative Isotopic Sciences

Course Title
Integrative Isotopic Sciences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Anthropology M.A., Integrative Anthropological Sciences Phd, or C.I.

Course Description
Theoretical and methodological approaches to stable isotope analysis and its application in the interpretation of human migration, diet, disease, environment, and physiology.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring
ANG6324 - Contemporary Maya

Course Title
Contemporary Maya

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology M.A. program, Maya Studies graduate certificate, or C.I.

Course Description
Overview of the cultures and peoples comprising the contemporary Maya of Central America.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Even Fall

ANG6405 - Food Security and Sustainability

Course Title
Food Security and Sustainability

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Ph.D. in Integrative Anthropological Sciences or M.A. in Anthropology programs or C.I.

Course Description
Global concepts of food security and sustainability including an examination of the social, economic, and environmental dimensions of how humans produce and consume food.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Occasional
ANG6467 - Advanced Topics in Medical Anthropology

Course Title
Advanced Topics in Medical Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Ph.D. in Integrative Anthropological Sciences or M.A. in Anthropology programs, or C.I.

Course Description
Examination of advanced topics in the cultural construction of health and illness.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Even Spring

ANG6474 - Science, Technology, and the Transformation of Human Societies

Course Title
Science, Technology, and the Transformation of Human Societies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Integrative Anthropological Sciences PhD, or C.I.

Course Description
Examines the ways in which scientific methods and technology are applied to social transformation within the integrative anthropological sciences.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Fall
ANG6498 - Advanced Qualitative Methods in Anthropology

**Course Title**
Advanced Qualitative Methods in Anthropology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
ANG 6801 and Admission to the Ph.D. in Integrative Anthropological Sciences Ph.D. program or C.I. Advanced qualitative methods including data collection and analysis, writing ethnographies, and research presentation.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Spring

ANG6520C - Advanced Human Osteology

**Course Title**
Advanced Human Osteology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.

**Course Description**
Advanced seminar on methods and theory pertaining to the study of the human skeleton.

**College**
College of Sciences

**Department**
Department of Anthropology

**Terms of Offering**
Occasional

**Current Fee Per Student**
$20.00
ANG6536 - Advances in Bioarchaeology

Course Title
Advances in Bioarchaeology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
ANG 6520C and Admission to the Ph.D. in Integrative Anthropological Sciences or M.A. in Anthropology programs or C.I. Advanced bioarchaeological analysis of cultural and historical processes that affect human skeletal remains.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Odd Fall

ANG6587 - Seminar in Biological Anthropology

Course Title
Seminar in Biological Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Maya Studies GC, or C.I.

Course Description
Topics in biological anthropology including focus on human biological variation and adaptation.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Occasional
ANG6701 - Public and Applied Anthropology

Course Title
Public and Applied Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.

Course Description
Explores anthropological approaches to important present-day cultural, political, economic, and environmental issues.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Fall

ANG6740C - Advanced Forensic Anthropology

Course Title
Advanced Forensic Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.

Course Description
Advanced theory and laboratory methods in forensic anthropology, including forensic skeletal analysis and interpretation.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Occasional

Current Fee Per Student
$9.10
ANG6801 - Ethnographic Research Methods
Course Title
Ethnographic Research Methods
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Anthropology MA, integrative Anthropological Sciences PhD, or C.I.
Course Description
Ethnographic research techniques and praxis: data collection and analysis, writing ethnographies, and research presentation.
College
College of Sciences
Department
Department of Anthropology
Terms of Offering
Fall

ANG6821 - Forensic Archeology Field Methods
Course Title
Forensic Archeology Field Methods
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Anthropology MA, Maya Studies GC, or C.I.
Course Description
Application of archeological techniques to the search, recovery, excavation and documentation of modern human remains.
College
College of Sciences
Department
Department of Anthropology
Terms of Offering
Occasional
Current Fee Per Student
$22.00
ANG6908 - Independent Study
Course Title
Independent Study
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Anthropology

ANG6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Anthropology

ANG6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Anthropology
ANG6930 - Seminar in Cultural Anthropology

Course Title
Seminar in Cultural Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to Anthropology MA, Integrative Anthropological Sciences PhD, or C.I.

Course Description
Theoretical foundations and contemporary issues in the study of living cultures.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring

ANG6931 - Science, Technology, and the Transformation of Human Societies

Course Title
Science, Technology, and the Transformation of Human Societies

Credits Hours
3

Prerequisites
Admission to the Ph.D. in Integrative Anthropological Sciences or M.A. in Anthropology programs or C.I.

Course Description
Scientific methods and technology as they affect social transformation within the integrative anthropological sciences.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Fall

ANG6938 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Anthropology
ANG6946 - Internship

Course Title
Internship

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Anthropology

ANG6958 - Study Abroad

Course Title
Study Abroad

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Anthropology

ANG6971 - Treatise(Thesis or Research Report)

Course Title
Treatise(Thesis or Research Report)

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Anthropology

ANG6973 - Thesis-Specialist

Course Title
Thesis-Specialist

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Anthropology

2022-2023 Graduate Catalog
ANG7075 - Advanced Anthropological Topics in Geospatial Analysis

Course Title
Advanced Anthropological Topics in Geospatial Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ANG 5852 and Admission to the Ph.D. in Integrative Anthropological Sciences program or C.I.

Course Description
Advanced application of geographic information systems methodology for the documentation and analysis of anthropological, archaeological, and forensic problems.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring

ANG7496 - Advanced Quantitative Methods in Anthropology

Course Title
Advanced Quantitative Methods in Anthropology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
ANG 5486 and Admission to the Ph.D. in Integrative Anthropological Sciences program or C.I. Advanced quantitative methods in anthropology, including multivariate systems, assessment of reliability, and approaches for small samples.

College
College of Sciences

Department
Department of Anthropology

Terms of Offering
Spring

ANT - Anthropology
ANT5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Anthropology

ANT6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Anthropology

ANT6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Anthropology

ANT6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Anthropology
**ANT6949 - Cooperative Education in Anthropology**

**Course Title**
Cooperative Education in Anthropology

**Credits Hours**
0 - 99

**College**
College of Sciences

**Department**
Department of Anthropology

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**APK - Applied Kinesiology**

**APK5907 - Independent Study**

**Course Title**
Independent Study

**Credits Hours**
0 - 99

**Lab/Studio/Field Work Hours**
0-99

**Prerequisites**
- C.I.

**Course Description**
Independent Study.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Occasional
APK5917 - Directed Research
Course Title
Directed Research
Credits Hours
0 - 99
Lab/Studio/Field Work Hours
0-99
Prerequisites
✦ C.I.
Course Description
Directed Research.
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy– Kinesiology
Terms of Offering
Occasional

APK5957 - Study Abroad
Course Title
Study Abroad
Credits Hours
0 - 99
Lab/Studio/Field Work Hours
0-99
Prerequisites
✦ C.I.
Course Description
Study Abroad.
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy– Kinesiology
Terms of Offering
Occasional
APK6102 - Functional Anatomy and Kinesiology

Course Title
Functional Anatomy and Kinesiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Kinesiology MS or PhD, or C.I.

Course Description
Overview of functional anatomy and fundamental movements from a biomechanical perspective.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional

APK6104 - Youth Physical and Athletic Development

Course Title
Youth Physical and Athletic Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or PhD or C.I.

Course Description
Concepts associated with sport and physical activity development in youth athletes, including physical literacy, talent identification, specialization, and strength and conditioning.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional
APK6107 - Cardiovascular Exercise Physiology

Course Title
Cardiovascular Exercise Physiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Kinesiology MS or PhD program or CI.

Course Description
Examination of cardiovascular function at rest and in response to acute aerobic and resistance exercise. Discussion of chronic exercise adaptations and common pathologies.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional

APK6116 - Exercise Physiology I

Course Title
Exercise Physiology I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or C.I.

Course Description
Provides an in-depth understanding of systems physiology with an emphasis on responses to various exercise intensities and modalities, and homeostatic control.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Fall
APK6118C - Neuromuscular Physiology of Human Movement

Course Title
Neuromuscular Physiology of Human Movement

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to Kinesiology MS or PhD or C.I.

Course Description
Neuromuscular adaptations as a result of training, muscle fatigue, and disease and motor control strategies associated with strength, power, and endurance.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Rehabilitation Sciences

Terms of Offering
Occasional

Current Fee Per Student
$5

APK6124 - Environmental Exercise Physiology

Course Title
Environmental Exercise Physiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or PhD or C.I.

Course Description
A critical analysis of the physiological mechanisms mediating human and athlete performance in extreme environments.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional
APK6127 - Assessment and Evaluation in Kinesiology

Course Title
Assessment and Evaluation in Kinesiology

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Complete 1 of the following
  - Admission to Kinesiology MS or PhD and APK6713
  - Admission to Kinesiology PhD or C.I.

Course Description
Techniques of assessment and evaluation of human performance and their applications to kinesiology.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Spring

Current Fee Per Student
$47.00

APK6167 - Sport Nutrition and Ergogenic Aids

Course Title
Sport Nutrition and Ergogenic Aids

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Kinesiology MS or PhD or C.I.

Course Description
Study of the use of sport nutrition and other potential ergogenic aids on the physiological processes of the body, and their influence on performance.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Occasional
APK6168 - Exercise, Nutrition and Weight Control

**Course Title**
Exercise, Nutrition and Weight Control

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Kinesiology MS program or C.I.

**Course Description**
Explores the interrelationship between nutrition, energy metabolism and exercise performance.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Occasional

APK6170 - Exercise Physiology II

**Course Title**
Exercise Physiology II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Complete all of the following
  - Admission to Kinesiology MS and APK 6116.
  - Kinesiology PhD or C.I.

**Course Description**
An in-depth study of adaptations of various physiological systems to exercise training and the effects of environmental factors on physiological systems and performance.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Spring
APK6171 - Exercise Prescription for Special Populations

Course Title
Exercise Prescription for Special Populations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or PhD or C.I.

Course Description
Designed to provide the student the basic understanding of exercise testing and prescription as it pertains to special populations.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional

APK6173C - Body Composition and Anthropometrics

Course Title
Body Composition and Anthropometrics

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to Kinesiology MS or PhD or C.I.

Course Description
Concepts and procedures associated with theoretical and applied aspects of body composition and anthropometrics, including usefulness and limitations in research, clinical, and health/fitness settings.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional
APK6176 - Program Design in Strength and Conditioning

Course Title
Program Design in Strength and Conditioning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or PhD or CI.

Course Description
An in-depth study of various types of training, including insights on developing athletes' strength, power, anaerobic conditioning, endurance, agility, and speed.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Occasional

APK6235 - Kinesiology Instrumentation

Course Title
Kinesiology Instrumentation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or PhD or CI.

Course Description
Instrumentation management and assessment protocols related to select kinesiology parameters.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Occasional
APK6407 - Peak Performance in Sports

**Course Title**
Peak Performance in Sports

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Kinesiology MS or PhD or C.I.

**Course Description**
An in-depth study of mental and physical performance, including mental rehearsal, motivation, effort, and persistence.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Occasional

APK6408 - Motivational Aspects in Athletic Performance

**Course Title**
Motivational Aspects in Athletic Performance

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Kinesiology MS or PhD or C.I.

**Course Description**
Conceptually integrate mental and physical performance, mental rehearsal, motivation, effort, persistence, adherence and compliance, measurement and evaluation, and other related topics of interest.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Occasional
APK6612 - Monitoring Training and Athletic Performance

Course Title
Monitoring Training and Athletic Performance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or PhD or CI.

Course Description
Advanced examination of the process of collecting sport performance variables and how they may improve the ability to successfully monitor athletes over a competitive season.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional

APK6703 - Statistical Methods in Kinesiology

Course Title
Statistical Methods in Kinesiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Kinesiology MS or Education PhD Exercise Physiology track or CI.

Course Description
Overview of the statistical evaluation in kinesiology: analysis of data, descriptive and inferential statistics, interpretation of results.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional
APK6713 - Research Methods in Kinesiology

Course Title
Research Methods in Kinesiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Kinesiology MS program or Education PhD-Exercise Physiology track or C.I.

Course Description
Examination of scientific inquiry and the research-based development of knowledge within the discipline of kinesiology.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall

APK6908 - Independent Study

Course Title
Independent Study

Credits Hours
0 - 99

Lab/Studio/Field Work Hours
0-99

Prerequisites
- C.I.

Course Description
Independent Study.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Occasional
APK6909 - Problem Analysis - Review of Literature

**Course Title**
Problem Analysis - Review of Literature

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to Kinesiology MS or PhD and C.I.

**Course Description**
Comprehensive review of literature related to a selected topic in kinesiology; identification, analysis, and evaluation of developments, issues, and research problems.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Every Semester

APK6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
0 - 99

**Lab/Studio/Field Work Hours**
0-99

**Prerequisites**
- C.I.

**Course Description**
Directed Research.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Occasional
APK6946 - Graduate Internship in Kinesiology

Course Title
Graduate Internship in Kinesiology

Credits Hours
0 - 6

Lab/Studio/Field Work Hours
3-6

Prerequisites
♦ C.I.

Course Description
Provides students with a field experience in a kinesiology-related organization, association, or business.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy – Kinesiology

Terms of Offering
Occasional

APK6958 - Study Abroad

Course Title
Study Abroad

Credits Hours
0 - 99

Lab/Studio/Field Work Hours
0-99

Prerequisites
♦ C.I.

Course Description
Study Abroad.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy – Kinesiology

Terms of Offering
Occasional
APK6971 - Thesis

Course Title
Thesis

Credits Hours
0 - 99

Lab/Studio/Field Work Hours
0-99

Prerequisites
- C.I.

Course Description
Thesis

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Occasional

APK7919 - Doctoral Research

Course Title
Doctoral Research

Credits Hours
0 - 99

Lab/Studio/Field Work Hours
0-99

Prerequisites
- C.I.

Course Description
Doctoral Research.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Occasional
APK7980 - Dissertation

Course Title
Dissertation

Credits Hours
0 - 99

Lab/Studio/Field Work Hours
0-99

Prerequisites
- Doctoral Candidacy and C.I.

Course Description
Dissertation.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Occasional

APK7981 - Dissertation Proposal Preparation

Course Title
Dissertation Proposal Preparation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology PhD program and C.I.

Course Description
Theoretical and practical development of dissertation project(s) and preparation for dissertation proposal prior to entering candidacy.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Summer

ARA - Arabic
ARA5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of Modern Languages and Literatures

ARA5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
Department of Modern Languages and Literatures

ARE - Art Education

ARE5251 - Art for Exceptionalities
Course Title
Art for Exceptionalities
Credits Hours
3
Lab/Studio/Field Work Hours
1
Course Description
Concepts, principles, and methods of integrating art processes into the education of the physically, emotionally, and mentally handicapped.
College
College of Community Innovation and Education
Department
School of Teacher Education
Terms of Offering
Occasional
ARE5359 - Teaching Art K-12

**Course Title**
Teaching Art K-12

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MA in Art Education, graduate standing or C.I.

**Course Description**
Transition from university art practices to public school teaching of art. Organize, design, and analyze art learning for students K-12.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer

**Current Fee Per Student**
$5.00

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ARE5454 - Studio Experiences in Art Education

**Course Title**
Studio Experiences in Art Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate admission or C.I.

**Course Description**
Materials available for instruction in public schools will be explored in depth in relation to their appropriateness and productive qualities. May be repeated for credit.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer
Spring

**Current Fee Per Student**
$10.00
ARE5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

ARE5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Teacher Education

ARE6195 - Teaching Art Appreciation with Interdisciplinary Strategies
Course Title
Teaching Art Appreciation with Interdisciplinary Strategies
Credits Hours
3
Lab/Studio/Field Work Hours
1
Prerequisites
- Graduate status and public school teaching experience.
Course Description
Focuses on the examination of art appreciation examples and concepts toward planning curriculum (interdisciplinary for the study of art history, criticism, and aesthetics).
College
College of Community Innovation and Education
Department
School of Teacher Education
Terms of Offering
Fall
Current Fee Per Student
$5.00

2022-2023 Graduate Catalog
ARE6450 - K-12 Instructional Materials

Course Title
K-12 Instructional Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
A historical examination of art education curriculum along with developing learning experiences and visual resources (slides, transparencies, technology) from art works, and documentation.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional

ARE6666 - Arts Advocacy

Course Title
Arts Advocacy

Credits Hours
3

Lab/Studio/Field Work Hours
1

Course Description
Graduate Standing or C.I. The study and development of plans to produce arts advocacy programs for the public school system.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional

Current Fee Per Student
$5.00
ARE6748 - Advanced Research Seminar in Art Education

Course Title
Advanced Research Seminar in Art Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examines the nature of past and present research in art education, various methods of conducting art education research, and how research can translate into practical classroom application. May be used in the program a maximum of 2 times only when course content is different. May be used in the degree program a maximum of 2 times only when course content is different.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Odd Fall
Odd Spring

ARE6905 - Research Trends in Art Education

Course Title
Research Trends in Art Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
This course will further prepare art education graduate students to identify and review landmark research and conduct relevant art education research. May be repeated for credit.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
ARE6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

ARE6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

ARE6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Teacher Education

ARH - Art History
ARH5897 - Advanced Seminar in Art History

Course Title
Advanced Seminar in Art History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ARH 2050 and ARH 2051 or C.I.

Course Description
Research methods on various topics including: major artist, monument, cultural period or theme.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Occasional

ARH5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Visual Arts and Design
ARH5933 - Seminar in African & African-American Arts

Course Title
Seminar in African & African-American Arts

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Traces African American history through visual and public art and explores how race relations in the United States were reflected in artistic forms.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Occasional

ARH5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Visual Arts and Design

ARH6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Visual Arts and Design
ARH6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Visual Arts and Design

ARH6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Visual Arts and Design

ART - Art

ART5280 - Serial Content
Course Title
Serial Content
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Emerging Media MFA or Digital Media M.A., Graduate Standing, or C.I.
Course Description
Sequential design, production methods and materials in visual arts.
College
College of Arts and Humanities
Department
School of Visual Arts and Design
Terms of Offering
Occasional
Current Fee Per Student
$45.00
ART5284 - Design Theory and Methods

**Course Title**
Design Theory and Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Emerging Media MFA or C.I.

**Course Description**
Introduction to semiotic theory, communication theory, perceptual codes, human factors and visual rhetoric.

**College**
College of Arts and Humanities

**Department**
School of Visual Arts and Design

**Terms of Offering**
Occasional

**Current Fee Per Student**
$45.00

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ART5390C - Advanced Drawing

**Course Title**
Advanced Drawing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
4

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Students are expected to develop an individual series of works that demonstrate advanced drawing concepts and techniques.

**College**
College of Arts and Humanities

**Department**
School of Visual Arts and Design

**Terms of Offering**
Occasional
ART5410C - Advanced Printmaking

**Course Title**
Advanced Printmaking

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
4

**Prerequisites**
- Admission to Emerging Media MFA, Studio Art track.

**Course Description**
Advanced problems in printmaking, including graduate level production, presentation, and evaluation criteria.

**College**
College of Arts and Humanities

**Department**
School of Visual Arts and Design

**Terms of Offering**
- Spring
- Fall

ART5585C - Advanced Painting

**Course Title**
Advanced Painting

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
4

**Prerequisites**
- Admission to Emerging Media MFA, Studio Art track.

**Course Description**
Advanced problems in sculpture, including graduate level production, research, presentation, and evaluation criteria.

**College**
College of Arts and Humanities

**Department**
School of Visual Arts and Design

**Terms of Offering**
- Spring
- Fall
**ART5696 - Art, Design and Human Interactions**

**Course Title**
Art, Design and Human Interactions

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Emerging Media MFA or C.I.

**Course Description**
Exploration and design of interface interactions systems and technologies in contemporary society and culture including place making, way finding, electronic interface design, and publication design.

**College**
College of Arts and Humanities

**Department**
School of Visual Arts and Design

**Terms of Offering**
Occasional

**ART5698 - Concourse I**

**Course Title**
Concourse I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ART 5910 and ART 5280 and ART 5694, or C.I.

**Course Description**
Digital reproduction of studio works.

**College**
College of Arts and Humanities

**Department**
School of Visual Arts and Design

**Terms of Offering**
Fall

**Current Fee Per Student**
$45.00
ART5745C - Advanced Sculpture

Course Title
Advanced Sculpture

Credits Hours
3

Lab/Studio/Field Work Hours
4

Prerequisites
• Admission to Emerging Media MFA, Studio Art Track.

Course Description
Advanced problems in sculpture, including graduate level production, research, presentation, and evaluation criteria.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Spring
Fall

ART5796C - Advanced Ceramics

Course Title
Advanced Ceramics

Credits Hours
3

Lab/Studio/Field Work Hours
4

Prerequisites
• Emerging Media: Studio Art & Design or C.I.

Course Description
Students respond to Chinese, Korean, Japanese, Middle Eastern, European, and American ceramics; clay properties, test tile manufacture, terminology, design, demonstrations, glazing, and firing procedures.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Occasional
ART5811 - The Professional Practice of Art

Course Title
The Professional Practice of Art

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Seminar class overview includes: digital documentation, inventory processing, accounting, art marketing, proposal writing, internships/residencies, art theory/criticism, and may include attending arts events, etc.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
- Fall

Current Fee Per Student
$45.00

ART5910 - Studio Concentration I

Course Title
Studio Concentration I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MFA. Course is the primary for production of work in studio.

Course Description
Students will meet periodically with faculty to discuss progress. Professor will meet with the whole class periodically in order to facilitate a group critique of work completed. May be used in the degree program a maximum of 3 times.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
- Spring
- Fall

Current Fee Per Student
$45.00
ART5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Visual Arts and Design

ART5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Visual Arts and Design

ART5941 - Graduate Practicum I
Course Title
Graduate Practicum I
Credits Hours
1
Lab/Studio/Field Work Hours
0
Prerequisites
- Web Art I, graduate status, or C.I.
Course Description
Candidates with cross-disciplinary interests will discuss and analyze issues in digital art making via the internet. Students will use this information to develop projects in their specialization.
College
College of Arts and Humanities
Department
School of Visual Arts and Design
Terms of Offering
Occasional
ART6683 - Time Arts

Course Title
Time Arts

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Emerging Media MFA program or C.I.

Course Description
Explore established and experimental approaches to the visual representation of movement, space, and time.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Occasional

ART6687 - Research Concentration

Course Title
Research Concentration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ART 6911 or C.I.

Course Description
Advanced visual arts production course designed to assist students in conducting research, selecting committee members and refining a unique style or unified theme. Studio/critique model.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Spring
ART6689 - Research Concentration II

Course Title
Research Concentration II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ART 6687

Course Description
Continuation of Research Concentration I. Produce an interactive body of art work under a unified theme.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Occasional

ART6699 - Concourse II

Course Title
Concourse II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ART 5698. Continuation of Concourse I.

Course Description
Digital work used to create group web exhibit and interactive portfolio.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Occasional
ART6743C - Intermedia Design

Course Title
Intermedia Design

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Admission to Emerging Media MFA or C.I.

Course Description
Enhancing material sense and repertoire regarding material selection, combination, and contextualization in static and dynamic projects. Design integration and enhanced structural awareness via media emphasized.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Occasional

Current Fee Per Student
$35.00

ART6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Visual Arts and Design
ART6911C - Studio Concentration

Course Title

Studio Concentration

Credits Hours

3

Lab/Studio/Field Work Hours

2

Prerequisites

- Admission to Emerging Media MFA or C.I.

Course Description

Over this repeatable four-course sequence, students will create individually driven studio work that evolves in materials, depth, scope, and content by building upon prior efforts.

College

College of Arts and Humanities

Department

School of Visual Arts and Design

Terms of Offering

Spring

Fall

Current Fee Per Student

$45.00

ART6918 - Directed Research

Course Title

Directed Research

Credits Hours

1 - 99

College

College of Arts and Humanities

Department

School of Visual Arts and Design
ART6930 - Graduate Seminar

Course Title
Graduate Seminar

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Emerging Media MFA, graduate standing or C.I

Course Description
Interactive discussions centered on art, aesthetics, culture, technology, and/or industry. May include select readings, writing assignments, instructor/guest lectures, and/or participating in arts events.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Spring
Fall

ART6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Visual Arts and Design
ART6942 - Graduate Practicum II

Course Title
Graduate Practicum II

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Web Art I, Graduate Practicum I.

Course Description
Candidates with cross-disciplinary interests will discuss and analyze digital art making via the internet. Students will apply principals from Practicum I and Internet projects.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Spring

ART6949 - Cooperative Education in Art

Course Title
Cooperative Education in Art

Credits Hours
0 - 99

College
College of Arts and Humanities

Department
School of Visual Arts and Design

ASH - Asian History
ASH5229 - History of the Middle East

Course Title
History of the Middle East

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Selected topics in the history of the modern Middle East. May be used in the degree program a maximum of 2 times only when course content is different.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

ASH5408 - Colloquium in Modern China

Course Title
Colloquium in Modern China

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate status or senior standing or C.I. Course explores works of scholarship in modern China including the rise of Communism, Chinese women and Sino-American relations.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional
ASH5485 - U.S. China Relations

Course Title
U.S. China Relations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
An in-depth study of the significant relations between China and the United States since the 18th century.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Even Fall

ASH5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of History
ASH5925 - Colloquium in South Asian History

Course Title
Colloquium in South Asian History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Addresses key themes in South Asian history through selected readings. Repeatable when content is different.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

ASH5926 - Colloquium in East Asian History

Course Title
Colloquium in East Asian History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Colloquium in historiography of East Asia. Examines how historians have interpreted the history of China, Japan, and Korea, from the nineteenth century to the 1960s.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional
ASH5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
Department of History

ASH6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of History

ASH6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of History
ASH6936 - Seminar in US-China Relations

**Course Title**
Seminar in US-China Relations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Historiographical interrogations of the intricate relations between the United States and China from 1900 to the present.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

ASH6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
Department of History
**ASH6939 - Seminar in Asian History**

**Course Title**
Seminar in Asian History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ASH 5926, or ASH 5925, or C.I.

**Course Description**
Students learn the elements of historical research and writing that go into producing an original research paper in Asian history.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

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**AST - Astronomy**

**AST5038 - Astrobiology**

**Course Title**
Astrobiology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing, or C.I.

**Course Description**
Discusses the history of the Solar System, the origin of life on Earth, and how and where to search for life elsewhere.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Fall
AST5145 - Advanced Asteroids, Comets, and Meteorites

**Course Title**
Advanced Asteroids, Comets, and Meteorites

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
An advanced study of physical, chemical, mineralogical and orbital characteristics of Asteroids, Comets and Meteorites, with an emphasis on the origin of our solar system.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Odd Spring

AST5151 - Physics of Planetary Processes

**Course Title**
Physics of Planetary Processes

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing. Undergraduates may take the course with approval.

**Course Description**
Core course for planetary track students. Provides an overview of the physical basis of molecular spectroscopy, radiative transfer basics, thermodynamics and condensed matter physics from the perspective of planetary science.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Spring
**AST5154 - Advanced Planetary Geophysics**

**Course Title**
Advanced Planetary Geophysics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Physics MS or PhD or C.I.

**Course Description**
The physics of planetary evolution, planetary interiors, and planetary surface processes.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Even Fall

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**AST5263 - Advanced Observational Astronomy**

**Course Title**
Advanced Observational Astronomy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in the Physics department or C.I.

**Course Description**
Experimental design and experimental techniques in astrophysics; spherical astronomy; physics of telescopes and of common astronomical detectors; error analysis.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Even Spring
AST5334 - Extrasolar Planets and Brown Dwarfs

Course Title
Extrasolar Planets and Brown Dwarfs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Physics M.S. or Physics Ph.D., or C.I.

Course Description
Substellar-mass objects, their formation, evolution, dynamics, detection, and environments.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Odd Spring

AST5765C - Advanced Astronomical Data Analysis

Course Title
Advanced Astronomical Data Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- MAC 2313, a 3000-level or higher course in astronomy or planetary science, ability to write simple computer programs, or C.I.

Course Description
Advanced astronomical data formation and acquisition, detector physics, measurement extraction, error analysis, modeling, computer programming, statistics, interpretation, and written and oral presentation of results.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Fall
AST5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Physics

AST5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Physics

AST5949 - Cooperative Education
Course Title
Cooperative Education
Credits Hours
0 - 99
College
College of Sciences
Department
Department of Physics
AST6112 - Origin and Evolution of Planetary Systems

Course Title
Origin and Evolution of Planetary Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Physics or C.I.

Course Description
Observations and properties of extrasolar planets and circumstellar disks through physics of disk evolution and planet formation and dynamical evolution of planetary systems.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Odd Spring

AST6156 - Current Topics in Planetary Sciences

Course Title
Current Topics in Planetary Sciences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Planetary Sciences M.S./Ph.D. or C.I.

Course Description
Review and analyze current advances in planetary science, particularly science results from recent discoveries. The focus of the course will vary depending on current discoveries. May be used in the degree program a maximum of 3 times.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional
AST6165 - Planetary Atmospheres

Course Title

Planetary Atmospheres

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- AST 5151 Physics of Planetary Processes, PHY 6246 Classical Mechanics, graduate status or senior standing, or C.I.

Course Description

This course examines the physical and chemical processes that govern the atmospheres of Earth and other planets.

College

College of Sciences

Department

Department of Physics

Terms of Offering

Spring

AST6909 - Research Report

Course Title

Research Report

Credits Hours

1 - 99

College

College of Sciences

Department

Department of Physics

AST6918 - Directed Research

Course Title

Directed Research

Credits Hours

1 - 99

College

College of Sciences

Department

Department of Physics
**AST7919 - Doctoral Research**

**Course Title**
Doctoral Research

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Prerequisites**
- Doctoral standing.

**Course Description**
Doctoral research. May be repeated for credit.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Every Semester

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**AST7980 - Doctoral Dissertation**

**Course Title**
Doctoral Dissertation

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Prerequisites**
- Candidacy status.

**Course Description**
Doctoral dissertation. May be repeated for credit.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Every Semester

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**ATR - Athletic Training**
ATR5016 - Foundational Behaviors of Athletic Training Practice I

Course Title
Foundational Behaviors of Athletic Training Practice I

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MAT degree program.

Course Description
The roles responsibilities of an athletic trainer in the evolving healthcare system; including professionalism, information fluency, and healthcare ethics, laws and regulations.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Summer

ATR5017 - Foundational Behaviors of Athletic Training Practice II

Course Title
Foundational Behaviors of Athletic Training Practice II

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MAT degree program.

Course Description
The roles responsibilities of an athletic trainer in the evolving healthcare system, including patient-centered care, collaborative care, and the influence of culture and other social determinants of health on healthcare.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall
ATR5106C - Prevention of Injury and Illness in Athletic Training Practice

**Course Title**
Prevention of Injury and Illness in Athletic Training Practice

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admitted to MATHT

**Course Description**
Physiological, psychological, and sociological aspects of health/wellness and the prevention of injury and illness; includes physical fitness, nutrition/hydration, flexibility and prophylactic taping/bracing.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy- Athletic Training

**Terms of Offering**
Summer

**Current Fee Per Student**
$70.00

ATR5117C - Acute Care in Athletic Training Practice I

**Course Title**
Acute Care in Athletic Training Practice I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to MAT degree program.

**Course Description**
Emergency preparedness including the evaluation and management of acute injuries and illnesses.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy- Athletic Training

**Terms of Offering**
Summer

**Current Fee Per Student**
$68.00
ATR5206C - Functional Human Anatomy for Athletic Trainers

**Course Title**
Functional Human Anatomy for Athletic Trainers

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to MAT degree program.

**Course Description**
Anatomical knowledge and clinical skills essential to the practice of athletic training; including knowledge of functional anatomy, manual muscle testing, and goniometry.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Athletic Training

**Terms of Offering**
Summer

**Current Fee Per Student**
$10.00

ATR5217C - Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice II

**Course Title**
Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- ATR 5219C.

**Course Description**
A regional study of evaluation, diagnosis, and immediate treatment of lower extremity injuries.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Athletic Training

**Terms of Offering**
Spring

**Current Fee Per Student**
$3
ATR5219C - Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice I

Course Title
Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice I

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
Admission to MAT degree program.

Course Description
A regional study of evaluation, diagnosis, and immediate treatment of head, neck, and spine injuries (including brain injuries).

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Athletic Training

Terms of Offering
Fall

Current Fee Per Student
$3

ATR5306C - Therapeutic Interventions in Athletic Training Practice I

Course Title
Therapeutic Interventions in Athletic Training Practice I

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
Admission to MAT degree program.

Course Description
Therapeutic interventions for head, neck, and spine musculoskeletal dysfunction (including brain injury).

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Athletic Training

Terms of Offering
Fall

Current Fee Per Student
$5.00
ATR5307C - Therapeutic Interventions in Athletic Training Practice II

**Course Title**
Therapeutic Interventions in Athletic Training Practice II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- ATR 5306C.

**Course Description**
Therapeutic interventions for lower extremity musculoskeletal dysfunction.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Athletic Training

**Terms of Offering**
Spring

**Current Fee Per Student**
$19.00

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ATR5406C - General Medical Conditions in Athletic Training Practice I

**Course Title**
General Medical Conditions in Athletic Training Practice I

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Enrolled MAT degree program.

**Course Description**
Clinical skills essential to the practice of athletic training. Clinical skills include the evaluation, recognition, treatment, and referral of general medical conditions/illnesses.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Athletic Training

**Terms of Offering**
Fall

**Current Fee Per Student**
$3.00
ATR5516 - Healthcare Administration in Athletic Training Practice I

**Course Title**
Healthcare Administration in Athletic Training Practice I

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MAT degree program.

**Course Description**
Policy, law, ethics, informatics and information management are explored with regard to the practice of athletic training.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Spring

ATR5617 - Athletic Training Research I

**Course Title**
Athletic Training Research I

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MAT degree program.

**Course Description**
Evidence-based practice as well as research methods, ethics and regulations in an effort to identify a meaningful question and concept for a capstone project.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Fall
**ATR5815L - Practicum in Athletic Training I**

**Course Title**
Practicum in Athletic Training I

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
10

**Prerequisites**
- ATR 5117C.

**Course Description**
Develop knowledge, skills, and attitudes by providing direct care of athletic injuries. Students are supervised by an assigned Preceptor.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Fall

**ATR5825L - Practicum in Athletic Training II**

**Course Title**
Practicum in Athletic Training II

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
10

**Prerequisites**
- ATR 5815L.

**Course Description**
Develop knowledge, skills, and attitudes by providing direct care of athletic injuries. Students are supervised by an assigned Preceptor.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Spring
ATR6118L - Acute Care in Athletic Training Practice II

**Course Title**
Acute Care in Athletic Training Practice II

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Complete the following:
  - ATR5117C - Acute Care in Athletic Training Practice I (3)

**Course Description**
Review, update and practice emergency preparedness and the evaluation and management of acute conditions. This course will be entirely scenario based.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Athletic Training

**Terms of Offering**
Spring

**Current Fee Per Student**
$66.00

ATR6218C - Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice III

**Course Title**
Musculoskeletal Evaluation and Diagnosis in Athletic Training Practice III

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- ATR 5217C.

**Course Description**
A regional study of evaluation, diagnosis, and immediate treatment of upper extremity injuries.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Athletic Training

**Terms of Offering**
Summer

**Current Fee Per Student**
$3.00

2022-2023 Graduate Catalog
ATR6308C - Therapeutic Interventions in Athletic Training Practice III

**Course Title**
Therapeutic Interventions in Athletic Training Practice III

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- ATR 5307C.

**Course Description**
Therapeutic interventions for upper extremity musculoskeletal dysfunction.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Athletic Training

**Terms of Offering**
Summer

**Current Fee Per Student**
$28.00

ATR6309C - Therapeutic Interventions in Athletic Training Practice IV

**Course Title**
Therapeutic Interventions in Athletic Training Practice IV

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- ATR 6308C.

**Corequisites**
- ATR 6845L.

**Course Description**
Psychological aspects of rehabilitation and performance are explored. Rehabilitation protocols and evidence-based practices are employed in the context of actual patient care.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Fall
ATR6407C - General Medical Conditions in Athletic Training Practice II

Course Title
General Medical Conditions in Athletic Training Practice II

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- ATR 5406C. General Medical Conditions in Athletic Training Practice I.

Course Description
Clinical skills essential to the practice of athletic training. Clinical skills include the evaluation, recognition, treatment, and referral of general medical conditions/illnesses.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Athletic Training

Terms of Offering
Spring

Current Fee Per Student
$9.00

ATR6505 - Athletic Training Seminar

Course Title
Athletic Training Seminar

Credits Hours
1

Lab/Studio/Field Work Hours
0

Corequisites
- Athletic Training Practicum V (ATR 6855L).

Course Description
Prepare for the BOC examination, review the Standards of Professional Practice, NATA Code of Ethics, and professional development requirements for the entry-level athletic trainer.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Spring
ATR6517 - Healthcare Administration in Athletic Training Practice II

**Course Title**
Healthcare Administration in Athletic Training Practice II

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ATR 5516

**Course Description**
Reimbursement, organizational administration/planning, risk mitigation/management, and emergency preparedness are explored with regard to the practice of athletic training.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Spring

ATR6618C - Athletic Training Research II

**Course Title**
Athletic Training Research II

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- ATR 5617

**Course Description**
Capstone groups will meet regularly, with guidance from a capstone adviser, to create a proposal for a capstone project.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Summer
ATR6619C - Athletic Training Research III

**Course Title**
Athletic Training Research III

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- ATR 6618C

**Course Description**
This course requires the student to complete a group capstone project and disseminate the information as a scholarly product (oral or poster presentation).

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Spring

ATR6835L - Practicum in Athletic Training III

**Course Title**
Practicum in Athletic Training III

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- ATR 5825L

**Course Description**
Develop knowledge, skills, and attitudes by providing direct care of athletic injuries. Focus is on non-sport population, general medical conditions and/or surgical observation.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Summer
ATR6845L - Practicum in Athletic Training IV

**Course Title**
Practicum in Athletic Training IV

**Credits Hours**
9

**Lab/Studio/Field Work Hours**
30

**Prerequisites**
- ATR 6835L

**Course Description**
Develop knowledge, skills, and attitudes by providing direct care of athletic injuries. Focus is on a fully immersed athletic training experience.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Fall

ATR6855L - Practicum in Athletic Training V

**Course Title**
Practicum in Athletic Training V

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
20

**Prerequisites**
- ATR 6845L

**Course Description**
Develop knowledge, skills, and attitudes by providing direct care of athletic injuries. Students are supervised by an assigned Preceptor.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Spring
ATR6917 - Directed Research

Course Title
Directed Research

Credits Hours
0 - 99

Lab/Studio/Field Work Hours
0-99

Course Description
This course is designed to enable the graduate student to engage in a research experience in the Athletic Training Laboratory throughout the semester.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Occasional

ATR6941 - Optional Internship

Course Title
Optional Internship

Credits Hours
0 - 4

Lab/Studio/Field Work Hours
0-4

Prerequisites
- ATR 5117C.

Course Description
Develop knowledge, skills, and attitudes by providing direct care of athletic injuries; to understand the medical delivery system in a variety of settings.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Occasional
ATR6957 - Study Abroad

**Course Title**
Study Abroad

**Credits Hours**
0 - 99

**Lab/Studio/Field Work Hours**
0-99

**Course Description**
Course allows a study abroad experience in the field of athletic training or sports medicine.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Occasional

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**AVM - Aviation Management**

**AVM5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management

**AVM5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management

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**BCH - Biochemistry**
BCH5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Chemistry

BCH5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Chemistry

BCH6740 - Advanced Biochemistry
Course Title
Advanced Biochemistry
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
• Must meet proficiency requirement as determined by the Chemistry department or C.I.
Course Description
Biochemistry focusing on enzymology, regulation of the activity of enzymes and cellular chemical activity, and biochemical methods to study proteins.
College
College of Sciences
Department
Department of Chemistry
Terms of Offering
Occasional

BME - Biomedical Engineering
BME5140 - Materials Science of Instrumentation for Clinical Applications

Course Title
Materials Science of Instrumentation for Clinical Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
General graduate standing in Engineering, Biomedical Science, Biotechnology, Chemistry or related disciplines or C.I. Study of engineering and materials concepts behind the clinical diagnostics currently used and under development, as well as technologies utilized in fabrication and characterization of these devices.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Odd Fall

BME5216C - Mechanics of Biostructures I

Course Title
Mechanics of Biostructures I

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Graduate standing or C.I.

Course Description
Part I of a two semester course. Mechanical analysis of hard and soft tissues and prosection lab on human anatomy and physiology.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Fall
BME5217C - Mechanics of Biostructures II
Course Title
Mechanics of Biostructures II
Credits Hours
3
Lab/Studio/Field Work Hours
1
Prerequisites
- 5216C or C.I.
Course Description
Part II of a two semester course. Cell physiology and engineering principles applied to analysis of cellular processes and prosection anatomy lab on human anatomy and physiology.
College
College of Engineering and Computer Science
Department
Department of Mechanical and Aerospace Engineering
Terms of Offering
Spring

BME5267 - Biofluid Mechanics
Course Title
Biofluid Mechanics
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- EML 3701 and EGM 3601 or C.I.
Course Description
This course will cover the physical and mathematical principals of fluid mechanics and its application and relevance to human physiology and pathology.
College
College of Engineering and Computer Science
Department
Department of Mechanical and Aerospace Engineering
Terms of Offering
Fall
BME5572 - Biomedical Nanotechnology

Course Title

Biomedical Nanotechnology

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- EEL 3123C with a "C" (2.0) or better grade.

Course Description

Human Physiology, Bioelectric Phenomena and Neurons, Nanoelectronics for fabrication of biochips for human biomedical applications, self-assembly, bioelectronics, moral and ethical issues.

College

College of Engineering and Computer Science

Department


Terms of Offering

Spring

BME5742C - Modeling Techniques and Methodologies in Bioengineering

Course Title

Modeling Techniques and Methodologies in Bioengineering

Credits Hours

3

Lab/Studio/Field Work Hours

1

Prerequisites

- EGN 3034, PHY 2048C, or C.I.

Course Description

Model identification and simulation implementation for physiological systems (e.g., cardiovascular, respiratory, neural, and muscular systems)

College

College of Engineering and Computer Science

Department

Department of Mechanical and Aerospace Engineering

Terms of Offering

Fall

2022-2023 Graduate Catalog
BME6215 - Advanced Biomechanics

Course Title
Advanced Biomechanics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- BME 5216C or C.I.

Course Description
The objectives of this course are to understand the basic concepts and biomedical applications of medical robotics, human motion mechanics and neuro-mechanics.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring

BME6231 - Continuum Biomechanics

Course Title
Continuum Biomechanics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGM 3601.

Course Description
Material laws for biological tissues, with / without microstructure and/or an incompressibility constraint. Models of damage, growth, remodeling, and electro-mechanical coupling. Introduction to multiscale modeling.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring
BME6268C - Applied and Computational Biofluids

Course Title
Applied and Computational Biofluids

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- EML 3701, EGM 3601, BME 5267, or C.I.

Course Description
Principles and foundations of applied fluid mechanics and computational methods to the human circulation.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring

BME6500C - Bioinstrumentation

Course Title
Bioinstrumentation

Credits Hours
3

Lab/Studio/Field Work Hours
2

Course Description
An introduction to the fundamental theory and experimental techniques needed for performing bioengineering measurements, designing related experiments, and analyzing experimental results.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Fall
BME6525 - Methods in Neural-Machine Interfaces

**Course Title**
Methods in Neural-Machine Interfaces

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- PHY 2048C and EML 4225, or C.I.

**Course Description**
Signal processing techniques for interpreting human intention from electromyography (EMG) and Electroencephalography (EEG) signals and human-safe control algorithms will be discussed and practiced.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Spring

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BME6908 - Independent Study

**Course Title**
Independent Study

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Independent study on a topic taken to supplement current coursework.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional
BME6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Student research under the direction of a BME faculty member.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

BME6935 - Topics in Biomedical Engineering

Course Title
Topics in Biomedical Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 3701 and EGM 3601 and graduate standing or C.I.

Course Description
In this course students will explore research topics in biomedical engineering (BME) guided by BME faculty. This team-taught course will involve seminars and presentations of research and case studies by faculty engaged in BME research as well as regional medical professionals.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Fall
BME6938 - ST: Continuum Biomechanics

**Course Title**
ST: Continuum Biomechanics

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EGM 3601 and EML 5237.

**Course Description**
Material laws for biological tissues, with / without microstructure and/or an incompressibility constraint. Models of damage, growth, remodeling, and electro-mechanical coupling. Introduction to multiscale modeling.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

BME6971 - Thesis

**Course Title**
Thesis

**Credits Hours**
0 - 99

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing. Thesis course for students in Biomedical Engineering program.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional

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**BMS - Basic Medical Sciences**
BMS6001 - Cellular Function and Medical Genetics

Course Title
Cellular Function and Medical Genetics

Credits Hours
5

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation in the College of Medicine M.D. Program.

Course Description
Cellular Function and Medical Genetics is an integrated, multidisciplinary, review of the basic sciences of biochemistry, molecular biology; genetic, nutrition, pharmacology and cell biology underpinning modern medicine.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Fall

BMS6002 - Structure and Function

Course Title
Structure and Function

Credits Hours
11

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation in the College of Medicine M.D. program.

Course Description
An integrated module with a curriculum that includes Clinical Anatomy, Embryology, Microanatomy, Physiology, and Neurosciences using medical imaging, clinical presentations, lectures, small-group sessions, team-based learning sessions.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall

2022-2023 Graduate Catalog
BMS6006 - Health and Disease

Course Title
Health and Disease

Credits Hours
5

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation in the College of Medicine M.D. program.

Course Description
Eight week module of the first year basic-science curriculum that integrates the following disciplines: immunology, microbiology, virology, pharmacology, and pathology.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring

BMS6015 - Practice of Medicine I

Course Title
Practice of Medicine I

Credits Hours
7

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation in the College of Medicine M.D. program.

Course Description
Extending throughout the first year of medical school, this module includes skills training in medical interviewing and physical examination while also addressing the context of the medical practice.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall
BMS6016 - Practice of Medicine II

Course Title
Practice of Medicine II

Credits Hours
8

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M-1 Term.

Course Description
P-2: Practice of Medicine is a year long module which teaches advanced clinical examination techniques and clinical reasoning skills integrated with organ systems modules.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall

BMS6050 - Psychosocial Issues in Healthcare

Course Title
Psychosocial Issues in Healthcare

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation in the College of Medicine M.D. program. This module covers the role of psychosocial factors in health and illness, emphasizing communication skills, cultural differences, human sexuality, domestic violence, and alcohol misuse.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
BMS6123 - Human Anatomy and Embryology

Course Title
Human Anatomy and Embryology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Matriculation into the M.S. Genetic Counseling Program. An overview of the human body structure and development through lecture, group discussions, problem-solving, self-learning modules, team based learning, and clinical case studies.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Fall

BMS6631 - Hematology and Oncology

Course Title
Hematology and Oncology

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation in the College of Medicine M.D. Program.

Course Description
Overview of major hematologic diseases: coagulation, and basic neoplasia. Pathology, pharmacology, laboratory and clinical medicine disciplines, emphasizing disease classification, differential diagnosis, and current treatments.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
BMS6632 - Endocrine and Reproductive Systems

**Course Title**
Endocrine and Reproductive Systems

**Credits Hours**
5

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M-1 Term.

**Course Description**
The S-2 module is an integrated overview of diseases of the endocrine, reproductive, and genital systems. Pathology, pathophysiology, pharmacology, and clinical medicine disciplines are included.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Fall

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BMS6633 - Cardiovascular and Pulmonary Systems

**Course Title**
Cardiovascular and Pulmonary Systems

**Credits Hours**
5

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M-1 Term.

**Course Description**
The Cardio/Pulmonary module is an integrated, multidisciplinary, overview of medically-relevant cardiovascular and pulmonary conditions.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Fall
BMS6634 - Gastrointestinal and Renal Systems

Course Title
Gastrointestinal and Renal Systems

Credits Hours
5

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M-1 Term.

Course Description
The module is one of six organ-system based modules scheduled for the M2 and end of M1 years. The module provides overview of diseases of the gastro and renal systems.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Fall

BMS6635 - Skin and Musculoskeletal Systems

Course Title
Skin and Musculoskeletal Systems

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M-1 Term.

Course Description
The module is an integrated overview of diseases and disorders affecting the skin, connective tissues, and musculoskeletal systems.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall
BMS6636 - Brain and Behavior

Course Title
Brain and Behavior

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M-1 Term.

Course Description
This module integrates foundational principles of basic clinical neuroscience relevant for understanding normal nervous system function and the pathophysiologic basis of nervous system disorders.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring

BMS6760 - Introduction to Genetic Counseling 1

Course Title
Introduction to Genetic Counseling 1

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation into the M.S. Genetic Counseling Program.

Course Description
An introduction of the basic principles of genetic counseling.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Fall
BMS6761 - Introduction to Genetic Counseling 2

**Course Title**
Introduction to Genetic Counseling 2

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Matriculation into the M.S. Genetic Counseling Program.

**Course Description**
This course is a continuation of the basic principles of Genetic Counseling.

**College**
College of Medicine

**Department**
Clinical Sciences

**Terms of Offering**
Spring

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BMS6762 - Advanced Genetic Counseling 1

**Course Title**
Advanced Genetic Counseling 1

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Matriculation into the M.S. Genetic Counseling Program.

**Course Description**
An overview of the advanced principles of genetic counseling; understanding the importance of pedigree, how to build a rapport with patients, and prepare for interactions with clients.

**College**
College of Medicine

**Department**
Clinical Sciences

**Terms of Offering**
Fall
**BMS6763 - Advanced Genetic Counseling 2**

**Course Title**
Advanced Genetic Counseling 2

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Matriculation into M.S. Genetic Counseling Program.

**Course Description**
Overview to continue the advanced principles of genetic counseling 2; the history of genetic counseling, the professional organizations, practice guidelines, and code of ethics.

**College**
College of Medicine

**Department**
Clinical Sciences

**Terms of Offering**
Spring

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**BMS6764 - Medical Biochemistry and Physiology For Genetic Counselors**

**Course Title**
Medical Biochemistry and Physiology For Genetic Counselors

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Matriculation into the M.S. Genetic Counseling Program.

**Course Description**
An overview of the fundamentals of medical biochemistry and physiology for genetic counselors.

**College**
College of Medicine

**Department**
Clinical Sciences

**Terms of Offering**
Spring
BMS6765 - Genetic Diseases of Human Organ Systems

Course Title
Genetic Diseases of Human Organ Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation into the M.S. Genetic Counseling Program.

Course Description
The Genetic Diseases of Human Organ Systems course provides an overview of genetic disease affecting the human organ systems through lecture, group discussions and problem solving, self-learning modules, team based learning, and clinical case studies.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Spring

BMS6766 - Inborn Errors of Metabolism

Course Title
Inborn Errors of Metabolism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation into the M.S. Genetic Counseling Program.

Course Description
Overview of the fundamentals of genetic diseases associated with inborn errors of metabolism.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Summer
BMS6767 - Molecular Diagnostics

Course Title
Molecular Diagnostics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Matriculation into the M.S. Genetic Counseling Program.

Course Description
An overview of basic laboratory skills used in molecular genetic clinical diagnostic laboratories for detecting genetic diseases.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Fall

BMS6821 - Healthcare Ethics

Course Title
Healthcare Ethics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Matriculation into the M.S. Genetic Counseling Program.

Course Description
An overview on the ethical issues in healthcare, and also discuss influences on ethical decisions made by healthcare providers and patients.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Fall
BMS6902 - Journal Club

Course Title
Journal Club

Credits Hours
1

Lab/Studio/Field Work Hours
0

Course Description
Matriculation into the M.S. Genetic Counseling Program. Students will review and discuss current literature relating to the practice of genetic counseling.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Spring
Fall

BMS6910 - Focused Inquiry and Research Experience

Course Title
Focused Inquiry and Research Experience

Credits Hours
5

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation in the College of Medicine M.D. program.

Course Description
This course provides the training and mentorship enabling medical students to successfully complete rigorous, independent, scholarly research projects in fields of individual passion.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall

2022-2023 Graduate Catalog
BMS6911 - Focused Inquiry and Research Experience II

Course Title
Focused Inquiry and Research Experience II

Credits Hours
5

Lab/Studio/Field Work Hours
0

Prerequisites
- Focused Inquiry and Research Experience I (BMS 6910).

Course Description
This course provides the training and mentorship enabling medical students to successfully complete rigorous, independent, scholarly research projects in fields of individual passion.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall

BMS6950 - Capstone 1

Course Title
Capstone 1

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation into the M.S. Genetic Counseling Program.

Course Description
Students will identify a Capstone case and prepare a summary of all clinical presentation, diagnostic testing, and management considerations.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Summer
BMS6951 - Capstone 2

Course Title
Capstone 2

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Matriculation into the M.S. Genetic Counseling Program. Students will have a Capstone case for presentation; diagnostic testing and management considerations for a Capstone case.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Spring

BOT - Botany

BOT5285L - Plant Microtechniques

Course Title
Plant Microtechniques

Credits Hours
2

Lab/Studio/Field Work Hours
6

Prerequisites
- BOT 4223C or C.I.

Course Description
Introduction to techniques used in the preparation of microscope slides/specimens of vascular plants, including infecting organisms.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Even Spring
BOT5505C - Advanced Plant Physiology

Course Title
Advanced Plant Physiology

Credits Hours
4

Lab/Studio/Field Work Hours
3

Prerequisites
- Permission of course instructor.

Course Description
Core aspects of plant physiology, with a hands-on research-driven focus on traits and processes that govern interaction with the environment.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Fall

BOT5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology

BOT5937 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology
BOT6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Biology

BOT6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Biology

BOT6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Biology

BOT6938C - Special Topics
Course Title
Special Topics
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Biology
**BSC5316 - Marine Conservation Biology**

**Course Title**
Marine Conservation Biology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- BSC 4312C Marine Biology, graduate standing, or C.I.

**Course Description**
Examine human impacts in marine ecosystems and how humans can become better stewards of these habitats.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Even Fall

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**BSC5408L - Advanced Biology Laboratory Techniques**

**Course Title**
Advanced Biology Laboratory Techniques

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
9

**Prerequisites**
- BS degree, C.I.

**Course Description**
This course will emphasize those biological techniques and resources necessary for students about to begin thesis research. Individual and small group instruction in current laboratory techniques, literature searches, and hands-on practice of techniques will be stressed. May not be repeated for credit.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Occasional
BSC5418 - Tissue Engineering
Course Title
Tissue Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Introduction to Tissue Engineering with a special emphasis on the current status of the field, on novel methods and on cell biomaterial interactions.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional

BSC5436 - Biomedical Informatics : Structure Analysis
Course Title
Biomedical Informatics : Structure Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PCB 3522 or equivalent or C.I.

Course Description
Introduction of bioinformatics tools and resources on RNA and protein structure analysis.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall
BSC5476c - Scientific Diving

Course Title
Scientific Diving

Credits Hours
4

Lab/Studio/Field Work Hours
4

Prerequisites
- Graduate standing in the Dept. of Biology, and C.I.

Course Description
Introduction to scientific diving and satisfies the 100 hours of training required by the American Academy of Underwater Sciences.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Occasional

BSC5665 - Clinical Embryology and Congenital Malformations

Course Title
Clinical Embryology and Congenital Malformations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ZOO 3733C or equivalent.

Course Description
Functional human embryology in a clinically oriented way to study the human development and congenital malformations as a result of genetic, environmental and toxic conditions.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Summer
Fall
BSC5824 - Biogeography
Course Title
Biogeography
Credits Hours
4
Lab/Studio/Field Work Hours
0
Course Description
Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate In Conservation Biology, PSM in Conservation Biology, or C.I. Study of geographic variation in nature, ranging from past to present and from genes to ecosystems.

College
College of Sciences
Department
Department of Biology
Terms of Offering
Even Spring

BSC5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99

College
College of Sciences
Department
Department of Biology

BSC5937 - ST: Sensory Ecology
Course Title
ST: Sensory Ecology
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing, or C.I.
Course Description
Study of how and why animals acquire, process and use information from their environment, and how sensory systems influence evolutionary processes.

College
College of Sciences
Department
Department of Biology
BSC6407C - Laboratory Methods in Molecular Biology

Course Title
Laboratory Methods in Molecular Biology

Credits Hours
3

Lab/Studio/Field Work Hours
6

Prerequisites
- Graduate standing, PCB 3522 or C.I.

Course Description
Description and practice of commonly used methods in molecular biology.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall

Current Fee Per Student
$70.00

BSC6431 - Practice of Biomedical Sciences

Course Title
Practice of Biomedical Sciences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Introduces students to the practice of biomolecular science.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall

2022-2023 Graduate Catalog
BSC6432 - Biomedical Sciences I

Course Title

Biomedical Sciences I

Credits Hours

5

Lab/Studio/Field Work Hours

0

Prerequisites

- 1) Acceptance in the Molecular Biology and Microbiology master's program, or 2) Biochem I, or Molecular Biology 1 and 2, or Cell Biology, or C.I.

Course Description

First semester of a multi-disciplinary course. Topics include metabolic reactions, DNA replication and transcription. Lectures incorporate current scientific findings in the context of biomedical applications.

College

College of Medicine

Department

College of Medicine Burnett School of Biomedical Sciences

Terms of Offering

Fall

BSC6433 - Biomedical Sciences II

Course Title

Biomedical Sciences II

Credits Hours

5

Lab/Studio/Field Work Hours

0

Prerequisites

- BSC 6432, graduate standing.

Course Description

Second semester of a multi-disciplinary course. Topics covered include protein translation, signaling and bioinformatics. Lectures incorporate current scientific findings in the context of biomedical applications.

College

College of Medicine

Department

College of Medicine Burnett School of Biomedical Sciences

Terms of Offering

Spring
BSC6614 - Advanced Topics in Systematics

Course Title
Advanced Topics in Systematics

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- An evolution course, C.I., admission to graduate program.

Course Description
Discussion of new cutting edge topics in Systematics and hands on learning of computer data analysis in this field.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Occasional

BSC6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology

BSC6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology
BSC6935 - Seminar in Biology

Course Title
Seminar in Biology

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Biology M.S. or Ph.D. in Conservation Biology, or Certificate in Conservation Biology, or C.I.

Course Description
Discussions and presentations addressing current research in the field of Biology. Graded S/U. May be used in the degree program a maximum of 2 times.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Spring
Fall

BSC6938 - ST: Complex Data in Biology

Course Title
ST: Complex Data in Biology

Credits Hours
4

Lab/Studio/Field Work Hours
1

Prerequisites
- PCB 6466 Methods in Experimental Ecology I or equivalent. A basic understanding of normal statistics (regression, ANOVA, etc.), genetics, and evolutionary biology is required.

Course Description
Covers advanced statistical and computational methods for handling complex biological data, including spatial autocorrelation, evolutionary datasets, high-dimensional traits, etc., at scales from molecular to ecological.

College
College of Sciences

Department
Department of Biology
BSC7919 - Doctoral Research
Course Title
Doctoral Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Biology

BTE - Business Teacher Education

BTE5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

BTE5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

BTE6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education
BTE6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

BTE6935 - Seminar in Business Education

Course Title
Seminar in Business Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
A survey of current problems, issues, and trends in business education to include global business competencies.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Spring

BTE6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

BUL - Business Law
BUL5332 - Advanced Business Law Topics

**Course Title**
Advanced Business Law Topics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to graduate program, or Management major or minor in term of graduation, BUL 3130.

**Course Description**
Advanced business law topics including coverage of the Uniform Commercial Code, torts, commercial paper, and secured transactions.

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

**Terms of Offering**
Spring
Fall

BUL5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

BUL5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

2022-2023 Graduate Catalog
BUL6444 - Law and Ethics

Course Title
Law and Ethics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Accepted for graduate study in College of Business Administration.

Course Description
Legal and ethical issues inherent in business decision making, including the effects of legislation, regulation, diversity, harassment, and other workplace issues on business activity.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
Spring
Fall

BUL6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

BUL6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting
BUL6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

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**CAP - Computer Applications**

**CAP5055 - AI for Game Programming**

**Course Title**
AI for Game Programming

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CS Foundation Exam or EEL 4851C or C.I.

**Course Description**
Surveys cutting-edge AI techniques for video games and board games and contrasts them with more traditional approaches.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Spring
CAP5100 - Human-Computer Interface Design

Course Title
Human-Computer Interface Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 4331C, graduate standing and/or approval of the Director of the Software Engineering Certificate Program.

Course Description
Focuses on dynamics of human-computer interaction. Provides a comprehensive overview of HCI design as a software discipline. Features a user-centered approach to Web-based application design.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CAP5115 - Virtual Reality Engineering

Course Title
Virtual Reality Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- MAS 3105 or C.I.

Course Description
Virtual reality, scene graphs and computer graphics, development of travel, selection, manipulation, system control, animation-based, and physics-based interaction techniques, implementation of 360° videos.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall
**CAP5150 - Foundations of Computer Security and Privacy**

**Course Title**
Foundations of Computer Security and Privacy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Students are expected to have knowledge equivalent to a BS in Computer Science.

**Course Description**
The course provides students with fundamental knowledge in computer security and privacy.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Fall

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**CAP5151 - Internet of Things Security and Privacy**

**Course Title**
Internet of Things Security and Privacy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CAP 5200.

**Course Description**
This class introduces full-stack IoT security and privacy issues, including hardware, software, network, and data.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Occasional
CAP5415 - Computer Vision

Course Title
Computer Vision

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 3503C, MAC 2312 and COT 3960.

Course Description
Image formation, binary vision, region growing and edge detection, shape representation, dynamic scene analysis, texture, stereo and range images, and knowledge representation.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CAP5510 - Bioinformatics

Course Title
Bioinformatics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Background in programming language or molecular biology.

Course Description
This course introduces problems, concepts, algorithms, and applications in Bioinformatics. It covers essential topics such as sequence alignment and prediction of gene and protein structure.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional
CAP5512 - Evolutionary Computation

**Course Title**
Evolutionary Computation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CAP 4630 or COP 3503C or C.I.

**Course Description**
This course covers the field of evolutionary computation, focusing on the theory and application of genetic algorithms.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Occasional

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CAP5516 - Medical Image Computing

**Course Title**
Medical Image Computing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAS 3105 and COP 4020 or COT 4210.

**Course Description**
This course provides students with the foundation necessary for understanding, visualizing, and quantifying medical images with computational methods.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Spring
CAP5610 - Machine Learning

Course Title
Machine Learning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 4630 or C.I.

Course Description
Origin/evaluation of machine intelligence; machine learning concepts and their applications in problem solving, planning and "expert systems" symbolic role of human and computers.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

CAP5619 - Artificial Intelligence for FinTech

Course Title
Artificial Intelligence for FinTech

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 5840.

Course Description
Fundamentals of machine learning; deep learning; reinforcement learning; applications to customer service automation, personalization, biometrics, process automation, and fraud prevention.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall
CAP5636 - Advanced Artificial Intelligence

Course Title
Advanced Artificial Intelligence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 4630.

Course Description
AI theory of knowledge representation, "expert systems", memory organization, problem solving, learning, planning, vision, and natural language.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CAP5725 - Computer Graphics I

Course Title
Computer Graphics I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Architecture of graphics processors; display hardware; principles of programming and display software; problems and applications of graphic systems.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
CAP5727 - Realistic Real-time Rendering

Course Title
Realistic Real-time Rendering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Topics in interactive computer graphics, software, hardware, perception, physics of light, lighting models, indirect lighting, other natural phenomena and how to simulate them in realtime.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CAP5738 - Visualization Techniques for Data Analysis

Course Title
Visualization Techniques for Data Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
COP 3330, COP 3502C. Techniques for visualization that are useful for analyzing and presenting quantitative information are covered. Projects analyze one or more real-world publicly-available datasets. Understanding the data, visualizing it, creating hypotheses, and visually exploring them. Application of statistical techniques to test hypotheses about data trends and visualize how well their hypotheses match with their analysis.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Every Semester
CAP5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

CAP5937 - ST: Mixed Reality - Virtual Reality
Course Title
ST: Mixed Reality - Virtual Reality
Credits Hours
3
Lab/Studio/Field Work Hours
1
Course Description
Virtual reality, scene graphs, immersion, presence, VR sickness, interaction techniques, audio, haptics, system control, perception, interaction principles, physics, scenario fidelity, animations, virtual agents, 360° videos.
College
College of Engineering and Computer Science
Department
Department of Computer Science

CAP6100 - Human-Computer Interaction Research Methods
Course Title
Human-Computer Interaction Research Methods
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Covers basic knowledge on how to design, conduct, and write-up user-centered scholarly research within computer science.
College
College of Engineering and Computer Science
Department
Department of Computer Science
Terms of Offering
Fall
Even Spring
CAP6105 - Pen-Based User Interfaces

Course Title
Pen-Based User Interfaces

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 5610 or C.I.

Course Description
Designed to give students a thorough understanding of the techniques, algorithms, and evaluation methodologies used in designing and developing pen-, sketch-, and gesture-based user interfaces.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CAP6110 - Augmented Reality Engineering

Course Title
Augmented Reality Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- CAP 5115.

Course Description
Augmented reality, tracking, situated visualization, simultaneous localization and mapping, AR interactions, calibration, registration, occlusion, photometric registration, common illumination, diminished reality, viewpoint guidance, multiple perspectives, collaboration.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
CAP6117 - Mixed Reality Project

Course Title
Mixed Reality Project

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 6110.

Course Description
Mixed reality, project management, reporting, prototyping, gesture and voice recognition, design walkthroughs, sound design, 3D scanning, character generation, motion capture, UX inspections, tutorials, help, documentation.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CAP6121 - 3D User Interfaces for Games and Virtual Reality

Course Title
3D User Interfaces for Games and Virtual Reality

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 5725 or C.I.

Course Description
Introduction to the design, implementation, and evaluation of the fundamental techniques in spatial 3D interaction.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
CAP6133 - Advanced Topics in Computer Security and Computer Forensics

**Course Title**
Advanced Topics in Computer Security and Computer Forensics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
COP 5611, COT 5405, CNT 5008. Advanced topics in computer security and forensics such as cryptography; automatic intrusion detection, advanced pattern matching, statistical techniques, firewalls, and vulnerability scanning.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Occasional

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CAP6135 - Malware and Software Vulnerability Analysis

**Course Title**
Malware and Software Vulnerability Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Digital Forensics MS major or CDA 5106 or COT 5405.

**Course Description**
Analyzes computer malicious codes, such as virus, worm, trojan, spyware, and software vulnerabilities, such as buffer-overflow.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Spring
CAP6307 - Text Mining I

**Course Title**
Text Mining I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
COP 3330, CAP 4630; or C.I. Extracting knowledge from unstructured text collections. Document indexing, similarity and summarization, clustering, classification, named entity recognition and relation extraction, text stream processing. Several programming assignments.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Occasional

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CAP6315 - Social Media and Network Analysis

**Course Title**
Social Media and Network Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CAP 5316.

**Course Description**
Techniques developed by the computer science research community for analyzing social networks and social media datasets.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Summer
CAP6318 - Computational Analysis of Social Complexity

**Course Title**
Computational Analysis of Social Complexity

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
CAP 5316. Computational concepts, principles, modeling and simulation approaches used to analyze complex social and economic phenomena, leveraging the availability of large amounts of data, and elements of complexity theory.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Odd Spring

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CAP6411 - Computer Vision Systems

**Course Title**
Computer Vision Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CAP 5415.

**Course Description**
Recent systems contributing toward recognition, reasoning, knowledge representation, navigation, and dynamic scene analysis. Comparisons, enhancements, and integrations of such systems.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Occasional
CAP6412 - Advanced Computer Vision

Course Title
Advanced Computer Vision

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 5415.

Course Description
Computational theories of perception, shape from IX techniques, multi-resolution image analysis, 3-D model based vision, perceptual organization, spatiotemporal model, knowledge-based vision systems.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

CAP6419 - 3D Computer Vision

Course Title
3D Computer Vision

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 5415 or EEL 5820 or C.I.

Course Description

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional
CAP6515 - Algorithms in Computational Biology

Course Title
Algorithms in Computational Biology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 5405 or CAP 5510.

Course Description
This course will concentrate on algorithmic problems in computational biology.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CAP6517 - Computational Genomics

Course Title
Computational Genomics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 5510.

Course Description
This course will summarize computational techniques for comparing and analyzing genomics; (DNA) sequences.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
CAP6545 - Machine Learning Methods for Biomedical Data

**Course Title**
Machine Learning Methods for Biomedical Data

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CAP 5510 or C.I.

**Course Description**
Summarize computational techniques for bridging two fields: machine learning and biomedical science to illustrate successful data mining and knowledge discovery in an interdisciplinary context.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Occasional

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CAP6614 - Current Topics in Machine Learning

**Course Title**
Current Topics in Machine Learning

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CAP 5610 or C.I.

**Course Description**
Machine learning, the study of algorithms that allow computer programs to learn from experience, is a rapidly changing area. This course will be a deep dive into current topics in machine learning, collected from papers appearing at recent machine learning conferences.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Spring
CAP6616 - Neuroevolution and Generative and Developmental Systems

Course Title
Neuroevolution and Generative and Developmental Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 3503C or C.I.

Course Description
Focuses on evolving neural networks for difficult sequential decision and control tasks and associated issues in efficient encoding and representation.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

CAP6640 - Computer Understanding of Natural Language

Course Title
Computer Understanding of Natural Language

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 5636.

Course Description
A study of the different approaches to build programs to understand natural language. The theory of parsing, knowledge representation, memory, and inference will be studied.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
CAP6671 - Intelligent Systems: Robots, Agents, and Humans  
**Course Title**  
Intelligent Systems: Robots, Agents, and Humans  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- CAP 5610 or C.I.  
**Course Description**  
Includes practical techniques for designing intelligent agents capable of planning, learning, and cooperation. Discussion of psychological/social issues.  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Computer Science  
**Terms of Offering**  
Spring  

CAP6675 - Complex Adaptive Systems  
**Course Title**  
Complex Adaptive Systems  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate standing or C.I.  
**Course Description**  
This course is an introduction to the field of complex adaptive systems and will cover basic definitions, theoretical background, and empirical analyses.  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Computer Science  
**Terms of Offering**  
Fall
CAP6676 - Knowledge Representation

Course Title
Knowledge Representation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
CAP 5636. Topics covered include terminological languages, logicist approaches, ontologies, ontological and conceptual relativity, processes, intangibles, time, building large knowledge bases, and complexity analysis.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

CAP6721 - Ray Tracing

Course Title
Ray Tracing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CAP 5725, programming experience.

Course Description
Advanced graphics: Implementation of ray tracing algorithm plus extensions, spatial subdivisions, MC sampling, camera models, texture mapping, instancing.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional
CAP6737 - Interactive Data Visualization

Course Title
Interactive Data Visualization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 5711.

Course Description
Principles and techniques for interactive data visualization that are useful for analyzing, presenting and exploring information are covered. The emphasis will be on algorithmic aspects of developing interactive visualization. The students will receive practical experience of building interactive visualization systems.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring

CAP6908 - Directed Independent Studies

Course Title
Directed Independent Studies

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Directed Independent Studies

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Every Semester

2022-2023 Graduate Catalog
CAP6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

CAP6918 - Directed Research
Course Title
Directed Research
Credits Hours
0 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

CAP6938ST1 - ST: Advanced Virtual Reality
Course Title
ST: Advanced Virtual Reality
Credits Hours
3
Lab/Studio/Field Work Hours
3
Course Description
Advanced topics in virtual reality: Current and emerging technologies, methods, and application domains.

CAP6938ST2 - ST: Immersive Visualization: Using Virtual Reality Techniques to Extract Knowledge from Data
Course Title
ST: Immersive Visualization: Using Virtual Reality Techniques to Extract Knowledge from Data
Credits Hours
3
Lab/Studio/Field Work Hours
3
Course Description
Data sizes are growing beyond what standard tools can handle. This course looks at using immersive and virtual reality techniques to analyze and understand data.
**CAP6942 - Project in Data Analytics**

**Course Title**
Project in Data Analytics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
COP 5711, CAP 5610, CNT 5805 and STA 6704. A project-focused course that demonstrates mastery of data analytics through development of novel algorithms or innovative application of existing techniques for data mining applications.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Summer
Spring

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**CAP7919 - Research**

**Course Title**
Research

**Credits Hours**
0 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

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**CAP7939 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

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**CBH - Comparative Psychology and Animal Behavior**
CBH5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

CBH5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

CCE - Civil Construction Engineering

CCE5006 - Infrastructure Systems Management
Course Title
Infrastructure Systems Management
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- CCE 4004 and CCE 4034, or C.I. Essential elements of infrastructure systems and cover concepts, methods, and technologies essential for infrastructure life cycle engineering and management.
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering
Terms of Offering
Spring
Fall

2022-2023 Graduate Catalog
CCE5205 - Decision Support for Infrastructure Projects

**Course Title**
Decision Support for Infrastructure Projects

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CCE 4004 and CCE 4034, or C.I.

**Course Description**
Infrastructure decision-making theories, data representation for decision analysis, advanced methods in decision-making, and applications of decision support systems in infrastructure projects.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Spring  
Fall

CCE5220 - Sustainable Infrastructure Systems

**Course Title**
Sustainable Infrastructure Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
STA 3032. Introduce the principles of sustainability as they relate to the built environment and infrastructure systems; sustainability metrics; life cycle assessment; resilience; green building principles.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Spring
CCE5917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

CCE5937 - Special Topics
Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

CCE6036 - Advanced Construction Planning and Control
Course Title
Advanced Construction Planning and Control

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CCE 5006 and CCE 5205, or C.I.

Course Description
Advanced concepts, theories, and applications in planning, estimating, and scheduling. Students will be introduced to dynamic project planning and optimization.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring
Fall
CCE6045 - Cost Analysis of Sustainable Infrastructure Systems

Course Title
Cost Analysis of Sustainable Infrastructure Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CCE 5006.

Course Description
Cost engineering for construction organizations, projects, and operations. Topics include project cash flow analysis, construction cost accounting, evaluating investments, and life cycle cost analysis.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Odd Fall

CCE6211 - Design and Monitoring of Construction Processes

Course Title
Design and Monitoring of Construction Processes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CCE 5006 and CCE 5205, or C.I.

Course Description
Concepts of integrated project delivery, improving site layout, advanced operations improvement technologies, improving site security, and green construction.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring
Fall
CCE6817 - Dynamics of Sustainable Systems
Course Title
Dynamics of Sustainable Systems
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- CCE 5220 or C.I.
Course Description
This course uses dynamic modeling as an experimental platform to study and analyze the dynamics of socio-technical problems in the engineering and construction industry.
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering
Terms of Offering
Even Fall

CCE6918 - Directed Research; Independent Study
Course Title
Directed Research; Independent Study
Credits Hours
1 - 99
Course Description
This is a directed research independent study course.
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering

CCE6971 - Thesis
Course Title
Thesis
Credits Hours
1 - 99
Course Description
This is a thesis course.
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering
CCE7980 - Dissertation

Course Title
Dissertation

Credits Hours
1 - 99

Course Description
This is a dissertation course.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

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CCJ - Criminal Justice

CCJ5015 - The Nature of Crime

Course Title
The Nature of Crime

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program, graduate certificate, or C.I.

Course Description
This course provides an overview of major dimensions of crime in the U.S.; epidemiology of crime, costs of crime, and typologies of crime and criminals.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ5456 - The Administration of Justice

**Course Title**
The Administration of Justice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Criminal Justice graduate program, graduate certificate program, or C.I.

**Course Description**
This course provides an overview of the criminal justice system and a critical analysis of formal and informal processing of offenders by criminal justice agencies.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Every Semester

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CCJ5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice
CCJ5931 - Contemporary Criminal Justice Strategies

**Course Title**
Contemporary Criminal Justice Strategies

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Graduate level analysis of contemporary crime issues and the reactions of the criminal justice system to combat those crimes at both the national and international levels. May be used in the degree program a maximum of 3 times.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Occasional

CCJ5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice
CCJ6027 - Criminal Justice Responses to Terrorism

Course Title
Criminal Justice Responses to Terrorism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Criminal Justice graduate program or C.I. Critically examines phenomena of domestic and international terrorism to give students a solid grounding of salient issues in developing crime control strategies to prevent terrorism and mount appropriate responses to incidents.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CCJ6038 - Violent Crimes and Criminals

Course Title
Violent Crimes and Criminals

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program or C.I.

Course Description
This course provides critical examination of violent crimes and criminals. Students will focus on gathering, reviewing, analyzing and synthesizing evidence-based data on violent crime.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ6051 - Community Justice

Course Title
Community Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program, graduate certificate, or C.I.

Course Description
Examines concepts of community justice as they relate to an alternative form of administering criminal justice.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CCJ6067 - Perspectives on Genocide

Course Title
Perspectives on Genocide

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program or C.I.

Course Description
This course provides a critical examination of criminal justice perspectives on genocide.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ6073 - Data Management Systems for Crime Analysis

Course Title
Data Management Systems for Crime Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.S. in Criminal Justice, Criminal Justice certificate, or C.I.

Course Description
This course is designed to provide the conceptual basis, understanding, and skills necessary for complex crime data manipulation.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall

CCJ6074 - Investigative and Intelligence Analysis: Theory and Methods

Course Title
Investigative and Intelligence Analysis: Theory and Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course is designed to familiarize the student with the complex analytical techniques and procedures used to support criminal investigations and criminal intelligence efforts.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ6077 - Advanced Crime Mapping and Analysis in Criminal Justice

Course Title
Advanced Crime Mapping and Analysis in Criminal Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CCJ 6073 and Crime Mapping and Analysis in Criminal Justice or C.I. Develop advanced mapping and analysis proficiency utilizing sophisticated spatial analysis techniques.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Summer

CCJ6079 - Crime Mapping and Analysis in Criminal Justice

Course Title
Crime Mapping and Analysis in Criminal Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CCJ 6073.

Course Description
Course provides the conceptual knowledge and practical skills to design and implement GIS based analysis of community crime problems.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Spring
CCJ6106 - Policy Analysis in Criminal Justice

Course Title
Policy Analysis in Criminal Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program, graduate certificate, or C.I.

Course Description
This course is designed to familiarize students with the causes and consequences of public policy with an emphasis on criminal justice policy.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

CCJ6118 - Criminal Justice Organizations

Course Title
Criminal Justice Organizations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Theory and research on complex organizations are applied in criminal justice settings. Alternative organizational goals, structures, staffing patterns, management styles and planning strategies are examined.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall
CCJ6335 - Criminal Justice Sentencing and Punishment Policy

Course Title
Criminal Justice Sentencing and Punishment Policy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program, graduate certificate, or C.I.

Course Description
This course critically examines the impact of sentencing policy on the correctional system, offenders, their families and the communities to which they return upon release.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CCJ6366 - Criminal Justice Responses to Domestic Violence

Course Title
Criminal Justice Responses to Domestic Violence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program and CCJ 6704 or C.I.

Course Description
This course examines the criminal justice response to domestic violence. Particular emphasis is placed on historical responses, policy as well as an examination of the current role of police, prosecutors, defense attorneys and magistrates in handling domestic assault and battery.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ6431 - Leadership and Ethics in Criminal Justice
Course Title
Leadership and Ethics in Criminal Justice
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Criminal Justice graduate program, graduate certificate, or C.I.
Course Description
Examines the leadership issues faced by decision makers in the criminal justice system.
College
College of Community Innovation and Education
Department
Department of Criminal Justice
Terms of Offering
Occasional

CCJ6485 - Issues in Justice Policy
Course Title
Issues in Justice Policy
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Examination of selected issues of public policy regarding the functions and roles of criminal justice agencies vis-a-vis other government departments or agencies and public purposes. May be repeated for credit.
College
College of Community Innovation and Education
Department
Department of Criminal Justice
Terms of Offering
Every Semester
CCJ6489 - Professionalism in Criminal Justice Organizations

**Course Title**
Professionalism in Criminal Justice Organizations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to M.S. in Criminal Justice, or C.I.

**Course Description**
Historical evolution of professionalism in criminal justice organizations and how it has changed the structure or practices of each involved agency.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Occasional

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CCJ6617 - Mental Disorder, Crime, and Criminal Justice

**Course Title**
Mental Disorder, Crime, and Criminal Justice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CCJ 5456, CCJ 5015, or C.I.

**Course Description**
An overview of the relationship between mental disorder, crime, and the criminal justice system.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Occasional
CCJ6626 - Copycat Crime and Criminals

Course Title
Copycat Crime and Criminals

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Explores the nature and prevalence of copycat crime while reviewing the theories, research and criminal justice policies associated with it.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CCJ6669 - Race, Crime and Justice

Course Title
Race, Crime and Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program or C.I.

Course Description
This course is designed to acquaint students of all disciplines with the operational dynamics of race, crime and justice.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ6675 - Human Rights and Criminal Justice
Course Title
Human Rights and Criminal Justice
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Criminal Justice graduate program, Global Health and Public Affairs certificate, or C.I.
Course Description
Provides in-depth analysis of the human rights movement and its potential impact upon criminal law as well as the juvenile and criminal justice systems.
College
College of Community Innovation and Education
Department
Department of Criminal Justice
Terms of Offering
Occasional

CCJ6696 - Criminal Justice Perspectives on Human Trafficking
Course Title
Criminal Justice Perspectives on Human Trafficking
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
This course introduces students to the problem, causes and suggested solutions for human trafficking both in the United States and abroad.
College
College of Community Innovation and Education
Department
Department of Criminal Justice
Terms of Offering
Spring
CCJ6699 - Criminal Justice Perspectives on Sexual Assault

Course Title
Criminal Justice Perspectives on Sexual Assault

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Criminal Justice master's program. This course will examine the public policy response and the functions of criminal justice agencies as they identify, supervise and punish offenders and assist victims of sexual assault.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Spring

CCJ6702 - Advanced Research Methods in Criminal Justice

Course Title
Advanced Research Methods in Criminal Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to Criminal Justice graduate program Research track and CCJ 6704.

Course Description
Exposes students to the application of research methods in criminal justice. This course serves as the capstone experience for the Research Track.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ6704 - Research Methods in Criminal Justice

Course Title
Research Methods in Criminal Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Master's program or C.I.

Course Description
An advanced examination of research methodology in criminal justice settings on such topics as problem conceptualization, sampling designs, research proposals, data collection, and evaluation techniques.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall
Spring
Even Summer

CCJ6706 - Data Analysis in Criminal Justice I

Course Title
Data Analysis in Criminal Justice I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CCJ 6704 and admission to Criminal Justice MS or MPA/MSCJ Dual degree program.

Course Description
Application of statistical software to quantitative and qualitative methods in Criminal Justice.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall
Spring
Odd Summer
CCJ6714 - Data Analysis in Criminal Justice II

Course Title
Data Analysis in Criminal Justice II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to Criminal Justice Master's program and CCJ 6706.

Course Description
Application of multivariate linear and nonlinear statistical techniques to criminal justice issues. Selecting appropriate procedures, computer-based analysis and interpreting and applying results.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CCJ6717 - CJ Theories of Crime Analysis and Prevention

Course Title
CJ Theories of Crime Analysis and Prevention

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Criminal Justice M.S. program, Crime Analysis certificate or C.I. This course provides the theoretical foundation for crime analysis and crime prevention.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall
CCJ6902 - Qualitative Criminal Justice Research Methods

**Course Title**
Qualitative Criminal Justice Research Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to Criminal Justice PhD, or C.I. This course provides the theoretical and methodological foundation for conducting and assessing qualitative criminal justice research.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Occasional

CCJ6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

CCJ6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice
CCJ6934 - Criminal Justice, Crime, and Popular Culture

Course Title
Criminal Justice, Crime, and Popular Culture

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Explore how Criminal Justice System, criminals, and crime are portrayed in entertainment and news media, and the effects portrayals have on society and criminal justice.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CCJ6938 - Special Topics in Criminal Justice

Course Title
Special Topics in Criminal Justice

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
Jan-99

Course Description
Students are exposed to in-depth coverage of a particular contemporary problem in criminal justice, for example, the death penalty or the influence of the media on crime and punishment.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ6939 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

CCJ6946 - Criminal Justice Practicum

**Course Title**
Criminal Justice Practicum

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Course Description**
Students will undertake a significant research project in a criminal justice agency. May be repeated for credit.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

CCJ7019 - Seminar in the Nature of Crime

**Course Title**
Seminar in the Nature of Crime

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Criminal Justice Ph.D. program.

**Course Description**
This course will cover the major criminological theories pertaining to the causes and consequences of criminal behavior, including early and contemporary perspectives.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Fall
CCJ7096 - Seminar in Criminal Justice Systems

Course Title
Seminar in Criminal Justice Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission into the Criminal Justice Ph.D. program.

Course Description
Coverage of the three central elements of the criminal justice system - policing, courts and corrections - and the primary factors affecting practices and operations of each.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall

CCJ7457 - Seminar in Criminal Justice Theory

Course Title
Seminar in Criminal Justice Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Ph.D. program.

Course Description
This course examines the theoretical foundations of Criminal Justice. The focus is on explaining how and why Criminal Justice agents, agencies, and systems behave.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall
CCJ7708 - Advanced Quantitative Methods for Criminal Justice Research

Course Title
Advanced Quantitative Methods for Criminal Justice Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Ph.D. program.

Course Description
This course will cover advanced regression techniques appropriate for analyzing experimental, quasi-experimental and observational criminal justice data including general linear, log-linear and multivariate models.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Spring

CCJ7725 - The Geography of Crime: Theory and Methods

Course Title
The Geography of Crime: Theory and Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Ph.D. program and CCJ 6073 and CCJ 6709 or equivalent.

Course Description
This course will cover key theoretical and practical approaches related to the understanding and examination of the geography of crime.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ7727 - Advanced Research Methods in Criminal Justice

Course Title
Advanced Research Methods in Criminal Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Criminal Justice Ph.D. program.

Course Description
This course will cover advanced research design topics and methodologies used in criminal justice research including quantitative, qualitative and mixed method techniques.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall

CCJ7741 - Advanced Quantitative Methods II for Criminal Justice Research

Course Title
Advanced Quantitative Methods II for Criminal Justice Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Ph.D. program and CCJ 7708.

Course Description
Course covers the theory and application of an array of advanced statistical modeling techniques for different types of data and research designs in criminal justice.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall
CCJ7747 - Hierarchical Linear Modeling in Criminal Justice Research

Course Title
Hierarchical Linear Modeling in Criminal Justice Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Ph.D. program and CCJ 7708.

Course Description
Overview of techniques of hierarchical linear modeling with an emphasis on application in criminal justice research.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CCJ7752 - Structural Equation Modeling in Criminal Justice Research

Course Title
Structural Equation Modeling in Criminal Justice Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Ph.D. Program and CCJ 7708.

Course Description
Overview of techniques of structural equation modeling with an emphasis on application in criminal justice research.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CCJ7775 - Criminal Justice Research in the Community

Course Title
Criminal Justice Research in the Community

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission into the Criminal Justice Ph.D. program.

Course Description
This course addresses the history of community-based research, different models of community-based research, and challenges associated with conducting community-based research in criminal justice.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Spring

CCJ7785 - Teaching Criminal Justice

Course Title
Teaching Criminal Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
CCJ 7096, CCJ 7019 and CCJ 7457. This course is designed to expose students to various pedagogical philosophies, approaches, technologies, and ethical issues from a criminal justice perspective.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Summer
CCJ7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Criminal Justice

CCJ7939 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Department of Criminal Justice

CDA - Computer Design/Architecture

CDA5106 - Advanced Computer Architecture

Course Title
Advanced Computer Architecture

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4768C.

Course Description
Modern processor design, instruction-level parallelism, thread-level parallelism, data-level parallelism, memory hierarchy, and I/O.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
Fall
CDA5110 - Parallel Architecture and Algorithms

Course Title
Parallel Architecture and Algorithms

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 4210, CDA 5106.

Course Description
General-purpose vs. special-purpose parallel computers; arrays, message-passing; shared-memory; taxonomy; parallelization techniques; communication synchronization and granularity; parallel data structures; automatic program restructuring.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

CDA5121 - High Performance Computing and Programming

Course Title
High Performance Computing and Programming

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 3503C or C.I.

Course Description
Basic hardware and software knowledge and essential programming skills for high-performance computing (HPC) including GPU computing and big data computing.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

2022-2023 Graduate Catalog
CDA5209 - Foundations of Secure Execution Environment

Course Title
Foundations of Secure Execution Environment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CDA 5106

Course Description
This class is a graduate course covering the foundations of secure execution environment.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring

CDA5220 - Foundations of Secure Execution Environment

Course Title
Foundations of Secure Execution Environment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CDA 5106.

Course Description
This class covers the foundations of secure execution environment.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
CDA5917 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Computer Science

CDA5937 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Computer Science

CDA6107 - Parallel Computer Architecture  
**Course Title**  
Parallel Computer Architecture  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- CDA 5106.  
**Course Description**  
Principles and trade-offs in the design of parallel architectures, shared-memory, message-passing, dataflow, data-parallel machines, cache coherence protocols, and consistence models.  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Computer Science  
**Terms of Offering**  
Spring
CDA6221 - Advanced Topics in Secure Execution Environment

**Course Title**
Advanced Topics in Secure Execution Environment

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CDA 5201.

**Course Description**
This class covers the advanced topics in secure execution environment.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Occasional

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CDA6530 - Performance Models of Computers and Networks

**Course Title**
Performance Models of Computers and Networks

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Performance models of computer systems and networks using probability models and discrete event simulations. Queuing theory and modeling tools.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Occasional
CDA6909 - Research Report

Course Title:
Research Report

Credits Hours:
1 - 99

College:
College of Engineering and Computer Science

Department:
Department of Computer Science

CDA6918 - Directed Research

Course Title:
Directed Research

Credits Hours:
1 - 99

College:
College of Engineering and Computer Science

Department:
Department of Computer Science

CDA6938 - Special Topics

Course Title:
Special Topics

Credits Hours:
3

College:
College of Engineering and Computer Science

Department:
Department of Computer Science

CDA7919 - Research

Course Title:
Research

Credits Hours:
1 - 99

College:
College of Engineering and Computer Science

Department:
Department of Computer Science
CDA7939 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Computer Science

CEG - Civil Geotechnical Structures

CEG5405 - Seepage in Soils
Course Title
Seepage in Soils
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- CEG 4011C.
Course Description
Principles of flow through soils; flow nets, analytical solutions; seepage forces, design of filters and drainage layers; dewatering, drainage in dams, embankments, and pavement systems.
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering
Terms of Offering
Even Spring

CEG5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering
CEG5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering

CEG6065 - Soil Dynamics
Course Title
Soil Dynamics
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- CEG 4011C.
Course Description
Comprehensive coverage in calculating the dynamic response of foundations, presenting a variety of contemporary techniques for fields and laboratory.
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering
Terms of Offering
Occasional
CEG6115 - Foundation Engineering  
**Course Title**  
Foundation Engineering  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- CEG 4012 or C.I.  

**Course Description**  
Analysis and design of spread footings, mat foundations, retaining walls, sheeting and bracing systems and pile foundations.  

**College**  
College of Engineering and Computer Science  

**Department**  
Department of Civil, Environmental, and Construction Engineering  

**Terms of Offering**  
Occasional  

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CEG6317 - Advanced Geotechnical Engineering  

**Course Title**  
Advanced Geotechnical Engineering  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- CEG 4012 or C.I.  

**Course Description**  
Mechanics of soils and models; elasticity and plasticity of soil bodies; strength of soils and stability of soil structures.  

**College**  
College of Engineering and Computer Science  

**Department**  
Department of Civil, Environmental, and Construction Engineering  

**Terms of Offering**  
Occasional
CEG6515 - Retaining Structures and Slope Stability

**Course Title**
Retaining Structures and Slope Stability

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CEG 4011C and CEG 4012 or C.I.

**Course Description**
Earth pressures, retaining structures, design of retaining walls, sheet piles, mechanically stabilized earth, soil nails, anchored and braced excavations. Slope stability, shear strength, limit equilibrium.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Even Fall

CEG6610 - Smart Underground Structures: Tunnels and Shafts

**Course Title**
Smart Underground Structures: Tunnels and Shafts

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CEG 4011C and CEG 4012 or C.I.

**Course Description**

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Fall
CEG6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering

CEG6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering

CEG6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering
CEG7980 - Dissertation

Course Title
Dissertation

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
0

Course Description
May be repeated for credit.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Every Semester

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CEN - Computer Programming

CEN5016 - Software Engineering

Course Title
Software Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 4331C.

Course Description
Application of formal software processes, engineering methods, and documentation standards to the development of large scale software systems. A team project is required.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
CEN5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

CEN5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Computer Science

CEN6075 - Formal Specification of Software Systems
Course Title
Formal Specification of Software Systems
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Discrete math (equivalent to COT 3100C, MAD 2104, or MHF 3302) or C.I.
Course Description
Issues and current research in formal specification and verification of software-intensive systems. mathematical models and formalisms.
College
College of Engineering and Computer Science
Department
Department of Computer Science
Terms of Offering
Odd Spring
CEN6087 - Cloud Computing
Course Title
Cloud Computing
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- CDA 5106 or C. I.
Course Description
Introduces cloud computing, infrastructure, applications, architecture, resource management, security, cloud storage systems and networks for computer clouds.
College
College of Engineering and Computer Science
Department
Department of Computer Science
Terms of Offering
Fall

CEN6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

CEN6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science
CEN6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Computer Science

CES - Civil Engineering Structure

CES5144 - Matrix Methods for Structural Analysis

Course Title
Matrix Methods for Structural Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- CES 4100C or C.I.

Course Description
Implementation of the matrix methods for structural analysis that are commonly and currently used in practice and in research, special topics such as finite element formulations, special analysis procedures, and use of software packages.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Even Fall
CES5325 - Bridge Engineering

Course Title
Bridge Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CES 4605 and CES 4702 or C.I.

Course Description
Bridge engineering fundamentals, design philosophies, analysis and design concepts for concrete and steel bridges, AASHTO specifications, Bridge rating, and introduction to Bridge health monitoring.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

CES5606 - Advanced Steel Structures

Course Title
Advanced Steel Structures

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CES 4605.

Course Description
Behavior and design of steel buildings; emphasis on AISC-LRFD building code; complex connections, tension members, stability of compression members, laterally unsupported beams, frames, and beam columns.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
**CES5706 - Advanced Reinforced Concrete**

**Course Title**
Advanced Reinforced Concrete

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CES 4702 or C.I.

**Course Description**
Design of frames, two-way floor systems, shear walls; shear and torsion; compression field theory; inelastic analysis; wind and seismic design; introduction to prestressed concrete.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Occasional

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**CES5821 - Masonry and Timber Design**

**Course Title**
Masonry and Timber Design

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Structural properties of masonry and timber; design loads-codes and standards; analysis for axial loads, flexure and shear.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Occasional
CES5917 - Directed Research
Course Title
  Directed Research
Credits Hours
  1 - 99
College
  College of Engineering and Computer Science
Department
  Department of Civil, Environmental, and Construction Engineering

CES5937 - Special Topics
Course Title
  Special Topics
Credits Hours
  3
College
  College of Engineering and Computer Science
Department
  Department of Civil, Environmental, and Construction Engineering

CES6010 - Structural Reliability
Course Title
  Structural Reliability
Credits Hours
  3
Lab/Studio/Field Work Hours
  0
Prerequisites
  ❖ STA 3032 and CES 4100C or equivalent course or C.I.
Course Description
  Application of probability theory to classical and computational reliability methods for civil systems. Topics in component and system reliability, simulation, bounds, sensitivity, and model updating.
College
  College of Engineering and Computer Science
Department
  Department of Civil, Environmental, and Construction Engineering
Terms of Offering
  Occasional
CES6116 - Finite Element Structural Analysis

**Course Title**
Finite Element Structural Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CES 5144 or C.I.

**Course Description**
Concept, theory, and application of the finite element method; analysis of one-, two-, and three-dimensional structural components and systems; stability and dynamics; applications.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Occasional

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CES6209 - Dynamics of Structures

**Course Title**
Dynamics of Structures

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Response analysis of single and multi-degree-of-freedom systems to periodic and non-periodic excitations; continuous systems; response spectra; applications in structural engineering.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Occasional
CES6220 - Wind and Earthquake Engineering

Course Title
Wind and Earthquake Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CES 6209 or C.I.

Course Description
Wind characteristics; wind effects on structures; dynamic analysis for wind loads; nature of earthquake forces; response spectra and seismic design; wind and seismic codes.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

CES6230 - Advanced Structural Mechanics

Course Title
Advanced Structural Mechanics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Review of biaxial bending and torsion; plate bending; theory of elasticity, visco-elasticity and plasticity; anisotropic elasticity and stability.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
CES6527 - Nonlinear Structural Analysis

Course Title

Nonlinear Structural Analysis

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- CES 5144 or C.I.

Course Description

Structural nonlinear analysis theory and applications, including material and geometric nonlinearity, numerical methods and solution strategies, inelastic element formulation, and use of software packages.

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

Terms of Offering

Occasional

CES6715 - Prestressed Concrete Structures

Course Title

Prestressed Concrete Structures

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- CES 4702 and CES 5706 or C.I.

Course Description

Prestressed concrete behavior and design; applications in building and bridge design including pre- and post-tensioned girders, floors, roofs, and walls.

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

Terms of Offering

Occasional
CES6876 - Smart City Built Infrastructure

Course Title

Smart City Built Infrastructure

Credits Hours

3

Prerequisites

- CES4100 with a grade of "C" (2.0) or better or C.I.

Course Description

Introduction to concepts, methods and technologies related to design, assessment, analysis, monitoring and non-destructive evaluation methods with specific applications for smart city built infrastructure.

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

Terms of Offering

Fall

CES6909 - Research Report

Course Title

Research Report

Credits Hours

1 - 99

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

CES6918 - Directed Research

Course Title

Directed Research

Credits Hours

1 - 99

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering
CES6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

CES7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

CES7939 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

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CGN - Civil Engineering
CGN5340 - Internet of Things: Applications in Smart Cities

Course Title
Internet of Things: Applications in Smart Cities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CGN 3405 or C.I.

Course Description
Internet of Things (IoT), urban sensing ecosystem, technological tools and methods, smart city infrastructure, IoT applications for smart cities, challenges and case studies.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring

CGN5341 - Interdisciplinary Introduction to Smart Cities' Applications

Course Title
Interdisciplinary Introduction to Smart Cities' Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TTE3810 and ENV 3001 with a grade of "C" (2.0) or better or C.I.

Course Description
This course provides a broad multidisciplinary background about the different systems and technologies used in Smart Cities.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring
Fall

2022-2023 Graduate Catalog
CGN5506 - Advanced Pavement and Civil Engineering Materials

Course Title
Advanced Pavement and Civil Engineering Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
CGN 3501C, CEG 4011C. Pavement and civil engineering materials such as aggregate, Portland cement, and concrete. In addition, mechanics, modeling, analysis, and design of those materials will be included.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

CGN5617 - Infrastructure Systems Optimization and Identification

Course Title
Infrastructure Systems Optimization and Identification

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032, CGN 3405, Basic programming skills, or C.I.

Course Description
This course covers the advanced mathematical programming techniques that are useful for civil infrastructure planning, operations, and maintenance with increasing infrastructure connectivity and data availability.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring
Fall
CGN5877 - Monitoring for Infrastructure Systems

Course Title
Monitoring for Infrastructure Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- One of the following: CES 4100C, ENV 4120, ENV 4561, CWR 4203C, CWR 4101C or CCE 4004.

Course Description
Applications of modern instrumentation and data processing technologies to infrastructure monitoring and assessment. Topics in current and state-of-the-art monitoring techniques, SHM for infrastructure systems, and case studies on performance-based evaluation.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Odd Spring

CGN5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

CGN5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering
CGN6342 - Modeling Human Behavior with Emerging Data

Course Title
Modeling Human Behavior with Emerging Data

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Parsing and visualizing trajectory data, probabilistic graphical models, hidden Markov models, human mobility models, transportation network analysis, traffic state prediction, data-driven traffic assignment.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring

CGN6343 - Cyber-Physical Systems and Smart Cities

Course Title
Cyber-Physical Systems and Smart Cities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CGN 5555 or C.I.

Course Description
Introduction to cyber-physical systems, smart cities as large-scale CPS, modeling and control of networked interconnected agents, mean field games, applications and case studies.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Fall
CGN6655 - Regional Planning, Design, and Development

Course Title
Regional Planning, Design, and Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Project course dealing with planning, design, and development of regional systems, including projections, case studies, design alternatives, environmental impact, etc.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

CGN6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

CGN6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering
CGN6938ST1 - Mobility in Smart Cities: Technologies and Application Areas

Course Title

Mobility in Smart Cities: Technologies and Application Areas

Credits Hours

3

Lab/Studio/Field Work Hours

0

Course Description

The course introduces students to research developments in intelligent transportation systems infrastructure with a focus on video-based data collection and networks connectivity.

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

CGN7919 - Doctoral Research

Course Title

Doctoral Research

Credits Hours

3

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

CGN7980 - Dissertation

Course Title

Dissertation

Credits Hours

3

College

College of Engineering and Computer Science

Department

Department of Civil, Environmental, and Construction Engineering

CGS - Computer General
CGS5131 - Computer Forensics I: Seizure and Examination of Computer Systems

**Course Title**
Computer Forensics I: Seizure and Examination of Computer Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Computer literacy and C.I.

**Course Description**
Legal issues regarding seizure and chain of custody. Technical issues in acquiring computer evidence. Popular file systems are examined. Reporting issues in the legal system.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Fall

**Current Fee Per Student**
$50.00

CGS5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

CGS5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science
CGS5949 - Cooperative Education in Computer General

Course Title
Cooperative Education in Computer General

Credits Hours
0 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

CGS6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

CGS6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

CGS6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Computer Science
CGS6949 - Cooperative Education in Computer General

Course Title
Cooperative Education in Computer General

Credits Hours
0 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

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CHI - Chinese

CHI5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

CHI5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

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CHM - Chemistry
CHM5225 - Advanced Organic Chemistry

Course Title
Advanced Organic Chemistry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CHM 2211, graduate status or senior standing, or C.I.

Course Description
Theoretical and physical organic concepts of organic systems from the perspective of modern structural theory, thermodynamics, and kinetics.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Odd Fall

CHM5235 - Applied Molecular Spectroscopy

Course Title
Applied Molecular Spectroscopy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CHM 3120 and CHM 2211, and graduate status or senior standing or C.I.

Course Description
Determination of chemical structure through interpretation of UV, IR, NMR and Mass Spectra.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Occasional
CHM5305 - Bioconjugate Chemistry

Course Title
Bioconjugate Chemistry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- BCH 4053 Biochemistry, and graduate status or senior standing or C.I.

Course Description
Reactivity of biological molecules, synthesis and properties of modified carbohydrates, proteins, lipids and nucleic acids, principles of bioconjugation.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Occasional

CHM5450 - Polymer Chemistry

Course Title
Polymer Chemistry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CHM 2211, and graduate status or senior standing or C.I.

Course Description
An introduction to the chemistry of synthetic polymers. Synthetic methods, polymerization mechanisms, characterization techniques, and polymer properties will be considered.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Even Fall
CHM5451C - Techniques in Polymer Science

Course Title
Techniques in Polymer Science

Credits Hours
3

Lab/Studio/Field Work Hours
5

Prerequisites
- CHM 2211 and CHM 3410, graduate status or senior standing, or C.I.

Course Description
A laboratory and lecture course designed to introduce students to the major polymerization mechanisms along with polymer characterization and processing methods using modern instrumentation.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Odd Spring

Current Fee Per Student
$63.00

CHM5580 - Advanced Physical Chemistry

Course Title
Advanced Physical Chemistry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Corequisites
- CHM 3411 and PR: MAC 2313, and graduate standing or senior standing or C.I.

Course Description
Selected topics of thermodynamics, kinetics, quantum mechanics, and structure.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Occasional
CHM5675 - Bioinorganic Chemistry

Course Title
Bioinorganic Chemistry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- BCH 4053.

Corequisites
- CHM 4610.

Course Description
Overview of the role of metals in biology. Emphasis on structure-function relationships of metalloenzymes, metalloenzyme mechanism, and spectroscopies and techniques commonly used for these structures.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Spring

CHM5735 - Chemical Synthesis of Nanomaterials

Course Title
Chemical Synthesis of Nanomaterials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Chemical methods for synthesis of nanomaterials with desired properties. Topics include principles of nanochemistry, controlled synthesis, purifications, and surface modifications.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Fall
CHM5785 - Green and Sustainable Chemistry  
**Course Title**  
Green and Sustainable Chemistry  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Course Description**  
Developing an advanced understanding of sustainability in chemical synthesis, rooted in the 12 Principles of Green Chemistry, with a focus on modern research.  
**College**  
College of Sciences  
**Department**  
Department of Chemistry  
**Terms of Offering**  
Spring  

CHM5917 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Sciences  
**Department**  
Department of Chemistry  

CHM5937 - ST: Bioinorganic Chemistry  
**Course Title**  
ST: Bioinorganic Chemistry  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- BCH 4053, or C.I.  
**Course Description**  
The role of metals in biology. Emphasis on structure-function relationships of metalloenzymes, metalloenzyme mechanism, and spectroscopies and techniques commonly used for these studies.  
**College**  
College of Sciences  
**Department**  
Department of Chemistry
CHM6134 - Advanced Instrumental Analysis

**Course Title**
Advanced Instrumental Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CHM 6710.

**Course Description**
Advanced instrumental techniques related to luminescence spectroscopy and applications to chemical analysis.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Occasional

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CHM6440 - Kinetics and Catalysis

**Course Title**
Kinetics and Catalysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Must meet proficiency requirement as determined by the Chemistry Department or C.I.

**Course Description**
Classical kinetics with an emphasis on industrial applications and current catalysis methodologies.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Spring
CHM6492 - Atomic Spectroscopy

Course Title
Atomic Spectroscopy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete all of the following
  - Complete the following:
    - Course Not Found
  - Or C.I.

Course Description
Theory and instrumentation for atomic absorption and emission spectroscopy with focus on their applications in various fields including forensic science.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Even Spring

CHM6620 - Solid State Inorganic Chemistry

Course Title
Solid State Inorganic Chemistry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CHM 4610, or C.I.

Course Description
Structure and chemistry of novel solid-state inorganic materials and their emerging applications.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Occasional
CHM6710 - Applied Analytical Chemistry

Course Title
Applied Analytical Chemistry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Must meet proficiency requirement as determined by the Chemistry department or C.I.

Course Description
Concepts in molecular structure that integrate structural, physical, and chemical properties with aspects of industrial and analytical chemistry.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Fall

CHM6711 - Chemistry of Materials

Course Title
Chemistry of Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CHM 2211, CHM 4130C, and CHM 3411, or C.I.

Course Description
Structure and properties of chemical products, with an emphasis on the correlation between molecular form and the functional properties deemed desirable for the product.

College
College of Sciences

Department
Department of Chemistry
CHM6908 - Directed Independent Studies

Course Title
Directed Independent Studies

Credits Hours
1 - 99

Prerequisites

- Instructor Consent Required

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Occasional

CHM6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Chemistry

CHM6918 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Chemistry
CHM6936 - Graduate Chemistry Seminar

Course Title
Graduate Chemistry Seminar

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites

♦ C.I.

Course Description
Students attend faculty-level seminars for multiple semesters dictated by their program. Students will need to complete CITI during first semester.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Spring
Fall

CHM6938 - ST: Electrochemistry

Course Title
ST: Electrochemistry

Credits Hours
3

Prerequisites

♦ Bachelor degree in Chemistry or consent of instructor.

Course Description
Electrochemistry course is design to study the fundamentals of electrochemical reactions with focus on electrode reaction mechanisms. It will include theory/practice of advanced electrochemical-analytical methods.

College
College of Sciences

Department
Department of Chemistry
**CHM6938 - ST: Electrochemistry**

**Course Title**
ST: Electrochemistry

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Graduate standing, or CI.

**Course Description**
The electrochemistry course studies the fundamentals of electrochemical reactions with a focus on electrode reaction mechanisms. It includes the theory/application of advanced electrochemical methods.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Occasional

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**CHM6949 - Cooperative Education in Chemistry**

**Course Title**
Cooperative Education in Chemistry

**Credits Hours**
0 - 99

**College**
College of Sciences

**Department**
Department of Chemistry

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**CHM6971 - TREATISE (THESIS OR Research Report)**

**Course Title**
TREATISE (THESIS OR Research Report)

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Chemistry
CHM7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Chemistry

CHM7939 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Chemistry

CHS - Chemistry Specialized

CHS5110 - Radiochemistry
Course Title
Radiochemistry
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- CHM 4610 Inorganic Chemistry, or equivalent, or C.I.
Course Description
Principles of radiochemistry and radioanalytical techniques, environmental radiochemistry, radiotracers in medicine, material science and geology, nuclear fuel, reactors and energy production, radiation protection.
College
College of Sciences
Department
Department of Chemistry
Terms of Offering
Even Fall
CHS5502 - Principles of Forensic Science

**Course Title**
Principles of Forensic Science

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Forensic Science MS program or C.I.

**Course Description**
Principles of forensic science crime scene investigation, concepts in physical and biological evidence, evidence collection and transport, discrimination and individualization of evidence.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Even Spring

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CHS5504 - Topics in Forensic Science

**Course Title**
Topics in Forensic Science

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Digital Forensics M.S. or Computer Forensics graduate certificate or C.I.

**Course Description**
History and current topics in Forensic Science.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Fall
**CHS5507 - Chemometric Applications in Forensic Science**

**Course Title**
Chemometric Applications in Forensic Science

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CHS 5504, or C.I.

**Course Description**
Modern methods of evaluating the evidential value of forensic data from physical evidence, including fibers, glass, ignitable liquids and others.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Even Spring

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**CHS5518 - The Forensic Collection and Examination of Digital Evidence**

**Course Title**
The Forensic Collection and Examination of Digital Evidence

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Adv topics in Forensic Science, graduate status, or C.I.

**Course Description**
This course will cover the nature of Digital Evidence collection and examination under the constraints of Law and courtroom procedures.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Summer
CHS5596 - The Forensic Expert in the Courtroom

**Course Title**
The Forensic Expert in the Courtroom

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission into M.S. Forensic Science program, the Digital Forensics M.S. or the Computer Forensics graduate certificate or C.I.

**Course Description**
Uses of technically and scientifically trained expert witnesses at trial.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Spring

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CHS5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Chemistry

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CHS5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Sciences

**Department**
Department of Chemistry
CHS6240 - Chemical Thermodynamics

**Course Title**
Chemical Thermodynamics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Must meet proficiency requirement as determined by the Chemistry department or C.I.

**Course Description**
Classical and statistical thermodynamics with emphasis on industrial applications and estimation methods.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Fall

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CHS6251 - Applied Organic Synthesis

**Course Title**
Applied Organic Synthesis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Must meet proficiency requirement as determined by the Chemistry department or C.I.

**Course Description**
A survey of chemical syntheses from both a product-oriented standpoint and a process-oriented standpoint. Relevant examples from the pharmaceutical and agricultural chemical industries.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Spring
CHS6509 - Advanced Forensic Microscopy

Course Title
Advanced Forensic Microscopy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete all of the following
  - Admitted to FSCMS
  - Graduate standing or C.I.

Course Description
In-depth description of microscopic techniques (from stereoscope to PLM to SEM), micro-spectroscopy (from polarization to absorption, emission, vibrational spectroscopy) and sample analysis.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Odd Spring

CHS6513 - Quality Assurance for Forensic Scientists

Course Title
Quality Assurance for Forensic Scientists

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission into M.S. Forensic Science program or C.I.

Course Description
Principles and concepts of quality assurance for forensic scientists. Includes a study of national analytical and accreditation standards.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Fall
CHS6535 - Forensic Molecular Biology

Course Title
Forensic Molecular Biology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete all of the following
  - Complete the following:
    - Course Not Found
  - Graduate standing or C.I.; and must have successfully completed undergraduate courses in statistics and biology

Course Description
Procedures for recovering and typing DNA from evidentiary materials and the interpretation of data.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Odd Fall

CHS6535L - Forensic Analysis of Biological Materials

Course Title
Forensic Analysis of Biological Materials

Credits Hours
3

Lab/Studio/Field Work Hours
6

Prerequisites
- Complete all of the following
- Complete the following:
  - CHS6545 - Forensic Analysis of Explosives (3)
  - Course Not Found
- Or C.I. and satisfaction of biology requirements.

Course Description
A laboratory course for forensic molecular biologists covering the procedures for recovering and typing DNA from evidentiary materials.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Even Spring
**CHS6536 - Population Genetics and Genetic Data**

**Course Title**
Population Genetics and Genetic Data

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I. and must have successfully completed undergraduate courses in statistics and biology.

**Course Description**
Analysis of laboratory derived DNA data and how they can be applied in an occupational context.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Even Fall

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**CHS6545 - Forensic Analysis of Explosives**

**Course Title**
Forensic Analysis of Explosives

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission into Forensic Science M.S. program or C.I.

**Course Description**
Modern analytical methods and protocols for the forensic analysis of low and high explosives. Analysis of pure materials and post-blast residues will be covered along with scene search and recovery protocols.

**College**
College of Sciences

**Department**
Department of Chemistry

**Terms of Offering**
Odd Spring
CHS6546 - Forensic Analysis of Ignitable Liquids

Course Title
Forensic Analysis of Ignitable Liquids

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission into Forensic Science M.S. or C.I. Modern analytical methods and protocols for the forensic analysis of ignitable liquids. Ignitable liquid production as relates to ASTM classification, sampling methods, databases and modern methods of data analysis.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Even Spring

CHS6613 - Current Topics in Environmental Chemistry

Course Title
Current Topics in Environmental Chemistry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CHM 2045C, CHM 2046, or the equivalent of a BS in biological, molecular, chemical or engineering sciences, or C.I.

Course Description
Advanced principles of environmental chemistry, environmental law, current remediation technologies and industrial practices relating to the environment.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Odd Spring
CHS6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Chemistry

CHS6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Chemistry

CHS6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Chemistry

CHS7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Chemistry
CHS7938 - Frontiers in Chemistry

Course Title
Frontiers in Chemistry

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PhD Chemistry program or C.I.

Course Description
Chemistry research seminar addressing current challenges, trends and opportunities in the chemical sciences. May be used in the degree program a maximum of 3 times.

College
College of Sciences

Department
Department of Chemistry

Terms of Offering
Every Semester

CIS - Computer and Information Systems

CIS5256 - Software Development Leadership

Course Title
Software Development Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 4331C and Computer Science major.

Course Description
The course teaches the concepts necessary to manage software projects successfully, with a focus on software quality, effective development practices, team dynamics, appropriate leadership style.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall
CIS5730 - Blockchains and Smart Distributed Contracts

Course Title
Blockchains and Smart Distributed Contracts

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 5840.

Course Description
Introduction to blockchains; consensus and decentralization mechanisms; symmetric and public key cryptography; bitcoin protocols and APIs; alternatives to bitcoins; smart contracts; Ethereum virtual machine; Solidity programming language; Web3 API; Hyperledger; scalability and other challenges of blockchain systems.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CIS5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

CIS5930 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Computer Science
CIS5937 - SPECIAL TOPICS
Course Title
SPECIAL TOPICS
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Computer Science

CIS6206 - Electronic Discovery for Digital Forensics Professionals
Course Title
Electronic Discovery for Digital Forensics Professionals
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
CGS 5131 or C.I. This course will introduce experienced digital forensics students to legal and practical issues regarding electronic discovery, including legal requirements, technical solutions and practical aspects.
College
College of Engineering and Computer Science
Department
Department of Computer Science
Terms of Offering
Fall
CIS6207 - The Practice of Digital Forensics

**Course Title**
The Practice of Digital Forensics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CGS 5131 and CNT 6418, or C.I.

**Course Description**
Application of digital scientific techniques to solve information assurance, forensic and legal problems.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Spring
Fall

CIS6386 - Operating Systems and File System Forensics

**Course Title**
Operating Systems and File System Forensics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CGS 5131 or C.I.

**Course Description**
In-depth coverage of computer forensics related issues associated with multiple operating systems, multiple file systems, and applications.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Spring
CIS6395 - Incident Response Technologies

**Course Title**
Incident Response Technologies

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Digital Forensics MS major or CDA 5106 or COT 5405.

**Course Description**
This course covers security incidents and intrusions. Topics include: identifying and categorizing incidents, responding to incidents, log analysis, network traffic analysis, and tools.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Fall

CIS6614 - Advanced Software Systems Security

**Course Title**
Advanced Software Systems Security

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CIS 4615.

**Course Description**
This course will cover various advanced topics on software threat modeling, secure software development life cycle, common security issues, and mitigations in modern software operation.

**College**
College of Engineering and Computer Science

**Department**
Department of Computer Science

**Terms of Offering**
Fall
CIS6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

CIS6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

CIS6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Computer Science

CIS7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

CJC - Criminal Justice Corrections
CJC5020 - Foundations of Corrections

Course Title
Foundations of Corrections

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to Criminal Justice graduate program, graduate certificate, or C.I.

Course Description
Provides an overview of the correctional process in the U.S., including philosophical foundations and contemporary practices.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CJC6135 - Seminar in Institutional Corrections

Course Title
Seminar in Institutional Corrections

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to the Criminal Justice Ph.D. Public Affairs (Criminal Justice track) Ph.D. program or C.I.

Course Description
This course will provide an overview and analysis of institutional corrections from an historical, philosophical, theoretical, and empirical perspective.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Spring
CJC6165 - Seminar in Community Corrections

Course Title
Seminar in Community Corrections

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Ph.D. program, Public Affairs (Criminal Justice track) Ph.D. program or C.I.

Course Description
Provides an overview and analysis of community-based punishment polices and practices, focusing on issues related to community-corrections programs, professionals, and role of community in controlling crime.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Summer

CJC6486 - Seminar in Correctional Effectiveness

Course Title
Seminar in Correctional Effectiveness

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice Ph.D. or Public Affairs (Criminal Justice track) Ph.D. program or C.I.

Course Description
Provides an overview and analysis of issues pertaining to correctional evaluation, focusing on the various effects of punishment on the offender, the criminal justice system, and society.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Fall

CJE - Criminal Justice Law Enforcement
CJE5021 - Foundations of Law Enforcement

**Course Title**
Foundations of Law Enforcement

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Criminal Justice graduate program, graduate certificate program, or C.I.

**Course Description**
Examines police role in modern society and law enforcement policy.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Occasional

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CJE5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice
CJE6120 - Personnel Management in Criminal Justice Organizations  
**Course Title**  
Personnel Management in Criminal Justice Organizations  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Admission to M.S. in Criminal Justice or C.I.  
**Course Description**  
This course provides a general overview of the issues and problems in the management of criminal justice agencies with an emphasis on best practices.  
**College**  
College of Community Innovation and Education  
**Department**  
Department of Criminal Justice  
**Terms of Offering**  
Occasional  

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CJE6320 - Seminar in Police Administration  
**Course Title**  
Seminar in Police Administration  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Admission to Criminal Justice Ph.D. or Public Affairs (Criminal Justice track) Ph.D. program or C.I.  
**Course Description**  
Administration and operational task of police organization, including exercise and control of discretion, hierarchies and divisions of labor, incentive structures, and evaluation of effectiveness and efficiency of police operations.  
**College**  
College of Community Innovation and Education  
**Department**  
Department of Criminal Justice  
**Terms of Offering**  
Fall
CJE6456 - Seminar in Policing Urban Communities

**Course Title**
Seminar in Policing Urban Communities

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission into the Criminal Justice Ph.D. or Public Affairs (Criminal Justice track) Ph.D. programs or C.I.

**Course Description**
This course concentrate on the urban communities of the United States and delves into the issues that affect the type of policing that occurs in these locales.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Spring

CJE6688 - Cyber Crime and Criminal Justice

**Course Title**
Cyber Crime and Criminal Justice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CCJ 5015 or C.I.

**Course Description**
Deals with the problem of cyber crime and the criminal use of the Internet. Includes investigation, enforcement and legal issues.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Occasional
CJE6706 - Seminar in Police Socialization and Culture

**Course Title**
Seminar in Police Socialization and Culture

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Criminal Justice Ph.D. or Public Affairs (Criminal Justice track) program or C.I.

**Course Description**
This course examines the origins and correlates of socialization and culture operating within the internal and external environments of policing.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Fall

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CJE6718 - Proseminar in Criminal Justice

**Course Title**
Proseminar in Criminal Justice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Capstone experience for the Criminal Justice Professional track. Reviews and integrates the six other courses in the core curriculum.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Fall
CJE6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Criminal Justice

CJE6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Criminal Justice

CJJ - Criminal Justice Juvenile Justice

CJJ6020 - The Juvenile Justice System
Course Title
The Juvenile Justice System
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Criminal Justice graduate program, graduate certificate, or C.I.
Course Description
This course will focus on the development and philosophy of the Juvenile Justice System; the measurement of delinquency, theories and correlates of delinquency and prevention.
College
College of Community Innovation and Education
Department
Department of Criminal Justice
Terms of Offering
Fall
CJJ6124 - Seminar in Prosecuting Juvenile Offenders

**Course Title**
Seminar in Prosecuting Juvenile Offenders

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admitted to Criminal Justice Ph.D. Program or Public Affairs (Criminal Justice track) Ph.D. program or C.I.

**Course Description**
This course will provide students with an advanced understanding of the theory and research surrounding the major decision-making stages in the juvenile court process.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Summer

CJJ6126 - Seminar in Juvenile Corrections

**Course Title**
Seminar in Juvenile Corrections

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admitted to Criminal Justice Ph.D. or Public Affairs (Criminal Justice track) Ph.D. program or C.I.

**Course Description**
This course will focus on community and institutional correctional settings in juvenile justice, evidence-based screening and assessment techniques, and juvenile justice interventions and their effectiveness.

**College**
College of Community Innovation and Education

**Department**
Department of Criminal Justice

**Terms of Offering**
Fall
CJJ6546 - Seminar in Policing and Prevention in the Juvenile Justice System

Course Title
Seminar in Policing and Prevention in the Juvenile Justice System

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to Criminal Justice Ph.D. program or Public Affairs Ph.D. Criminal Justice track or C.I.

Course Description
This course will provide students with an advanced understanding of the initial stages of the juvenile system and the strategies used to intervene.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Spring

CJL - Criminal Justice Law and Process

CJL5049 - International Perspectives on Law and Justice

Course Title
International Perspectives on Law and Justice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Examination of the legal and criminal justice systems of other nations and territories through lecture, seminar, research and field visits.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional
CJL6520 - American Criminal Courts

Course Title
American Criminal Courts

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program or C.I.

Course Description
Critically study and evaluate day-to-day discretionary decisions of prosecutors, judges and defense attorneys and identify how their decisions shape the broad discretionary power this institution yields.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Odd Fall

CJL6568 - Law and Social Control

Course Title
Law and Social Control

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Criminal Justice graduate program, graduate certificate, or C.I.

Course Description
This course will examine the types of behavior the state has sought to control and the means employed to exert such control.

College
College of Community Innovation and Education

Department
Department of Criminal Justice

Terms of Offering
Occasional

CJT - Criminal Justice Technology
CJT5937 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Community Innovation and Education  
**Department**  
Department of Criminal Justice

CJT6938 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Community Innovation and Education  
**Department**  
Department of Criminal Justice

CLA - Classical and Ancient Studies

CLA5917 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Arts and Humanities  
**Department**  
Department of Philosophy

CLA5937 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Arts and Humanities  
**Department**  
Department of Philosophy
CLP - Clinical Psychology

CLP5166 - Advanced Psychopathology

Course Title
Advanced Psychopathology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to Clinical Psychology Masters Program or C.I.

Course Description
Consideration of classification, causation, management and treatment of emotional disorders. Review of theories and research in the field. Lecture/Laboratory.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

CLP5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Psychology

CLP5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Psychology
CLP6181 - Psychological Theories of Substance Abuse Treatment
Course Title
Psychological Theories of Substance Abuse Treatment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Acceptance to the Clinical Psychology Master's or PhD programs or C.I.

Course Description
Focuses on the mechanisms responsible for, and the treatment of, substance tolerance and dependence.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

CLP6191 - Multicultural Psychotherapy
Course Title
Multicultural Psychotherapy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Clinical Psychology Master's Program or Ph.D. Program or C.I.

Course Description
The theories, issues, and techniques of counseling within a multicultural environment.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall
Spring
CLP6195C - Introduction to Psychotherapy

**Course Title**
Introduction to Psychotherapy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to Clinical Psychology Masters Program or C.I.

**Course Description**
Counseling theory with experiential lab component including practice in specific techniques in counseling.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Fall

**Current Fee Per Student**
$0

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CLP6321 - Psychotherapy in Community Settings

**Course Title**
Psychotherapy in Community Settings

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Clinical Psychology Master's Program or C.I.

**Course Description**
Theoretical concepts, research methods, and current areas of exploration in the field of community psychology and its impact on the community mental health system.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Summer
CLP6441C - Individual Psychological Assessment I

Course Title
Individual Psychological Assessment I

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites

- Admission to Clinical Psychology Masters Program or C.I.

Course Description
Theory and techniques of psychological assessment with emphasis on intake interviewing, cognitive and personality assessment, and report writing.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring

Current Fee Per Student
$20

CLP6449C - Career and Lifestyle Assessment

Course Title
Career and Lifestyle Assessment

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites

- Admission to Clinical Psychology Masters Program or C.I.

Course Description
Application and theory of obtaining, integrating, and utilizing career, vocational, and lifestyle assessment in clinical settings such as rehabilitation centers, mental health centers, and hospitals.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring

Current Fee Per Student
$15.00
CLP6457C - Group Psychotherapy

Course Title
Group Psychotherapy

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to the Master's in Clinical Psychology Program or C.I.

Course Description
Group counseling: theory and practice. Experiential group laboratory.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring

CLP6459C - Human Sexuality, Marriage, and Sex Therapies

Course Title
Human Sexuality, Marriage, and Sex Therapies

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to Master's in Clinical Psychology Program or C.I.

Course Description
Human sexuality, theory and practice of specific techniques of marriage and sex therapy.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Summer
CLP6460C - Introduction to Child, Adolescent, and Family Therapies

Course Title
Introduction to Child, Adolescent, and Family Therapies

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to the Clinical Psychology Mater’s Program or C.I.

Course Description
Theories and practices of child, adolescent and family therapies. Includes practice in specific techniques.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

CLP6461 - Cognitive-Behavioral Therapy

Course Title
Cognitive-Behavioral Therapy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Must be enrolled in the Clinical Psychology PhD Program.

Course Description
Covers theory, outcomes, and methods of cognitive-behavioral therapy. Includes discussion of variations of CBT, as targeted to particular psychiatric disorders.

College
College of Sciences

Department
Department of Psychology
CLP6527c - Measurement, Research Design, and Statistical Analysis in Clinical Psychology I

**Course Title**
Measurement, Research Design, and Statistical Analysis in Clinical Psychology I

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
0

**Corequisites**
- Admission into the Master's in Clinical Psychology Thesis Track or instructor permission.

**Course Description**
This course provides an overview of approaches to research design, statistical analysis, and measurement in the field of clinical psychology.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Fall

CLP6528C - Measurement, Research Design, and Statistical Analysis in Clinical Psychology II

**Course Title**
Measurement, Research Design, and Statistical Analysis in Clinical Psychology II

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Master's in Clinical Psychology, Research/Thesis Track, CLP6527c, or instructor permission.

**Course Description**
A continuation of CLP 6527C. CLP 6527C is a prerequisite. Topics covered include research design, statistical analysis, and measurement in the field of clinical psychology.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Fall
CLP6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Psychology

CLP6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Psychology

CLP6932 - Ethical and Professional Issues in Mental Health Practices

Course Title
Ethical and Professional Issues in Mental Health Practices

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master's in Clinical Psychology Program or C.I.

Course Description
Examination of codes of ethics, laws, and professional standards in the mental health field.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring
CLP6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

CLP6949 - Predoctoral Internship

Course Title
Predoctoral Internship

Credits Hours
1

Lab/Studio/Field Work Hours
40

Prerequisites
- Acceptance to Clinical Psychology Ph.D. program or C.I.

Course Description
Placement in an approved setting on a full-time basis for one calendar year. Required of all clinical Ph.D. students. This course is intended for the Ph.D. in Clinical Psychology, in certain instances graduate students in other programs may enroll.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Every Semester
CLP7125 - Lifespan Psychopathology

Course Title
Lifespan Psychopathology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Clinical Psychology PhD or C.I.

Course Description
Clinical presentation and etiological theories of psychological disorders across the lifespan.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

CLP7136 - Child Psychopathology

Course Title
Child Psychopathology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Clinical Psychology PhD or C.I.

Course Description
Clinical presentation and etiological theories of psychological disorders in children and adolescents.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall
CLP7145C - Introduction to Clinical Psychology and Psychotherapy

Course Title
Introduction to Clinical Psychology and Psychotherapy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to PSYCH-PH

Course Description
A historical look at clinical psychology, psychotherapy, and clinical research; and training in basic clinical skills.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring
Fall

CLP7429 - Clinical Neuropsychological Assessment

Course Title
Clinical Neuropsychological Assessment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Clinical Psychology Ph.D. program or C.I.

Course Description
Provides foundational knowledge in clinical neuropsychological assessment, with a focus on assessment of adult clinical patients by doctoral-level clinical psychologists.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
CLP7446C - Child Psychological Assessment
Course Title
   Child Psychological Assessment
Credits Hours
   3
Lab/Studio/Field Work Hours
   2
Prerequisites
   - Admission to Psychology Ph.D. Clinical track or C.I.
Course Description
   Emphasis is placed on theories and techniques of psychological assessment with children and adolescents. Primary emphasis on interviewing, observation skills, and administering intelligence tests.
College
   College of Sciences
Department
   Department of Psychology
Terms of Offering
   Spring

CLP7447C - Clinical Psychological Assessment
Course Title
   Clinical Psychological Assessment
Credits Hours
   3
Lab/Studio/Field Work Hours
   2
Prerequisites
   - Admission to Psychology PhD Clinical track or C.I.
Course Description
   Theory and techniques of adult psychological assessment with emphasis on intake interviewing, cognitive and personality assessment, and report writing.
College
   College of Sciences
Department
   Department of Psychology
Terms of Offering
   Spring
CLP7474 - Child Empirically Supported Treatments
Course Title
Child Empirically Supported Treatments

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Clinical Psychology PhD or C.I.

Course Description
Empirically supported psychological and pharmacological treatments for children and adolescents.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Odd Spring

CLP7494 - Empirically Supported Psychotherapies
Course Title
Empirically Supported Psychotherapies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Clinical Psychology PhD or C.I.

Course Description
Empirically supported psychological and pharmacological treatment across the lifespan.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
CLP7623 - Ethical and Professional Issues in Clinical Psychology

Course Title
Ethical and Professional Issues in Clinical Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Clinical Psychology PhD or C.I.

Course Description
APA Code of Ethics, relevant laws, and professional standards in clinical psychology.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

CLP7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Psychology
CLP7939 - ST: Social and Developmental Aspects of Relationships

Course Title
ST: Social and Developmental Aspects of Relationships

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to PSYCH–PHD

Course Description
Enhance the understanding of the formation, maintenance, and dissolution of close relationships through the integration of social and developmental psychological perspectives.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring

CLP7939 - Affective Neuroscience

Course Title
Affective Neuroscience

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Advanced recent knowledge on the topic of affective neuroscience. We will review and discuss recent scientific journal articles across a range of subtopics related to the neuroscience of emotion. We will include both healthy and disordered functioning of the neural and hormonal systems that relate to a wide range of emotions.

College
College of Sciences

Department
Department of Psychology
### CLP7942L - Supervision Practicum

**Course Title**
Supervision Practicum

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to Clinical Psychology Ph.D. program or C.I.

**Course Description**
Advanced practicum focused on learning in didactic and experiential effective clinical supervision. Graded S/U. May be used in the degree program a maximum of 2 times.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Every Semester

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### CLP7943C - Clinical Practicum

**Course Title**
Clinical Practicum

**Credits Hours**
1 - 12

**Lab/Studio/Field Work Hours**
12-Jan

**Prerequisites**
- Acceptance to Clinical Psychology Ph.D. program or C.I.

**Course Description**
Clinical activities performed in an approved university or community setting under faculty/staff supervision. This course is intended for the Ph.D. in Clinical Psychology, in certain instances graduate students in other programs may enroll.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Every Semester

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**Current Fee Per Student**
$15.00

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### CNT - Computer Networks

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2022-2023 Graduate Catalog
CNT5008 - Computer Communication Networks Architecture

Course Title
Computer Communication Networks Architecture

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4768C.

Course Description
Computer networks, layers, protocols and interfaces, local area networks networking.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

CNT5410L - Cyber Operations Lab

Course Title
Cyber Operations Lab

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- IDC 5602 or C.I.

Course Description
Programming, software, and hardware components for cybersecurity operations related to system administration, firewalls, cyber attack, cyber defense, security, secure architectures at network and computer level.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Summer
CNT5805 - Network Science

Course Title
Network Science

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Undergraduate degree in CS, EE, or CpE. The emerging science of complex networks and their applications. Focus will be on algorithms, mathematical theories, and computational methods that analyze complex networks and predict their behavior.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Even Fall

CNT5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science
CNT6418 - Computer Forensics II
Course Title
Computer Forensics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CGS 5131 or C.I.

Course Description
Computer network protocols and security models, cryptography, network intrusion detection and prevention, digital evidence collection and legal issues involved in network forensics, wireless security and forensics.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring

Current Fee Per Student
$50.00

CNT6519 - Wireless Security and Forensics
Course Title
Wireless Security and Forensics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Digital Forensics MS major or CDA 5106 or COT 5405.

Course Description
Advanced topics in wireless network security, security management, cryptography, wireless forensics and related areas.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall
CNT6707 - Advanced Computer Networks

Course Title
Advanced Computer Networks

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CNT 5008 or C.I.

Course Description
Recent advances in computer networks, overlay and multihomed networks, routing and multicasting, Internet friendly protocols, congestion control, QoS-differentiated services, cellular networks.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring

CNT6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

CNT7919 - Doctoral Research

Course Title
Doctoral Research

Credits Hours
0 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

COM - Communications
COM5312 - Introduction of Communication Research

Course Title
Introduction of Communication Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Provides the foundational knowledge and skills for conducting research in graduate Communication coursework including both quantitative and qualitative approaches.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Every Semester

COM5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media
COM5932 - Topics in Communication Theory and Research

Course Title
Topics in Communication Theory and Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Communication M.A. program or C.I. In-depth examination of a particular area of communication theory and research, emphasizing major developments, current uses, implications for research, and overall impact on the field.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional

COM5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Nicholson School of Communication and Media

2022-2023 Graduate Catalog
COM6008 - Proseminar in Communication

**Course Title**
Proseminar in Communication

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Communication M.A. program or C.I.

**Course Description**
Introduction to the field of communication at the graduate level emphasizing skills and practices needed to succeed at the graduate level and as a professional in the field.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Spring
Fall

COM6046 - Interpersonal Communication

**Course Title**
Interpersonal Communication

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status.

**Course Description**
Survey of theoretical perspectives in interpersonal communication.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Spring
COM6047 - Interpersonal Support in the Workplace

Course Title
Interpersonal Support in the Workplace

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Graduate standing.

Course Description
Interpersonal theories relevant to understanding marginalization and building supportive relationships in the workplace.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional

COM6048 - Communication in Close Relationships

Course Title
Communication in Close Relationships

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Graduate standing or C.I.

Course Description
Classic and contemporary theory of communication in close relationships.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
COM6121 - Communication Management

Course Title
Communication Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Analysis and development with reference to particular media. Organizational theory, structure, and behavior. Management principles and operations.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional

COM6145 - Organizational Communication

Course Title
Organizational Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Organizational communication theory, perspectives, methods and current issues that reflect the centrality of communication processes in constituting organizing and organizations.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
COM6303 - Qualitative Research Methods in Communication

Course Title
Qualitative Research Methods in Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Communication M.A. or C.I. and complete COM5312 or equivalent with a minimum grade of B-

Course Description
Examination of qualitative methods in communication with emphasis on interviewing, ethnography, focus groups, observational methods and data interpretation.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
Fall

COM6304 - Quantitative Research Methods in Communication

Course Title
Quantitative Research Methods in Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Communication M.A. program or C.I.

Course Description
Examination of quantitative methods in communication. Topics include experimental research design, sampling procedures, survey design, content analysis, and introduction to data analysis.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Every Semester
COM6401 - Communication Theory

Course Title
Communication Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examination and critical analysis of the major theories of communication processes as well as their underlying metatheoretical foundations.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring

COM6463 - Studies in Intercultural Communication

Course Title
Studies in Intercultural Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Comprehensive survey of methodological and theoretical issues and concepts in intercultural and cross-cultural research.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
COM6466 - Persuasion in the Media
Course Title
Persuasion in the Media
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
The underlying persuasive messages about cultural norms and values that are communicated through mass media channels such as movies, music, etc.
College
College of Sciences
Department
Nicholson School of Communication and Media
Terms of Offering
Occasional

COM6467 - Studies in Persuasion
Course Title
Studies in Persuasion
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate status.
Course Description
Analysis of research and major theoretical perspectives in persuasive communication.
College
College of Sciences
Department
Nicholson School of Communication and Media
Terms of Offering
Occasional
**COM6468 - Communication and Conflict**

**Course Title**
Communication and Conflict

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Research seminar in the study of communication and conflict.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional

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**COM6525 - Communication Strategy and Planning**

**Course Title**
Communication Strategy and Planning

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Focus on the creation of communication strategies in conjunction with overall organizational goals, with emphasis on decision making and management.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional
COM6535 - Communication Campaigns

Course Title
Communication Campaigns

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Communication M.A. program or Strategic Communication Ph.D. program or C.I.

Course Description
This seminar examines the strategies and effects of public communication campaigns with a focus on foundational theory and empirical research.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional

COM6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media

COM6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media
COM6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Nicholson School of Communication and Media

COM6949 - Cooperative Education in Communications

Course Title
Cooperative Education in Communications

Credits Hours
0 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media

COM7025 - Health Communication

Course Title
Health Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Strategic Communication Ph.D. or C.I.

Course Description
Examines issues of healthcare provider-patient communication, health literacy, public health, health in other cultures, ethics in health communication, and mass media health messages.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall
COM7227 - Seminar in Health Communication

Course Title
Seminar in Health Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COM 7025, admission to Strategic Communication Ph.D. program, or C.I.

Course Description
A seminar-format advanced course designed to explore in depth a specific area of focus in health communication.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring

COM7236 - Seminar in Risk and Crisis Communication

Course Title
Seminar in Risk and Crisis Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COM 7815, admission to Strategic Communication Ph.D. program, or C.I.

Course Description
An advanced course designed to explore in depth a specific area of focus in risk and crisis communication selected by the instructor.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
COM7325 - Seminar in Research Methods

Course Title
Seminar in Research Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Strategic Communication Ph.D. program or C.I.

Course Description
In-depth examination of a particular quantitative or qualitative research method in communication with a focus on producing a publishable study.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring

COM7464 - Theory Building for Strategic Communication

Course Title
Theory Building for Strategic Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Strategic Communication Ph.D. program or C.I.

Course Description
Required for communication doctoral students and is designed for all graduate students who have an interest in paradigmatic issues related to communication theory construction.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
COM7528 - Communication and Community Engagement

**Course Title**
Communication and Community Engagement

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Strategic Communication Ph.D. program or C.I.

**Course Description**
Project based on a partnership with a community organization.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall

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COM7529 - Strategic Communication

**Course Title**
Strategic Communication

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Strategic Communication Ph.D. program or C.I.

**Course Description**
A survey of theories, principles, and processes of strategic communication in diverse contexts including advertising, public relations, health, crisis, instruction, persuasion, journalism, and organizational communication.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall
COM7745 - Current Issues in Communication

Course Title
Current Issues in Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Strategic Communication Ph.D. program or C.I.

Course Description
In-depth examination of a particular area of communication theory and research, emphasizing major developments, current uses, implications for research, and overall impact on the field.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
Fall

COM7815 - Risk Communication

Course Title
Risk Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Strategic Communication Ph.D. program or C.I.

Course Description
A message-centered approach to the study of risk communication. The course establishes risk communication as a distinct sub-discipline within the communication discipline.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall
COM7821 - Instructional Communication in Strategic Contexts

**Course Title**
Instructional Communication in Strategic Contexts

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Strategic Communication Ph.D. program or C.I.

**Course Description**
Instructional communication examines communication that occurs when instructing others. This course will include strategic instructional communication theories, research and best practices.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall

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COM7920 - Doctoral Colloquium

**Course Title**
Doctoral Colloquium

**Credits Hours**
0 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Strategic Communication Ph.D. program of C.I.

**Course Description**
Focuses on progression through the NSCM Ph.D. degree program, the research process, guidance on the academic profession, and written and oral presentation of scholarly research.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall

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COP - Computer Programming
COP5021 - Program Analysis

Course Title
Program Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 4020 and COT 4210 or C.I.

Course Description
Static analysis of programs including theoretical and practical limitations, data flow analysis, abstract interpretation, and type and effect systems. Tools to automate program analysis.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Even Spring

COP5537 - Network Optimization

Course Title
Network Optimization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Techniques for modeling complex, interconnected systems as networks; optimization with graph theory; algorithms, data structures, and computational complexity; statistical methods for studying large, evolving networks.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall
COP5611 - Operating Systems Design Principles

Course Title
Operating Systems Design Principles

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• COP 4600.

Course Description
Structure and functions of operating systems, process communication techniques, high-level concurrent programming, virtual memory systems, elementary queuing theory, security, distributed systems, case studies.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring

COP5621 - Compiler Construction

Course Title
Compiler Construction

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
COP4020 and COT 4210. Techniques in the design and implementation of compilers. Optimization, code generation, error recovery, attributed grammars. A project is required.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Odd Fall
COP5711 - Parallel and Distributed Database Systems

Course Title

Parallel and Distributed Database Systems

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- COP 4710.

Course Description

Storage manager, implementation techniques for parallel DBMSs, distributed DBMS architectures, distributed database design, query processing, multidatabase systems.

College

College of Engineering and Computer Science

Department

Department of Computer Science

Terms of Offering

Occasional

COP5818 - Full Stack Development for FinTech

Course Title

Full Stack Development for FinTech

Credits Hours

3

Lab/Studio/Field Work Hours

0

Corequisites

- COT 5480.

Course Description

Fundamentals of web technologies; front-end design using HTML5, CSS3 and ReactJS; SQL and NoSQL databases; back-end design.

College

College of Engineering and Computer Science

Department

Department of Computer Science

Terms of Offering

Fall
COP5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

COP5937 - ST: Hacking For Defense (H4D): Solving National Security Issues with the Lean Launchpad

Course Title
ST: Hacking For Defense (H4D): Solving National Security Issues with the Lean Launchpad

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Teaches entrepreneurship and provides opportunity for teams to rapidly build products and services that solve real problems for the Defense (DoD) and Intelligence Community (IC).

College
College of Engineering and Computer Science

Department
Department of Computer Science

COP6526 - Parallel and Cloud Computation

Course Title
Parallel and Cloud Computation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 5711.

Course Description
The course introduces students to parallel computing across the hardware-software stack. Special emphasis is placed on parallel programming using emerging architectures and technologies.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall

2022-2023 Graduate Catalog
COP6616 - Multicore Programming
Course Title
Multicore Programming

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 5405 or C.I.

Course Description
The course focuses on the computational principles, algorithms, and tools for multi-processor programming. Topics of study include programming models and frameworks, lock-free synchronization, transactional memory.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

COP6730 - Transaction Processing
Course Title
Transaction Processing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 4710.

Course Description
Transaction models, transaction monitors, isolation concepts and lock manager implementation, log manager, transaction manager, file and buffer management, client-server computing.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional
COP6731 - Advanced Database Systems

Course Title
Advanced Database Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 5711.

Course Description
Selected topics concerning object-oriented databases, multimedia databases, active databases, temporal databases, spatial databases, and information systems.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

COP6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

COP6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science
COP6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Computer Science

COP7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Computer Science

COP7939 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Computer Science

COT - Computer Theory
COT5405 - Design and Analysis of Algorithms
Course Title
Design and Analysis of Algorithms

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 4210.

Course Description
Classification of algorithms, e.g., recursive, divide-and-conquer, greedy, etc. Data Structures and algorithm design and performance. Time and space complexity analysis.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
Fall

COT5480 - Computational Methods in FinTech I
Course Title
Computational Methods in FinTech I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Fundamentals of data structures; definition and analysis of algorithms; basic classes of algorithms; graph algorithms; algorithms for identity, privacy, anonymity and automation.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Fall
COT5570 - Introductory Mathematics for Modeling and Simulation

Course Title
Introductory Mathematics for Modeling and Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Preparatory analytical survey of material for the M&S core Math Foundations course: algebra, discrete mathematics, and basic probability.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Fall

COT5600 - Quantum Computing

Course Title
Quantum Computing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 3503C.

Course Description
This course introduces basic concepts in quantum circuits and quantum algorithms.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
COT5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Computer Science

COT5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Computer Science

COT6410 - Computational Complexity

Course Title
Computational Complexity

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

• COT 5405.

Course Description
Properties of algorithms, computational equivalence of machines, time-space complexity measures, examples of algorithms of different complexity, classification of algorithms, classes P and NP.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional
COT6417 - Algorithms on Strings and Sequences

Course Title
Algorithms on Strings and Sequences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 5405 or C.I.

Course Description
Study of algorithms for exact and approximate string pattern matching, sequence alignment and multiple string alignment.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

COT6481 - Computational Methods in FinTech II

Course Title
Computational Methods in FinTech II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 5480.

Course Description
Advanced data structures; advanced algorithms; automated accounting, risk management and tax automation; computer architectures and applications to financial technology; parallel programming on multiple processors and GPUs.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Spring
COT6505 - Computational Methods/Analysis I

Course Title
Computational Methods/Analysis I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 5405.

Course Description
Analysis of direct and iterative solutions of systems of linear equations, eigenvalues and vectors and roots of nonlinear equations, error analysis.

College
College of Engineering and Computer Science

Department
Department of Computer Science

Terms of Offering
Occasional

COT6571 - Mathematical Foundations of Modeling and Simulation

Course Title
Mathematical Foundations of Modeling and Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COT 5570 or equivalent background.

Course Description
Provides analytical background material relevant to the M&S program. Emphasize critical thinking and problem solving and conducts survey probability and statistics, linear algebra and calculus.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Spring
COT6602 - Introduction to Quantum Information Theory  
**Course Title**  
Introduction to Quantum Information Theory  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- COT 5600 Quantum Computing.  

**Course Description**  
Basic concepts in quantum information theory and quantum error correcting codes.  

**College**  
College of Engineering and Computer Science  

**Department**  
Department of Computer Science  

**Terms of Offering**  
Occasional  

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COT6909 - Research Report  
**Course Title**  
Research Report  

**Credits Hours**  
1 - 99  

**College**  
College of Engineering and Computer Science  

**Department**  
Department of Computer Science  

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COT6918 - Directed Research  
**Course Title**  
Directed Research  

**Credits Hours**  
1 - 99  

**College**  
College of Engineering and Computer Science  

**Department**  
Department of Computer Science
COT6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Computer Science

CPO - Comparative Politics

CPO5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
School of Politics, Security, and International Affairs

CPO5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
School of Politics, Security, and International Affairs
CPO6038 - Political Development

Course Title
Political Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to graduate degree-seeking program, or C.I. Analyze the political determinants of economic development and the economic causes of political outcomes such as democratization.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

CPO6056 - Politics of Authoritarian Regimes

Course Title
Politics of Authoritarian Regimes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to a graduate degree-seeking program or C.I.

Course Description
Introduction to the politics of authoritarian regimes. Review of academic work on how autocrats stay in power and the characteristics of political contention in authoritarian states.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
CPO6058 - Revolution and Political Violence

Course Title
Revolution and Political Violence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Studies or C.I.

Course Description
Seminar addresses theory and analytical models of political revolutions and insurgencies with cases, especially Third World.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

CPO6091 - Seminar in Comparative Politics

Course Title
Seminar in Comparative Politics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to a graduate degree-seeking program or C.I.

Course Description
Introduction to the theory and methodology of comparative politics, institutions, and contextual factors of selected political systems such as Canada, European, and Third World nations.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Even Spring
CPO6206 - Comparative Politics of Africa

Course Title
Comparative Politics of Africa

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate degree-seeking program or C.I.

Course Description
Explores the conceptual, theoretical, methodological issues in the study of African political systems.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

CPO6307 - Issues in Latin American Politics

Course Title
Issues in Latin American Politics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Examines and evaluates major issues in Latin American politics employing political science theories and methodologies.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
CPO6407 - Comparative Politics of the Middle East

**Course Title**
Comparative Politics of the Middle East

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or consent of the instructor.

**Course Description**
A study of issues in Middle Eastern politics as studied in comparative politics including political regimes, political economy, political violence, environmental politics, and gender politics.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional

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CPO6446 - Comparative Political Parties

**Course Title**
Comparative Political Parties

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Theories of the formation, structure, organization, and behavior of political parties as well as theories of political party systems.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional
CPO6729 - Global Security in the Age of Migration

Course Title
Global Security in the Age of Migration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Explore migration as the outcome and cause of security concerns, while introducing students to theories of migration, conflict, security, and border control policies.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

CPO6776 - Comparative Rising Powers

Course Title
Comparative Rising Powers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate degree-seeking program or C.I..

Course Description
Examination of key contemporary rising powers in Eurasia: China, India, and Russia. It focuses on a comparative analysis of the nature of their rise.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
CPO6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
School of Politics, Security, and International Affairs

CPO6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
School of Politics, Security, and International Affairs

CPO6938ST2 - Special Topics in Comparative Politics: Politics of Authoritarian Regimes
Course Title
Special Topics in Comparative Politics: Politics of Authoritarian Regimes
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Introduction to the politics of authoritarian regimes. Review of academic work on how autocrats stay in power and the characteristics of political contention in authoritarian states.
College
College of Sciences
Department
School of Politics, Security, and International Affairs

CRW - Creative Writing
CRW5130 - Form and Theory in Creative Writing

Course Title
Form and Theory in Creative Writing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Creative Writing MFA or C.I.

Course Description
Formal and theoretical study of creative writing of given genre (poetry, short fiction, etc). May be used in the degree program a maximum of 3 times.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

CRW5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

CRW5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of English
CRW5948C - Creative Writing Service Learning

**Course Title**
Creative Writing Service Learning

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to Creative Writing MFA or C.I.

**Course Description**
On-site experience leading and sharing creative writing in community settings. May be used in the degree program a maximum of 3 times.

**College**
College of Arts and Humanities

**Department**
Department of English

**Terms of Offering**
Occasional

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CRW6025 - Advanced Graduate Writing Workshop

**Course Title**
Advanced Graduate Writing Workshop

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Creative Writing MFA and C.I.

**Course Description**
Writing and revising in one established form. Advanced Graduate Writing Workshop may be taken five times (for a total of 15 hours) in order to produce a book-length manuscript (fiction, poetry, or other genre). May be used in the degree program a maximum of 5 times.

**College**
College of Arts and Humanities

**Department**
Department of English

**Terms of Offering**
Spring
Fall
CRW6720 - Professional Development in Creative Writing

Course Title
Professional Development in Creative Writing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Professional development lectures, discussions, and hands-on activities to assist graduate students in preparing for successful careers in writing, editing/publishing, and teaching.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Fall

CRW6721 - Literary Journal Editing

Course Title
Literary Journal Editing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Creative Writing MFA program or C.I.

Course Description
Experiential-learning course. Students explore the history and current issues in literary publishing and participate in editing and producing an existing national journal published by the English department.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional
CRW6806C - Teaching Creative Writing

Course Title
Teaching Creative Writing

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Graduate standing in MFA in Creative Writing program or C.I.

Course Description
Addresses trends in creative writing pedagogy, workshop alternatives, course design, classroom management, role of creative writing in academia.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Fall

CRW6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

CRW6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English
CRW6920 - Fiction Workshop

Course Title
Fiction Workshop

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admissions to the MFA Creative Writing Program and C.I.

Course Description
Examination of fiction with an emphasis on the development of individual styles, writing and revising and preparing for publication.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

CRW6921 - Multi-Genre Workshop

Course Title
Multi-Genre Workshop

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admissions to the MFA Creative Writing Program or C.I.

Course Description
Examination of two or more genres with an emphasis on the development of individual styles, writing and revising and preparing for publication.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Spring
Fall
CRW6922 - Novel Workshop

Course Title
Novel Workshop

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admissions to the MFA Creative Writing Program or C.I.

Course Description
Examination of the novel with an emphasis on the development of individual styles, writing and revising and preparing for publication.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Spring
Fall

CRW6923 - Nonfiction Workshop

Course Title
Nonfiction Workshop

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admissions to the MFA Creative Writing Program or C.I.

Course Description
Examination of creative nonfiction with an emphasis on the development of individual styles, writing and revising and preparing for publication.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Spring
Fall
CRW6924 - Poetry Workshop

**Course Title**
Poetry Workshop

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admissions to the MFA Creative Writing Program or C.I.

**Course Description**
Examination of poetic forms with an emphasis on the development of individual styles, writing and revising and preparing for publication.

**College**
College of Arts and Humanities

**Department**
Department of English

**Terms of Offering**
Spring
Fall

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CRW6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
Department of English

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CRW6946 - Internship

**Course Title**
Internship

**Credits Hours**
1 - 99

**Prerequisites**
- Instructor Consent Required

**College**
College of Arts and Humanities

**Department**
Department of English

**Terms of Offering**
Occasional
CRW6976 - Scholarship and Publication Models

Course Title
Scholarship and Publication Models

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Creative Writing MFA, graduate standing or C.I.

Course Description
Overview of thesis-writing process from proposal to defense, and possible subsequent publication.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

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CWR - Civil Water Resources

CWR5125 - Groundwater Hydrology

Course Title
Groundwater Hydrology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CWR 4124C or C.I.

Course Description
Theories of groundwater movement, geological factors, analysis and design techniques, etc. Emphasis on practical considerations.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
CWR5205 - Hydraulic Engineering  
**Course Title**  
Hydraulic Engineering  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- CWR 4202C or C.I.  
**Course Description**  
Concepts of fluid mechanics and hydrodynamics applied to natural and man-made flow of intent to civil and environmental engineering.  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Civil, Environmental, and Construction Engineering  
**Terms of Offering**  
Occasional

CWR5515 - Numerical Methods in Civil and Environmental Engineering  
**Course Title**  
Numerical Methods in Civil and Environmental Engineering  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- CWR 4202C or C.I.  
**Course Description**  
This course will present intermediate to advanced numerical methods theory and include code development and error assessment, while targeting civil and environmental engineering applications.  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Civil, Environmental, and Construction Engineering  
**Terms of Offering**  
Occasional
CWR5545 - Water Resources Engineering

Course Title
Water Resources Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CWR 4120 or C.I.

Course Description
Systems identification and solution to complex water allocation problems, and other hydraulic engineering designs and operations using economic analysis and operations research techniques.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

CWR5634 - Water Resources in a Changing Environment

Course Title
Water Resources in a Changing Environment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CWR 4120.

Course Description
To model and understand potential impact of climate change and human activities on hydriodic systems and various spatial and temporal scales.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Odd Fall
CWR5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

CWR5935 - Water First Seminar Series

Course Title
Water First Seminar Series

Credits Hours
0

Lab/Studio/Field Work Hours
0

Course Description
This course will expose students to state-of-the-art interdisciplinary water and environmental research as well as real world applications. It will provide networking opportunities with potential collaborators and prospective employers at other academic institutions, industry partners, or government agencies. PhD students supervised by faculty in the water resources or environmental engineering groups will be encouraged to actively participate by presenting their thesis and dissertation research in the seminar series.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring
Fall

CWR5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering
CWR5999 - Coastal Systems Analysis

**Course Title**
Coastal Systems Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CWR 4120, CWR 4633C, GLY 4730 (Mar. Geol.), OCE 3008, or C.I

**Course Description**
Coastal features; drivers of coastal flooding; climate variability and change; numerical and statistical modeling of extremes; coastal flood risk, management and adaptation.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Even Fall

CWR6007 - Ecohydraulics

**Course Title**
Ecohydraulics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
CWR 5634 OR Admission to the M.S. in Biology, Ph.D. in Conservation Biology, or Certificate in Conservation Biology or C.I. Sustainable and multi-objective management of rivers, shorelines and aquatic resources, this course investigates fundamental linkages between physical processes and ecological responses in engineered and natural systems.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Even Spring
CWR6102 - Advanced Hydrology

Course Title
Advanced Hydrology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CWR 4120C or C.I.

Course Description
Single site and regional frequency analysis; modeling hydrologic systems; lumped and distributed event models for urban and natural drainage basins; continuous simulation; real-time forecasting.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

CWR6126 - Groundwater Modeling

Course Title
Groundwater Modeling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CWR 5125.

Course Description
Review of contemporary computer-based groundwater flow models and their application to environmental engineering problems.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
CWR6235 - Open Channel Hydraulics

**Course Title**
Open Channel Hydraulics  

**Credits Hours**
3  

**Lab/Studio/Field Work Hours**
0  

**Prerequisites**
- CWR 4202C or C.I.  

**Course Description**
Free surface flow studies by empirical and theoretical methods for the design, operation, and management of open channels.

**College**
College of Engineering and Computer Science  

**Department**
Department of Civil, Environmental, and Construction Engineering  

**Terms of Offering**
Occasional

CWR6236 - River Engineering and Sediment Transport

**Course Title**
River Engineering and Sediment Transport  

**Credits Hours**
3  

**Lab/Studio/Field Work Hours**
0  

**Prerequisites**
- CWR 4633C or C.I.  

**Course Description**
River morphology and regime with stabilization and modification of river courses. Sediment transport including control methods and modeling.

**College**
College of Engineering and Computer Science  

**Department**
Department of Civil, Environmental, and Construction Engineering  

**Terms of Offering**
Occasional
CWR6535 - Modeling Water Resources Systems

Course Title
Modeling Water Resources Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CWR 4120 or C.I.

Course Description
Contemporary mathematical models for water quality and quantity considerations including computer-based hydraulic and hydrologic models.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

CWR6539 - Finite Elements in Surface Water Modeling

Course Title
Finite Elements in Surface Water Modeling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CWR 5515 or C.I.

Course Description
This course explores finite element techniques as applied to surface water modeling, introduces theory and applications, and develops means by which errors can be appraised.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
CWR6606 - Stochastic River Network Hydro-Geomorphology  
**Course Title**  
Stochastic River Network Hydro-Geomorphology  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Course Description**  

**College**  
College of Engineering and Computer Science  
**Department**  
Department of Civil, Environmental, and Construction Engineering  
**Terms of Offering**  
Odd Spring  

CWR6660 - Water Policy, Planning and Governance  
**Course Title**  
Water Policy, Planning and Governance  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- CWR 4633C or C.I.  
**Course Description**  
This course deals with political, social, economic and administrative systems that affect the use, development, planning, and management of water resources at different levels.

**College**  
College of Engineering and Computer Science  
**Department**  
Department of Civil, Environmental, and Construction Engineering  
**Terms of Offering**  
Even Fall
CYP5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

CYP5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

CYP6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

CYP6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology
CYP6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

CYP6942 - Practicum in Psychological Counseling
Course Title
Practicum in Psychological Counseling
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Master's in Clinical Psychology Program or C.I.
Course Description
Training in psychotherapy skills in a community setting under faculty supervision.
College
College of Sciences
Department
Department of Psychology
Terms of Offering
Spring
CYP6948C - Psychology Internship

Course Title
Psychology Internship

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
20

Prerequisites
- Admission to the Clinical Psychology Master’s Program and CYP6942, or C.I.

Course Description
Supervised placement in community setting for 10-30 hours per week.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall
Spring
Summer

DEP - Developmental Psychology

DEP5057 - Developmental Psychology

Course Title
Developmental Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to a psychology graduate program or C.I.

Course Description
Psychological aspects of development including intellectual, social, and personality factors.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring
Fall
DEP5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

DEP5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

DEP6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

DEP6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology
DEP6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Sciences

**Department**
Department of Psychology

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DIG - Digital Media

DIG5137 - Information Architecture

**Course Title**
Information Architecture

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Film and digital media majors or C.I.

**Course Description**
Exploration of the process of formal design of interactive processes, examining the theories of usability and object oriented design.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall
DIG5348C - Digital Asset Creation

Course Title
Digital Asset Creation

Credits Hours
3

Lab/Studio/Field Work Hours
3

Course Description
Introduction to digital art asset creation fundamentals, including figure drawing, digital painting, 3d modeling, animation, character setup, technical art and contemporary game engine topics.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

DIG5366C - Animation and Visual Effects Production II

Course Title
Animation and Visual Effects Production II

Credits Hours
3

Lab/Studio/Field Work Hours
2

Course Description
Topics in animation and visual effects project creation and production pipeline management in a team environment.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Spring
DIG5378C - Editing for Animation and Visual Effects I: Theory and Production

**Course Title**
Editing for Animation and Visual Effects I: Theory and Production

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Course Description**
Exploration of history and grammar of editing will be examined, adapted and applied to the specific needs of narrative animation and live-action visual effects.

**College**
College of Arts and Humanities

**Department**
School of Visual Arts and Design

**Terms of Offering**
Spring

DIG5385C - Visual Effects for Animation and Live Action I

**Course Title**
Visual Effects for Animation and Live Action I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Course Description**
Application of digital tools to generate visual effects animation for successful integration with animate and live action media, and the aesthetic critique of results.

**College**
College of Arts and Humanities

**Department**
School of Visual Arts and Design

**Terms of Offering**
Spring
DIG5386C - Animation and Visual Effects Production I

Course Title

Animation and Visual Effects Production I

Credits Hours

3

Lab/Studio/Field Work Hours

2

Course Description

Production of a short animated or visual effects concept to completion with the focus on working as an individual to meet deadlines.

College

College of Arts and Humanities

Department

School of Visual Arts and Design

Terms of Offering

Fall

DIG5387C - Visual Development and Design for Animation and Visual Effects

Course Title

Visual Development and Design for Animation and Visual Effects

Credits Hours

3

Lab/Studio/Field Work Hours

2

Course Description

Design concepts are applied to animation environments to create a “personality of place”, visual continuity, and to create the visual universe of the story.

College

College of Arts and Humanities

Department

School of Visual Arts and Design

Terms of Offering

Spring
DIG5439C - Script and Story Development for Animation and Visual Effects

Course Title
Script and Story Development for Animation and Visual Effects

Credits Hours
3

Lab/Studio/Field Work Hours
2

Course Description
Emerging Media MFA - Animation and Visual Effects track student or C.I. Students will write and storyboard original narrative short animation, or script and storyboard solutions addressing specific live action problems in visual effects.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Fall

DIG5487 - Media Aesthetics

Course Title
Media Aesthetics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Aesthetics within digital environments, relationship between technologies, visual elements, and the body. Introduction to theoretical traditions along with written and digital projects, including an exhibition.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall
DIG5508 - Programming for Digital Media

Course Title
Programming for Digital Media

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course provides a foundation for understanding and applying the elements of programming which target interactive media. Topics include functions, variables, classes, data types, and design patterns.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

DIG5529C - Production for Media

Course Title
Production for Media

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Admission to Digital Media MS program or C.I.

Course Description
Theories and practices of production processes for interactive entertainment.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall
**DIG5548C - Rapid Prototype Production I**

**Course Title**
Rapid Prototype Production I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to Digital Media MS or C.I. Students engage in interdisciplinary teams to create rapid development projects.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall

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**DIG5557C - Production and Design I**

**Course Title**
Production and Design I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to FIEA MS in Interactive Entertainment program or C.I.

**Course Description**
Theory and methodology for creation and communication of videogame designs.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall
DIG5565C - Digital Asset Management Systems

**Course Title**

Digital Asset Management Systems

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

3

**Prerequisites**

- Graduate standing or C.I.

**Course Description**


**College**

College of Sciences

**Department**

Nicholson School of Communication and Media

**Terms of Offering**

Occasional

DIG5637 - Game Programming Fundamentals

**Course Title**

Game Programming Fundamentals

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission to FIEA M.S. in Interactive Entertainment program or C.I.

**Course Description**

Introduction to real-time game programming fundamentals, including computer architecture and low-level programming and optimization. Focus on game consoles and cross-platform software development.

**College**

College of Sciences

**Department**

Nicholson School of Communication and Media

**Terms of Offering**

Fall
DIG5831 - Computational Media  
**Course Title**  
Computational Media  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- DIG 5508 Programming for Digital Media.  

**Course Description**  
Computational media techniques used in interactive media, focusing on authorship and creative applications. Topics include style transfer, voice recognition, and synthesis and text generation.  

**College**  
College of Sciences  

**Department**  
Nicholson School of Communication and Media  

**Terms of Offering**  
Spring  

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DIG5856 - Experimentation, Application and Innovation in Games  
**Course Title**  
Experimentation, Application and Innovation in Games  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- DIG 5529C or C.I.  

**Course Description**  
Survey and development of games being used in non-traditional applications, such as medical simulation, education and research.  

**College**  
College of Sciences  

**Department**  
Nicholson School of Communication and Media  

**Terms of Offering**  
Spring
DIG5865 - The History of Animation and Visual Effects

Course Title
The History of Animation and Visual Effects

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Emerging Media MFA - Animation and Visual Effects track student or C.I. History of animation and visual effects from beginning to present covering a wide-range of narrative, independent, commercial, and experimental projects produced throughout the world.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Fall

DIG5875C - Introduction to Modeling and Simulation

Course Title
Introduction to Modeling and Simulation

Credits Hours
3

Prerequisites
- STA 2023 or equivalent

Course Description
Introduction to the theory and practice of modeling and simulation with emphasis on multidisciplinary scientific underpinnings.

College
College of Graduate Studies

Department
College of Graduate Studies Dean’s Office

Terms of Offering
Summer
Spring
Fall

DIG5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media
DIG6099C - Media Distribution

Course Title
Media Distribution

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- DIG 6558 or C.I.

Course Description
Theory and practical application of videogame messaging, advertisement and distribution.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Summer

DIG6136 - Design for Interactive Media

Course Title
Design for Interactive Media

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- DIG 5508: Programming for Digital Media, or C.I.

Course Description
This studio course gives students tangible experience with the design principles, methodologies, and processes used for interactive media.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
DIG6365C - Media and Music for Animation and Visual Effects

Course Title
Media and Music for Animation and Visual Effects

Credits Hours
3

Lab/Studio/Field Work Hours
1

Course Description
Course will examine the use and effect of music/sound effects in various forms of media: film, games, commercials, and other forms of multimedia.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Spring

DIG6377C - Visual Effects for Animation and Live Action II

Course Title
Visual Effects for Animation and Live Action II

Credits Hours
3

Lab/Studio/Field Work Hours
2

Course Description
DIG 5385C Visual Effects for Animation and Live Action I or C.I. Integration of digital elements and live action footage and the aesthetic critique of those results.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Spring
DIG6379C - Editing for Animation and Visual Effects II: Practical Editing

Course Title
Editing for Animation and Visual Effects II: Practical Editing

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- DIG 5378C or C.I.

Course Description
Students will apply practical editing solutions and incorporate audio to their own animation or visual effects material.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Fall

DIG6384C - Directing for Animation and Visual Effects

Course Title
Directing for Animation and Visual Effects

Credits Hours
3

Lab/Studio/Field Work Hours
2

Course Description
Emerging Media MFA - Animation and Visual Effects track student or C.I. Topics in production planning and adaptation of live action directing techniques to unique problems in Animation and Visual Effects.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Fall
DIG6388C - Animation and Visual Effects Production III

Course Title
Animation and Visual Effects Production III

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- DIG 5366C or C.I.

Course Description
Preproduction (including storyboards, visual development, and character and environmental design) for individual MFA thesis project created and presented for faculty approval.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Fall

DIG6389C - Animation and Visual Effects Production IV

Course Title
Animation and Visual Effects Production IV

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- DIG 6388C or C.I.

Course Description
Research and production of an initial animation test demonstrating the visual look and process strategy for final MFA thesis project and presentation for faculty approval.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Spring
**DIG6432 - Transmedia Story Creation**

**Course Title**
Transmedia Story Creation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Film and digital media majors or C.I.

**Course Description**
Repurposing of traditional stories: creation of authentic environments and the emergence of new authoring scenarios.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Summer
Fall

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**DIG6436 - Ethnographic Storytelling and New Media**

**Course Title**
Ethnographic Storytelling and New Media

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Theories and practices related to ethnographic storytelling using new media.

**College**
College of Arts and Humanities

**Department**
College of Arts and Humanities Dean’s Office

**Terms of Offering**
Odd Fall
DIG6524 - Studio 1
Course Title
Studio 1
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
• Graduate standing.
Course Description
Studio project management, conceptualization, and prototyping for intensive digital projects. Create project proposal and timeline, concept and design documentation, and prototype, and participate in critiques.
College
College of Sciences
Department
Nicholson School of Communication and Media
Terms of Offering
Fall

DIG6528 - Studio 2
Course Title
Studio 2
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
• Graduate standing.
Course Description
Continuing studio sequence for students producing a culminating digital project. Students produce a polished final project for public showcase and/or exhibition.
College
College of Sciences
Department
Nicholson School of Communication and Media
Terms of Offering
Spring
DIG6546 - Previsualization and Concept Development

**Course Title**
Previsualization and Concept Development

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Film and digital medial majors, DIG 6136, or C.I.

**Course Description**
Skills and knowledge for planning and developing a new feature length film or digital media project.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall

DIG6547C - Preproduction and Prototyping

**Course Title**
Preproduction and Prototyping

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- DIG 5529C or C.I.

**Course Description**
Standard pre-production process in interactive entertainment.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall
DIG6551 - Theory and Practice of Interactive Storytelling

Course Title
Theory and Practice of Interactive Storytelling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Analysis and creation of interactive stories within and across platforms. What makes stories compelling, how to exploit the particular affordances of media through authors communicate.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring

DIG6558 - Production and Design II

Course Title
Production and Design II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- DIG 5557C or C.I.

Course Description
Advanced principles of game design and production including integrating development skills into level designs and complete games.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
**DIG6559C - Advanced Digital Asset Creation**  
**Course Title**  
Advanced Digital Asset Creation  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
3  

**Course Description**  
Advanced techniques in digital asset specializations such as 2d art, mobile application art, 3d modeling and texturing, animation, lighting and effects and technical art topics.  

**College**  
College of Sciences  

**Department**  
Nicholson School of Communication and Media  

**Terms of Offering**  
Spring  

**DIG6589C - Digital Asset Portfolio Development**  
**Course Title**  
Digital Asset Portfolio Development  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
3  

**Course Description**  
DIG 6559C or C.I. Concentration in professional digital artist portfolio development in specializations such as 2d art, mobile application art, 3d modeling and texturing, animation, lighting and effects and technical art topics.  

**College**  
College of Sciences  

**Department**  
Nicholson School of Communication and Media  

**Terms of Offering**  
Summer
DIG6605 - Physical Computing
Course Title
Physical Computing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- DIG 5137.

Course Description
Introduces methods of connecting physical objects to microprocessor controllers in order to build original interactive components for research or artistic purposes.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Odd Spring

DIG6635 - Applied Programming Mechanics
Course Title
Applied Programming Mechanics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- DIG 6638 or C.I.

Course Description
Application of advanced software development principles for interactive entertainment.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Summer
DIG6638 - Advanced Game Programming

**Course Title**
Advanced Game Programming

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
DIG 5637 or C.I. Advanced principles of software development for interactive entertainment.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Spring

DIG6647 - History and Theory of Dynamic Media

**Course Title**
History and Theory of Dynamic Media

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Contemporary interactive media theory and history of convergence between computing, fine arts, and narrative media. Through hands on interactive media production, synthesis and evaluation-oriented projects.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall
DIG6718C - Interactive Entertainment Project

Course Title
Interactive Entertainment Project

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- DIG 5046C or C.I.

Course Description
Students implement a complete game, based on designs pre-produced and prototyped in previous courses.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

DIG6812 - Digital Interaction for Informal Learning

Course Title
Digital Interaction for Informal Learning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Theories of digital media interaction that apply to the design of interfaces that help people learn in informal contexts.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
DIG6817 - Contemporary Topics in Interactive Media

Course Title
Contemporary Topics in Interactive Media

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Digital media research topics including games for health, social impact, and art; folklore in interactive media; data visualizations and informal learning; extended reality design.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional

DIG6825 - Research Methods for Interactive Media

Course Title
Research Methods for Interactive Media

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Scholarly and creative research design and methods for interactive media. Topics: research questions, literature reviews, qualitative, quantitative, and mixed methods, and story world research.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
DIG6836 - Humanistic Data Analysis

Course Title
Humanistic Data Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
A hands-on approach to procedural methods of analysis, including text-mining, topic modeling, and other approaches to textual and historical data.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Odd Fall

DIG6866C - Technical Problem Solving for Animation and Visual Effects

Course Title
Technical Problem Solving for Animation and Visual Effects

Credits Hours
3

Lab/Studio/Field Work Hours
2

Course Description
Emerging Media MFA - Animation and Visual Effects track student or C.I. Addresses and solves unique problems presented by individualized graduate thesis projects in animation and visual effects.

College
College of Arts and Humanities

Department
School of Visual Arts and Design

Terms of Offering
Fall
DIG6944C - Game Design Practicum

Course Title
Game Design Practicum

Credits Hours
6

Lab/Studio/Field Work Hours
6

Prerequisites
- DIG 5046C or C.I.

Course Description
Supervised experience supplementing theoretical and practical experiences involving new research developments or partnerships within industry.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

DIG6947C - Digital Venture Practicum

Course Title
Digital Venture Practicum

Credits Hours
6

Lab/Studio/Field Work Hours
4

Course Description
Principles and application of digital venture business development, IP rights, market research, iterative production, monetization, support and distribution as it relates to a start-up entity.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall
EAB - Experimental Analysis of Behavior

EAB5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

EAB5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

EAB6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology
EAB6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

EAB6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

EAS - Engineering: Aerospace

EAS5123 - Intermediate Aerodynamics
Course Title
Intermediate Aerodynamics
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- EAS 4134
Corequisites
- EML 5060.
Course Description
Aerodynamic characteristics of airfoils, finite wings, waves, wing-body combinations, viscous flow and flow instabilities. Airfoil design.
College
College of Engineering and Computer Science
Department
Department of Mechanical and Aerospace Engineering
Terms of Offering
Occasional
EAS5157 - V/Stol Aerodynamics and Performance

Course Title
V/Stol Aerodynamics and Performance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EAS 4105

Corequisites
- EML 5060.

Course Description
Momentum theory, blade element theory, hover and forward flight, stability, aeroelasticity.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EAS5211 - Aeroelasticity

Course Title
Aeroelasticity

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EAS 3101 or EML 3701 and EML 4225.

Course Description
Concerned with consequences and trade-offs created by interactions between aerodynamic forces and structural deformation. Static aeroelastic problems; control effectiveness; lift effectiveness; divergence. Dynamic aeroelasticity; flutter and vibration.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EAS5302 - Direct Energy Conversion

**Course Title**
Direct Energy Conversion

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EML 3101 and EML 4142.

**Course Description**
Direct methods of energy conversion; particular emphasis on fuel cells, thermoelectrics, thermionics, solar energy, photovoltaics and magnetohydrodynamics. Analysis and systems design.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional

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EAS5315 - Rocket Propulsion

**Course Title**
Rocket Propulsion

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EAS 4134 or EML 4703.

**Course Description**
Analysis and performance of rocket motors; selection and thermochemistry of chemical propellants: liquid and solid propellant rockets.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional
EAS5407C - Mechatronic Systems

**Course Title**
Mechatronic Systems

**Credits Hours**
3

**Prerequisites**
- EML 3034C

**Course Description**
Discrete control techniques for aerospace mechatronic systems. Controller design, test and evaluation.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional

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EAS5535 - Engineering Design for Aerospace Vehicles

**Course Title**
Engineering Design for Aerospace Vehicles

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EAS 4700C, EAS 4710C, EML 4501C, EML 4502C, or equivalent.

**Course Description**
Applications of the design process to aerospace vehicles. A system approach will be emphasized. Techniques for optimizing interface requirements will be covered.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional
EAS5917 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Mechanical and Aerospace Engineering

EAS5937 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Mechanical and Aerospace Engineering

EAS6138 - Advanced Gas Dynamics  
**Course Title**  
Advanced Gas Dynamics  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- EML 5713.  
**Corequisites**  
- EML 5060.  
**Course Description**  
Analysis of steady and unsteady transonic, supersonic and hypersonic flows. Shock waves, nozzles, diffusers, and high speed wind tunnels.  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Mechanical and Aerospace Engineering  
**Terms of Offering**  
Odd Fall
EAS6185 - Turbulent Flow

Course Title
Turbulent Flow

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• EML 5060 and EML 5713.

Course Description
Phenomena and methods of characterizing turbulence; spatial and temporal velocity correlation; energy spectra; transition prediction; turbulent boundary layer equations; hot wire and LDV measurement techniques.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Even Fall

EAS6222 - Non-Destructive Evaluation of Aero-Structures

Course Title
Non-Destructive Evaluation of Aero-Structures

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• EAS 4200 or EML 5237.

Course Description
Overview of methods employed for non-destructive evaluation of structures in the context of damage tolerant analysis.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring
EAS6250 - Structural and Dynamic Stability

Course Title
Structural and Dynamic Stability

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5237, EML 5271.

Course Description
Concepts of and analysis methods for elastic and dynamic stability and associated bifurcations, including for high strain rates and structures with multiple stable equilibria.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring

EAS6403C - Attitude Determination and Control

Course Title
Attitude Determination and Control

Credits Hours
3

Lab/Studio/Field Work Hours
3

Course Description
Spacecraft attitude dynamics and control. Pointing and stabilization methods. Optimal and learning algorithms applied to perturbation analysis.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering
EAS6405 - Advanced Flight Dynamics

Course Title
Advanced Flight Dynamics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EAS6414 - Estimation of Dynamical Systems in Aerospace Engineering

Course Title
Estimation of Dynamical Systems in Aerospace Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5271, EML 5060 or C.I.

Course Description
Concepts of parameter estimation, probability concepts in estimation and estimation of dynamical systems relevant to aerospace systems applications.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Fall
EAS6415 - Guidance, Navigation and Control

Course Title
Guidance, Navigation and Control

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5060, EAS 6507.

Course Description
Inertial and GPS navigation techniques. Explicit and implicit guidance formulations. Robust control applications to aircraft, missile and space vehicles.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EAS6507 - Topics of Astrodynamics

Course Title
Topics of Astrodynamics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5271 or C.I.

Course Description
Spacecraft attitude dynamics and control. Orbital mechanics. Optimal control of aerospace vehicles. Emphasis is on recent developments and applications.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EAS6722 - Multidisciplinary Optimization Under Uncertainty

**Course Title**
Multidisciplinary Optimization Under Uncertainty

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EML 5060 or C.I.

**Course Description**
Formulation of design objectives as optimization problems. Application of optimization techniques to design. Surrogate techniques for analytical and experimental optimum engineering design. Applications to project.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Fall

EAS6807C - Aerospace Measurements Instrumentation

**Course Title**
Aerospace Measurements Instrumentation

**Credits Hours**
3 - 99

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- EAS 4134, EAS 3800C, EAS 6507, EML 5060, or C.I.; not open to students who have credit for EML 6308C.

**Course Description**
Inertial instruments (i.e.; gyros, accelerometers), thermal, fluid, optical sensors and actuators, for space and aerodynamic applications.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional
EAS6808 - Space Environment and Payload Instrumentation

**Course Title**
Space Environment and Payload Instrumentation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EAS 4504, EML 5060 or C.I.

**Course Description**
Space environment and payload instrumentation. Characterization of space environment and payload instrumentation methods.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional

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EAS6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

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EAS6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering
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<th>Credits Hours</th>
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<th>Department</th>
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<td>Special Topics</td>
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<td>Department of Mechanical and Aerospace Engineering</td>
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<td>EAS7980</td>
<td>Dissertation</td>
<td>1 - 99</td>
<td>College of Engineering and Computer Science</td>
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<td>EBD5917</td>
<td>Directed Research</td>
<td>1 - 99</td>
<td>College of Community Innovation and Education</td>
<td>School of Teacher Education</td>
</tr>
</tbody>
</table>

**Course Description**

Dissertation

**Terms of Offering**

Occasional

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**EBD - Education: Emotional Behavioral Disorders**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits Hours</th>
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<th>Department</th>
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<tbody>
<tr>
<td>EBD5917</td>
<td>Directed Research</td>
<td>1 - 99</td>
<td>College of Community Innovation and Education</td>
<td>School of Teacher Education</td>
</tr>
</tbody>
</table>
EBD699 - Research Report
Course Title: Research Report
Credits Hours: 1 - 99
College: College of Community Innovation and Education
Department: School of Teacher Education

EBD6918 - Directed Research
Course Title: Directed Research
Credits Hours: 1 - 99
College: College of Community Innovation and Education
Department: School of Teacher Education

ECM - Engineering: Computer Mathematics

ECM5917 - Directed Research
Course Title: Directed Research
Credits Hours: 1 - 99
College: College of Engineering and Computer Science
Department:

ECM5937 - Special Topics
Course Title: Special Topics
Credits Hours: 3
College: College of Engineering and Computer Science
Department:
ECM6308 - Current Topics in Parallel Processing

**Course Title**
Current Topics in Parallel Processing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Research topics in parallel architectures, including, but not limited to, systolic architectures, wavefront arrays, interconnection networks, reconfigurable architectures and fast algorithms. May be used in the degree program a maximum of 2 times.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Even Fall

ECM6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**

ECM6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
ECM6938 - Special Topics

Course Title  
Special Topics  

Credits Hours  
3  

College  
College of Engineering and Computer Science  

Department  

ECO - Economics

ECO5445 - Introduction to Business Analytics

Course Title  
Introduction to Business Analytics  

Credits Hours  
3  

Lab/Studio/Field Work Hours  
0  

Prerequisites  
- Admission to the Master's in Economics or C.I.  

Course Description  
Students are introduced to important tools of business analytics; first, UNIX, SQLite, and Python; then analyzing data using R and implementing numerical methods using Python.  

College  
College of Business Administration  

Department  
Department of Economics  

Terms of Offering  
Fall  

ECO5917 - Directed Research

Course Title  
Directed Research  

Credits Hours  
1 - 99  

College  
College of Business Administration  

Department  
Department of Economics
ECO5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Economics

ECO6115 - Economic Analysis of the Firm
Course Title
Economic Analysis of the Firm
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- CBA Master's program of Study Foundation Core.
Course Description
Commodity price and output determination; factor price determination and functional income distribution; analysis of different types of markets.
College
College of Business Administration
Department
Department of Economics
Terms of Offering
Spring
Fall
ECO6118 - Microeconomic Theory I

Course Title
Microeconomic Theory I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 3101 (or equivalent), ECO 3410 (or equivalent), and ECO 6403 (concurrent enrollment), or C.I.

Course Description
Microeconomic principles governing individual decision-making relative to the theory of the firm and consumer choice.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Fall

ECO6315 - Seminar in Contemporary Economic Issues

Course Title
Seminar in Contemporary Economic Issues

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 6118 or equivalent and ECO 6403 or equivalent.

Course Description
Discussion and analysis of current economic problems and issues. May be used in the degree program a maximum of 3 times only when course content is different.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Occasional
ECO6403 - Mathematical Economics

**Course Title**
Mathematical Economics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ECO 3101 (or equivalent), ECO 3410 (or equivalent), and ECO 6118 (co-requisite), or C.I.

**Course Description**
Covers the foundations of economic theory with particular focus on the mathematical methods that are indispensable for proper understanding of the economic literature.

**College**
College of Business Administration

**Department**
Department of Economics

**Terms of Offering**
Fall

ECO6404 - Games and Economic Behavior

**Course Title**
Games and Economic Behavior

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing and ECO 6118.

**Course Description**
The study of interactive and strategic behavior relying on Experimental Game Theoretic literature.

**College**
College of Business Administration

**Department**
Department of Economics

**Terms of Offering**
Even Fall

2022-2023 Graduate Catalog
ECO6416 - Applied Business Research Tools

**Course Title**
Applied Business Research Tools

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Master's of Business Administration program foundation core courses; Core I Courses.

**Course Description**
Multivariate methods and related tools applied to analyze business and economic data as an aid in decision making.

**College**
College of Business Administration

**Department**
Department of Economics

**Terms of Offering**
Fall

ECO6424 - Econometrics I

**Course Title**
Econometrics I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ECO 6403 (or equivalent) and ECO 6118 (or equivalent), or C.I.

**Course Description**
Develops basic statistical methods and provides coverage of the general linear regression model, generalized least squares, generalized methods of moments, and multi-equation models.

**College**
College of Business Administration

**Department**
Department of Economics

**Terms of Offering**
Fall
ECO6445 - Data Wrangling

**Course Title**
Data Wrangling

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ECO 5445, ECO 6405, ECO 6406, and ECO 6118.

**Course Description**
Systematic development of data wrangling methods for use in business analytics as well as quantitative business fields.

**College**
College of Business Administration

**Department**
Department of Economics

**Terms of Offering**
Spring

ECO6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Business Administration

**Department**
Department of Economics

ECO6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Business Administration

**Department**
Department of Economics
ECO6935 - Capstone in Business Analytics I

Course Title
Capstone in Business Analytics I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master's in Economics or C.I.

Course Description
Provides students with the culminating academic experience, a forum in which to develop and carry out research of a well-defined business analytics problem.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Occasional

ECO6936 - Capstone in Business Analytics II

Course Title
Capstone in Business Analytics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to the Master's in Economics or C.I., Capstone I. Provides students with continuing culminating academic experience, a forum in which to write-up as well as present research of a well-defined business analytics problem.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Occasional
ECO6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Economics

ECO6949 - Cooperative Education in Economics

Course Title
Cooperative Education in Economics

Credits Hours
0 - 99

College
College of Business Administration

Department
Department of Economics

ECO7116 - Microeconomic Theory II

Course Title
Microeconomic Theory II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 6118 (or equivalent) and ECO 6403 (or equivalent).

Course Description
Advanced treatment of demand, production, cost, and market theory under varying competitive conditions.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Spring
ECO7426 - Econometrics II

Course Title
Econometrics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 6424 (or equivalent) or C.I.

Course Description
Covers estimation of static and dynamic panel data models, and limited dependent variable models as well as sample selection problems.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Fall

ECO7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Economics

ECO7939 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Economics

ECP - Economic Problems & Policy
ECP5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics

ECP5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Economics

ECP5957 - Study Abroad
Course Title
Study Abroad
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics

ECP6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics
ECP6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics

ECP6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Economics

ECP7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics

ECS - Economic Systems & Development

ECS5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics
ECS5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Economics

ECS6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics

ECS6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics

ECS6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Economics

ECT - Education:Career/Technical
ECT5907 - Independent Study
Course Title
Independent Study

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

ECT5917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

ECT5937 - Special Topics
Course Title
Special Topics

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

ECT5944 - Internship
Course Title
Internship

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education
<table>
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<td>ECT5949</td>
<td>Cooperative Education</td>
<td>0 - 99</td>
<td>College of Community Innovation and Education</td>
<td>Department of Educational Leadership &amp; Higher Education</td>
</tr>
<tr>
<td>ECT5957</td>
<td>Study Abroad</td>
<td>1 - 99</td>
<td>College of Community Innovation and Education</td>
<td>Department of Educational Leadership &amp; Higher Education</td>
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<tr>
<td>ECT6791</td>
<td>Research in Career Education</td>
<td>3</td>
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<td><strong>Prerequisites</strong></td>
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<td></td>
<td>- Graduate standing or C.I.</td>
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<td><strong>Course Description</strong></td>
<td>Curricular, instructional, demographic, and trends research in the field of career and technical education.</td>
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<th><strong>Term of Offering</strong></th>
<th>Spring</th>
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ECT6792 - Research Applications for Workforce Development

Course Title
Research Applications for Workforce Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Research methods for data-driven decision-making including collection, organization, and synthesis of data that apply to workforce development and training.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Spring

Current Fee Per Student
0

ECT6908 - Independent Research

Course Title
Independent Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

ECT6909 - Research Report

Course Title
Research Report

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education
ECT6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

ECT6938 - Special Topics
Course Title
Special Topics
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

ECT6946 - Graduate Internship
Course Title
Graduate Internship
Credits Hours
0 - 99
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

ECT6958 - Study Abroad
Course Title
Study Abroad
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education
ECT6971 - Treatise (Thesis or Research Report)

Course Title
Treatise (Thesis or Research Report)

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

ECT6973 - Thesis Specialist

Course Title
Thesis Specialist

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

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ECW - Education:Career/Workforce

ECW5207 - Management of Career Education Programs

Course Title
Management of Career Education Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing.

Course Description
Study and achievement of competencies needed by career and workforce education teachers, supervisors, and local administrators in the management of career education programs.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Spring
ECW5208 - Workforce Development and Training Management

**Course Title**
Workforce Development and Training Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Examination of leadership in workforce development, human resource development, talent management, and technical/industry training to include duties, environment, budget, personnel management, and policy.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Summer

**Current Fee Per Student**
0

ECW5265 - Experiential Learning in Career and Workforce Education Programs

**Course Title**
Experiential Learning in Career and Workforce Education Programs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Study of various experiential learning methods (apprenticeships, internships, job shadowing, etc.) and competency achievement to establish, manage, and coordinate programs within career and workforce education.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Fall
ECW5561 - Student Guidance in the Career/Workforce Program

Course Title
Student Guidance in the Career/Workforce Program

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Achievement of skills used by teachers and professionals as they gather student data, confer with students, and help students plan for employment or further education.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall

ECW6067 - History of Career Education in the United States

Course Title
History of Career Education in the United States

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
A detailed examination of federal legislation, associations, organizations, people, events, and other key factors that define the history of career education in the U.S.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall
ECW6105 - Career Education Curriculum Planning and Implementation

Course Title
Career Education Curriculum Planning and Implementation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Achievement of knowledge and skills necessary to participate in the initial determination, planning, organization, and implementation of new or expanded adult, career and workforce education, and technical education institutions or programs.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall

ECW6205 - Administration of Local Career Education Programs

Course Title
Administration of Local Career Education Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Organization, personnel selection and assignment, and establishment of policies and procedures for local career and workforce education programs within federal, state and local requirements.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Summer
ECW6206 - Supervision in Local Career and Technical Education Programs

**Course Title**
Supervision in Local Career and Technical Education Programs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
A study in the supervision of CTE instruction, including plans for teacher professional education, curriculum and instruction improvement, coordination of program activities, and personnel relations.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Summer

ECW6268 - School, College, and Career Readiness

**Course Title**
School, College, and Career Readiness

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
The study and achievement of the knowledge, skills, and academic preparation competencies needed to establish, maintain, and coordinate school, college, and career readiness activities and programs.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Spring
ECW6666 - Issues in Career Education

Course Title
Issues in Career Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
An examination of current issues in career education including changing work force demands and implications for secondary and postsecondary career education.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Spring

ECW6667 - Workforce Development Theory to Practice

Course Title
Workforce Development Theory to Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Examination of the theories for practice in workforce development, talent management, human resource development, and industry training programs promoting economic stability for individuals and organizations.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Spring

Current Fee Per Student
0
ECW6695 - School/Community Relations for Career and Technical Education Programs

Course Title
School/Community Relations for Career and Technical Education Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Graduate Standing or C.I.

Course Description
Assemble the knowledge and skills to utilize community resources and establish public relations procedures and practices for career and technical education (CTE) programs.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall

EDA - Education: Administration

EDA5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

EDA5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education
EDA6061 - Organization and Administration of Schools

**Course Title**
Organization and Administration of Schools

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Basic Teacher Certificate or C.I.

**Course Description**
Introduction to and overview of educational administration including governance, finance communications and information management, personnel evaluation.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Every Semester

EDA6062 - Leadership in Educational Organizations

**Course Title**
Leadership in Educational Organizations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the MA in Educational Leadership

**Course Description**
This course addresses leadership, organization, and administrative knowledge and skills needed by leaders, directors, and management.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Occasional
EDA6228 - Human Resource Processes in Education

**Course Title**
Human Resource Processes in Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the MA in Educational Leadership.

**Course Description**
Addressed will be human capital recruitment, development, retention, and evaluation are critical to all education organizations.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Occasional

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EDA6232 - Legal Aspects of School Operation

**Course Title**
Legal Aspects of School Operation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Basic Teacher Certificate or C.I.

**Course Description**
Study of state and federal laws affecting the operation of public schools emphasizing individual rights and responsibilities of students, faculty, and administrators.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Every Semester
EDA6234 - Personnel and Education Related Law

**Course Title**
Personnel and Education Related Law

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the MA in Educational Leadership.

**Course Description**
This course includes up to date national laws, legal cases, and federal policies related to personnel, students, and education organizations.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Occasional

EDA6240 - Educational Financial Affairs

**Course Title**
Educational Financial Affairs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Basic Teacher Certificate or C.I.

**Course Description**
Theoretical and practical approaches to managing school business affairs at central office and individual school levels.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Every Semester
EDA6246 - Basic Education Funding and Management

Course Title
Basic Education Funding and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the MA in Educational Leadership.

Course Description
This course addresses general funding sources, management, constraints, and ethical concerns within and beyond Florida for private, charter, for profit, not for profit, and other education organizations.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Occasional

EDA6260 - Educational Systems Planning and Management

Course Title
Educational Systems Planning and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Basic Teacher Certificate or C.I.

Course Description
Application of current educational management and behavioral theory for systems approaches in schools and educational facilities.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Every Semester
EDA6275 - Digital Leadership and Systems Management

Course Title
Digital Leadership and Systems Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the MA in Educational Leadership.

Course Description
Addressed in this course are leadership for learning, teaching, data analysis, communication, and decision making across geographic boundaries.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Occasional

EDA6300 - Community School Administration

Course Title
Community School Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
The relationships between the school and the community with special emphasis on community needs and the development of a total community school program.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Every Semester
EDA6303 - Organizations and the Community

**Course Title**
Organizations and the Community

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the MA in Educational Leadership.

**Course Description**
Addressed will be how community engagement of stakeholder groups is contextual and varies beyond Florida and outside of public education. Assumptions regarding stakeholder groups will be challenged from a social justice perspective.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Occasional

EDA6423 - Data-Based Decision Making for School Educational Leaders

**Course Title**
Data-Based Decision Making for School Educational Leaders

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Purpose is to understand and use concepts from research, measurement, and assessment to make informed and reasoned decisions.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Every Semester
**EDA6502 - Organization and Administration of Instructional Programs**

**Course Title**
Organization and Administration of Instructional Programs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Basic Teacher Certificate or C.I.

**Course Description**
Study of school organization, administration, and management with emphasis toward organizational theory, leadership, evaluation, and change and improvement strategies.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Occasional

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**EDA6909 - Research Report**

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

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**EDA6918 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education
EDA6931 - Contemporary Issues in Educational Leadership

Course Title
Contemporary Issues in Educational Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
A capstone course intended to stimulate inspection, analysis, and dialogue regarding contemporary issues and tensions facing educational leaders and educational systems.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Summer
Fall

EDA6932 - Issues in Education

Course Title
Issues in Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to the MA in Educational Leadership.

Course Description
Addressed will be issues in international, for profit, private, charter, public, virtual, and other emerging educational contexts and their unique concerns.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Occasional
EDA6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

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EDA6939 - Seminar in Educational Administration

**Course Title**
Seminar in Educational Administration

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Broad overview understanding of evaluating research and planning and conducting original research for Masters level. School administration, patterns of curriculum organization, and research projects covered.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Occasional
EDA6946 - Internship  
**Course Title**  
Internship  

**Credits Hours**  
1 - 99  

**Prerequisites**  
- C.I. Normally, the Educational Leadership internship is completed during the latter part of the degree program.  

**Course Description**  
Application must be made in semester prior to internship through the student’s adviser. May be used in the degree program a maximum of 2 times.  

**College**  
College of Community Innovation and Education  

**Department**  
Department of Educational Leadership & Higher Education  

**Terms of Offering**  
Spring  
Fall  

EDA7101 - Organizational Theory in Education  
**Course Title**  
Organizational Theory in Education  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Admission to the Educational Leadership Ed.D. Executive track, Educational Leadership Ed.S., or Curriculum and Instruction Ed.D.  

**Course Description**  
In this course, students will engage with relevant theoretical and empirical literatures regarding organizations, change, and leadership AND apply those literatures to issues of professional practice within their current professional settings, and their own proposed empirical work.  

**College**  
College of Community Innovation and Education  

**Department**  
Department of Educational Leadership & Higher Education  

**Terms of Offering**  
Spring  
Fall
EDA7192 - Educational Leadership

Course Title
Educational Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDA 7101 and EDF 7471.

Course Description
An analysis of the interactive process and functioning of groups; development of skills essential for effective educational leadership; and the change process.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Spring

EDA7193 - Instructional Leadership

Course Title
Instructional Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDA 7192 and EDF 7407.

Course Description
Study and analysis of research on leadership resulting in improved student achievement at the local, state, and national levels is the focus of this course.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Summer
EDA7195 - Politics, Governance, and Financing of Educational Organizations

**Course Title**
Politics, Governance, and Financing of Educational Organizations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDA 7215 and EDA 7224.

**Course Description**
The study of policy development as a political process; governance issues; and financial issues in education.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Spring

EDA7196 - Leadership in a Learning Organization

**Course Title**
Leadership in a Learning Organization

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Education Ed.D. program.

**Course Description**
This course emphasizes contemporary leadership theory as it applies to a learning organization; i.e., human resources, district department leadership, military, higher education or business.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Occasional
EDA7205 - Planning, Research, and Evaluation Systems in Educational Administration

Course Title
Planning, Research, and Evaluation Systems in Educational Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDA 7193 and EDA 7408.

Course Description
The study of research and evaluation methodologies, system theory, and planning and design strategies in educational administration.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Summer

EDA7215 - Community Outreach for Educational Leaders

Course Title
Community Outreach for Educational Leaders

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDA 7225 and EDA 7193.

Course Description
The course focus will be on developing understandings of the essential relationships between schools and community organizations and the community organizations with themselves.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall
EDA7224 - Human Resource Development in Educational Organizations

**Course Title**
Human Resource Development in Educational Organizations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDA 7225 and EDA 7193.

**Course Description**
The purpose of this course is to provide understanding of the functions of recruiting, selecting, placing, evaluating, and compensating people.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Fall

EDA7225 - Advanced Legal Studies in Education

**Course Title**
Advanced Legal Studies in Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDA 7192 and EDF 7407.

**Course Description**
In-depth study of current legal issues confronting educational leaders and their private sector counterparts.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Summer
EDA7919 - Dissertation Research
Course Title
Dissertation Research
Credits Hours
1 - 6
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

EDA7943 - Field Project in Educational Leadership
Course Title
Field Project in Educational Leadership
Credits Hours
3 - 6
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to doctoral candidacy in the Educational Leadership Ed.D. Executive track or program consent.
Course Description
Field experience and projects for advanced graduate students. Participation in school plant surveys, accreditation visitation, curriculum studies, administrative analysis, and field research. May be used in the degree program a maximum of 5 times.
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education
Terms of Offering
Summer
Fall
**EDA7987 - Dissertation in Practice**

**Course Title**
Dissertation in Practice

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the EdD in Educational Leadership–Executive Track/completion of EdD coursework.

**Course Description**
The dissertation in practice is the capstone experience during which doctoral students conduct scholarly research on a complex problem of practice in an education organization.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Every Semester

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**EDE - Education: Elementary**

**EDE5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**EDE5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
EDE6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EDE6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EDE6933 - Introductory Seminar in Elementary Education

Course Title
Introductory Seminar in Elementary Education

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate program or C.I.

Course Description
Overview of the MEd and MA in Elementary Education programs' policies and expectations, and exploration of the teaching profession (professional organizations, accomplished practices, publications, issues and terminology).

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Every Semester
EDE6935 - Capstone Seminar in Elementary Education

**Course Title**
Capstone Seminar in Elementary Education

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDE 6933 or C.I.

**Course Description**
As a culminating experience, this seminar provides students with the opportunity to synthesize what they have learned throughout their MEd or MA in Elementary Education program.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester

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EDE6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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EDE7919 - Research

**Course Title**
Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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EDF - Education: Foundations
EDF5607 - Language, Culture and Pedagogy: Impact and Implications

Course Title
Language, Culture and Pedagogy: Impact and Implications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
C.I. Explores in-depth issues surrounding learning needs of students from linguistically and culturally diverse populations. Research on language, culture and pedagogy will be highlighted.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional

EDF5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research
EDF6141 - Human Intelligence

Course Title
Human Intelligence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and a course in learning.

Course Description
An examination of theory and research on human intelligence and its relation to learning and cognitive performance with emphasis on implications for educational and workplace settings.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional

EDF6155 - Lifespan Human Development and Learning

Course Title
Lifespan Human Development and Learning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Research in childhood, adolescent, and adult development relevant to contemporary American education. Emphasis on application of theory to educational practice.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Every Semester
EDF6206 - Challenges of Classroom Diversity

Course Title
Challenges of Classroom Diversity

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing, EDF 6886 or C.I.

Course Description
An examination of factors which shape the curriculum in diverse classrooms with specific attention to learning, assessment and best practices appropriate for minority students.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional

EDF6216 - Motivation in Learning and Performance

Course Title
Motivation in Learning and Performance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
An examination of theory and research in learning and performance with an emphasis on practical applications for educational and workplace settings.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional
EDF6233 - Introduction to Action Research and Analysis of Classroom Practice

**Course Title**
Introduction to Action Research and Analysis of Classroom Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDG 6935, EDG 6223, and EDF 6472.

**Course Description**
Analyses of teaching and curriculum practices to inform design of data-driven assessment that provides evidence of student learning and progress.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Every Semester

EDF6237 - Principles of Learning and Introduction to Classroom Assessment

**Course Title**
Principles of Learning and Introduction to Classroom Assessment

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Students will examine prominent developmental and learning theories in depth and their implications for instruction and assessment. Key issues in educational psychology will be explored.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring
EDF6259 - Learning Theories Applied to Leadership in Teaching Practice

Course Title
Learning Theories Applied to Leadership in Teaching Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examination and application of theories of learning, leadership, and best practice in teaching that result in evidence of student progress.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Every Semester

EDF6401 - Statistics for Educational Data

Course Title
Statistics for Educational Data

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Design of educational evaluation; analysis of data, descriptive and inferential statistics, interpretation of results.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Every Semester
EDF6432 - Measurement and Evaluation in Education

Course Title
Measurement and Evaluation in Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Concepts of measurement and evaluation, classroom test construction, creation and use of derived scores, selection and use of published measurement instruments, current issues.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Every Semester

EDF6447 - Development and Validation of Educational Tests and Measures

Course Title
Development and Validation of Educational Tests and Measures

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EDF 6401, EDF 6432. Criterion and norm-referenced test development for educational agencies: specifications, item development and trial, scaling, passing scores, and test norms.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Every Semester
EDF6464 - Mixed Methods for Evaluation in Educational Settings

Course Title
Mixed Methods for Evaluation in Educational Settings

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDF 6401 and EDF 6481 or C.I.

Course Description
This service learning course will examine component and integrated mixed method designs toward developing a proposal for a program evaluation for a local nonprofit organization.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

EDF6472 - Data-Driven Decision-Making for Instruction

Course Title
Data-Driven Decision-Making for Instruction

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EDG 6935 and EDG 6223 or admission to K-8 Math and Science MEd. Understand how to design a research study, understand basic measurement principles, collect/analyze data, interpret results, report findings, apply research-to-practice in applied settings.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring
Fall
EDF6481 - Fundamentals of Graduate Research in Education

Course Title
Fundamentals of Graduate Research in Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Review and critique of research literature, use of library resources for educational research, and introduction to the concepts of research design and data analysis.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Every Semester

EDF6486 - Research Design in Education

Course Title
Research Design in Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EDF 7403 or C.I. An examination of methodological techniques for specific educational problems. Intended for students in the process of designing independent research studies.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Every Semester
EDF6496 - Teaching and Learning in Urban Settings

**Course Title**
Teaching and Learning in Urban Settings

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Analysis and discussion of instructional and assessment methods that seek to improve the quality of teaching and learning in urban schools.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Odd Fall
Even Spring

EDF6517 - Perspectives on Education

**Course Title**
Perspectives on Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
A critical analysis of the conceptual and operative educational systems developed in the United States.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester
EDF6635 - Capstone: Action Research in Teacher Leadership

Course Title
Capstone: Action Research in Teacher Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDF 6472 and EDF 6233.

Course Description
The Capstone, the final course in the program, is an action research study. The research study focuses on contemporary research in teacher leadership.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring

EDF6725 - Critical Issues in the Study of High Needs Populations

Course Title
Critical Issues in the Study of High Needs Populations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. This course explores issues of social, political, and economic conditions and their impacts on schools and communities serving diverse learners in high needs settings and their families.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer
EDF6727 - Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education

Course Title
Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Analysis of critical issues in education including social, ethical, legal, and safety concerns which impact the quality of education.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
- Spring
- Fall

EDF6809 - Introduction to Comparative and International Education

Course Title
Introduction to Comparative and International Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Surveys the salient issues, perspectives and paradigms of comparative and international education, while introducing students to cross-national comparative research design.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional
EDF6855 - Equitable Educational Opportunity and Life Chances: A Cross-National Analysis

Course Title
Equitable Educational Opportunity and Life Chances: A Cross-National Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Analysis of how gender, class, race, ethnicity, and language affect the quality and outputs of schooling, with a focus on multinational organizations and NGO's.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Summer

EDF6884 - Education as A Cultural Process

Course Title
Education as A Cultural Process

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing, EDF 6886, or C.I.

Course Description
An analysis of the theoretical underpinnings of multicultural education with special emphasis on the cultural context of American education for minority groups.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional
EDF6886 - Multicultural Education

**Course Title**
Multicultural Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A survey of multicultural education; analysis of the relationship between cultural transmission, cultural pluralism, and the learning process within American schools.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Every Semester

EDF6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

EDF6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
EDF6938 - Special Topics
Course Title
Special Topics

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EDF6938 - ST: Qualitative Research Design
Course Title
ST: Qualitative Research Design

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- EDF 7475 or equivalent.

Course Description
Design and implementation of a qualitative study, from IRB to dissemination proposal.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring
**EDF7403 - Quantitative Foundations of Educational Research**

**Course Title**
Quantitative Foundations of Educational Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDF 6401 or C.I.

**Course Description**
Examination of appropriate methods in applied educational contexts. Consideration of analysis strategies for educational data, emphasis on identification and interpretation of findings.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Every Semester

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**EDF7405 - Quantitative Methods II**

**Course Title**
Quantitative Methods II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDF 7403 and EDF 7463 or C.I.

**Course Description**
Correlation, regression, path analysis, and structural equation modeling in educational studies. Use of path analysis and structural equation modeling to test theory.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Fall
EDF7406 - Multivariate Statistics in Education  
**Course Title**  
Multivariate Statistics in Education  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- EDF 7403 and EDF 7463 or C.I.  

**Course Description**  
Statistical methods that simultaneously analyze multiple measurements on an individual or object under investigation.  

**College**  
College of Community Innovation and Education  

**Department**  
Learning Sciences & Educational Research  

**Terms of Offering**  
Spring  

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EDF7407 - Research in Educational Leadership 2  
**Course Title**  
Research in Educational Leadership 2  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- EDA 7101 and EDF 7471.  

**Course Description**  
Focus on the role of statistical analysis in the research process with a focus on a practical application for educational decision makers. The purpose of this course is to familiarize students with basic statistical methods so as to enable one to select appropriate methods and be able to apply them.  

**College**  
College of Community Innovation and Education  

**Department**  
Department of Educational Leadership & Higher Education  

**Terms of Offering**  
Spring  

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2022-2023 Graduate Catalog
EDF7408 - Research in Educational Leadership 3

**Course Title**
Research in Educational Leadership 3

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDA 7215 and EDA 7224.

**Course Description**
Research 3 continues the development of respect for the scientific spirit of inquiry and to build upon the problem-solving and research strategies studied in Research 1 and Research 2. The course is intended to enhance students' comfort and confidence with research and statistical tools that will enhance their professional effectiveness.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Spring

EDF7410 - Application of Nonparametric and Categorical Data Analysis in Education

**Course Title**
Application of Nonparametric and Categorical Data Analysis in Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDF 7403 or comparable doctoral level statistics course.

**Course Description**
Application of nonparametric and categorical data analysis procedures to education. Topics: nonparametrics for single samples, paired samples, independent samples, logistic regression, contingency tables, and logit models.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research
EDF 7415 - Latent Variable Modeling In Education

Course Title
Latent Variable Modeling In Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDF 7403 or its equivalent at the doctoral level.

Course Description
This course introduces students to the propriety, fit, parsimony, interpretation and power analysis of latent variable measurement and causal models.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

EDF 7427 - Psychometrics

Course Title
Psychometrics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDF 7403, C.I.

Course Description
Overview of classical test theory with an introduction to item response theory and generalizability theory. Techniques for evaluating validity and reliability will be applied through statistical analyses.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Odd Fall
EDF7457 - Data, Assessment, and Accountability

**Course Title**
Data, Assessment, and Accountability

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Education Ed.D. program.

**Course Description**
Differentiates data from research, emphasizes working with data sets, and guides data use to make ethical decisions and to understand and measure outcomes.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Fall

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EDF7463 - Analysis of Survey, Record, and Other Qualitative Data

**Course Title**
Analysis of Survey, Record, and Other Qualitative Data

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDF 6401 and EDF 7403 or C.I.

**Course Description**
Examination of the major elements involved in planning, conducting, and reporting survey research; emphasis is on the design, instrumentation, data analysis and data; interpretation for survey research.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Every Semester
EDF7468 - Evaluation of Complex Problems of Practice

Course Title
Evaluation of Complex Problems of Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Education Ed.D. program.

Course Description
Emphasizes evaluation of complex problems of practice, review of effective evaluation, and development of knowledge and skills in program evaluation.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional

EDF7471 - Research in Educational Leadership I

Course Title
Research in Educational Leadership I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Educational Leadership Ed.D. Executive Track

Course Description
Students will focus on the types of educational research and the fundamentals of a solid research design with an emphasis on practical applications for educational decision makers.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall
EDF7473 - Ethnography in Educational Settings

Course Title
Ethnography in Educational Settings

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- EDF 7475 or equivalent (or permission of the instructor)

Course Description
Exploration/integration of theories/practices of naturalistic, field-based studies of educational settings, proceeding from conceptualization, through data collection and analysis, to results presentation.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring

EDF7474 - Multilevel Data Analysis In Education

Course Title
Multilevel Data Analysis In Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDF 7403 or comparable doctoral level statistics course.

Course Description
The course will consider the statistical foundations of multilevel linear models, also known as hierarchical linear models (HLMs), and focuses on their application in education and behavioral sciences.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

2022-2023 Graduate Catalog
EDF7475 - Qualitative Research in Education

**Course Title**
Qualitative Research in Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Doctoral Standing or C.I.

**Course Description**
Introduction to the philosophical and conceptual basis of qualitative research methods, strategies for gathering, analyzing, and interpreting qualitative data, emerging issues.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Fall

EDF7476 - Advanced Research Methods

**Course Title**
Advanced Research Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDF 7403, EDF 7463, C.I.

**Course Description**
Review/expand knowledge of empirical research in education. Includes systematic literature review, convert conceptual questions to concrete, and multiple analytic methods.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Fall
EDF7478 - Analysis of Data for Complex Problems of Practice

**Course Title**
Analysis of Data for Complex Problems of Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Education Ed.D. program.

**Course Description**
Qualitative and quantitative methods appropriate for the analysis of data are introduced and used for solving complex problems of practice.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Occasional

EDF7479 - Applications of Technology in Qualitative Research: Data, Organization, and Analysis

**Course Title**
Applications of Technology in Qualitative Research: Data, Organization, and Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDF 7475 or C.I.

**Course Description**
Course includes use of video and audio to collect data, two leading data analysis software packages, and requires students demonstrate competencies in lab-based assignments.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research
EDF7483 - Mixed Methods Research in Education

**Course Title**
Mixed Methods Research in Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Students are expected to have completed a foundational masters-level research course.

**Course Description**
This course provides a doctoral-level introduction to mixed methods research methods and methodology design and its implementation for educational contexts. Mixed methods research combines qualitative and quantitative data collection and analysis. Since the 1990’s, this research method has evolved to include specific approaches and terminology beyond those of the individual quantitative and qualitative fields.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Summer

EDF7488 - Monte Carlo Simulation Research in Education

**Course Title**
Monte Carlo Simulation Research in Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
EDF 7403 or C.I. Students are taught how to generate univariate and multivariate data under various parametric conditions for the purpose of exploring the limits of analytical procedures.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research
EDF7489 - Quantitative Research Synthesis

Course Title
Quantitative Research Synthesis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Equivalent to EDF 6481 and EDF 7403.

Course Description
This course addresses the problem of the accumulation of evidence in scientific research through the use of quantitative methods for research synthesis and meta-analysis.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring

EDF7494 - Identifying Complex Problems of Practice

Course Title
Identifying Complex Problems of Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Education Ed.D. program.

Course Description
Emphasizes orientation toward identifying complex problems of practice through review of sound research methodology and development of knowledge and skills in program evaluation.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional
EDF7916 - Analysis and Synthesis of Educational Literature

Course Title
Analysis and Synthesis of Educational Literature

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Students will learn to find, select, critically analyze, and synthesize educational research and scholarship.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Even Spring

EDF7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

EDF7939 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research
EDF7947 - Internship in Methodology, Measurement, and Analysis

Course Title
Internship in Methodology, Measurement, and Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDF 7403, EDF 7463, and C.I.

Course Description
This course provides practical application of research skills developed through course work. The student will complete/participate in an approved research project.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional

EDG - Education: General

EDG5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EDG5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education
EDG5941 - Clinical Practice

**Course Title**
Clinical Practice

**Credits Hours**
2 - 8

**Lab/Studio/Field Work Hours**
11

**Course Description**
Admission to STEP II, III or IV. Clinical Internship in an appropriate educational setting under the direction of a university supervisor or peer teacher.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

EDG6223 - Curriculum Theory, Organization, and Policy

**Course Title**
Curriculum Theory, Organization, and Policy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
An exploration and examination of foundations and leadership decision-making in curriculum design, development, organization, and policy.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Every Semester
EDG6224 - Curriculum Policy Analysis

**Course Title**
Curriculum Policy Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Overview and synthesis of major components of policy involving curriculum. Exploration of the relationship between curriculum policy and curriculum evaluation as parts of analysis.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Odd Spring

EDG6285 - Evaluation of School Programs

**Course Title**
Evaluation of School Programs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
History of program evaluation, systems approaches to program evaluation, concepts of stakeholder and qualitative approaches to program evaluation, the role of evaluator and administrator.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Occasional
EDG6329 - Quality Teaching Practices

Course Title
Quality Teaching Practices

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Valid teaching certificate.

Course Description
Focus is on skills and competencies of quality reflective educators. Teaching episodes are videotaped and analyzed against national standards of teaching quality.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional

EDG6415 - Principles of Instruction and Classroom Management

Course Title
Principles of Instruction and Classroom Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or consent of department chair.

Course Description
Students are exposed to various methods of delivering instruction, as well as organizational and management skills. Students microteach and view lessons to develop reflective practices.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall
EDG6636 - Impact of Social Contexts on Teaching and Learning

Course Title
Impact of Social Contexts on Teaching and Learning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EDF 6725. Provides analysis and discussion of instructional and assessment methods that seek to improve the quality of teaching and learning of students/community members in high needs settings. Further, the course is designed to assist students in applying the content of the course to an informed educational practice.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring

EDG6775 - Exploring Global Educational Issues in International Contexts

Course Title
Exploring Global Educational Issues in International Contexts

Credits Hours
1 - 3

Lab/Studio/Field Work Hours
0

Prerequisites
• Graduate standing.

Course Description
Guided field experience in global issues challenging the educational community worldwide, from both academic and experiential perspectives. In conjunction with international field experience/study abroad.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional
EDG6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

EDG6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

EDG6935 - Introductory Seminar in Teacher Leadership
Course Title
Introductory Seminar in Teacher Leadership
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing and admitted to Teacher Leadership MED.

Course Description
Examine current leadership trends in educational contexts and critically analyze the role of collaborative leadership in school improvement.
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research
Terms of Offering
Every Semester
EDG6938 - Special Topics
Course Title
Special Topics
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

EDG6940 - Graduate Internship
Course Title
Graduate Internship
Credits Hours
1 - 8
Lab/Studio/Field Work Hours
8-Jan
Prerequisites
- Approval of student internship office.
Course Description
Internship in an appropriate educational setting under the direction of a qualified field supervisor and/or a university supervisor. May be repeated for credit.
College
College of Community Innovation and Education
Department
School of Teacher Education
EDG7221 - Advanced Curriculum Theory

**Course Title**
Advanced Curriculum Theory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDG 6223 or C.I.

**Course Description**
An analysis of the research base which supports the various dimensions of the curriculum field.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Occasional

EDG7325 - Models of Teaching and Instructional Theory

**Course Title**
Models of Teaching and Instructional Theory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDG 6223; EDF 7232 or C.I.

**Course Description**
Examination of models of teaching. Focus on the roles of the teacher, applicable contexts and learning goals; historical, philosophical, learning, and research basis.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Even Fall
Even Spring

2022-2023 Graduate Catalog
**EDG7919 - Dissertation Research**

**Course Title**
Dissertation Research

**Credits Hours**
1 - 6

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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**EDG7921 - Critical Issues in Teaching, Learning, and Development**

**Course Title**
Critical Issues in Teaching, Learning, and Development

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admitted to EDUC-PHD

**Course Description**
Examination of relevant literature surrounding research and practice of teaching, learning, and development. Examines major themes, ideas, perspectives, and programs in teaching, learning, and development.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester
EDG7947 - Laboratory of Practice

**Course Title**
Laboratory of Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Education Ed.D. program.

**Course Description**
Guided internship: student placement in a leadership setting in a school, social service agency, private or community setting that is involved with learning or development. May be used in the degree program a maximum of 2 times.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Occasional

EDG7948 - Internship in Teaching, Learning, and Development

**Course Title**
Internship in Teaching, Learning, and Development

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admitted to EDUC-PHD

**Course Description**
Internship placement determined by the advisor and aligned with research interests of the student in discipline setting/s related to teaching, learning, and development.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester
EDG7951 - Professional Scholarship and Grant Writing in Teaching, Learning, and Development

**Course Title**
Professional Scholarship and Grant Writing in Teaching, Learning, and Development

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admitted to EDUC-PHD

**Course Description**
Examination of professional scholarship and grant writing in teaching, learning, and development. Students review and edit professional works and review funding agencies.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester

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EDG7981 - Research in Teaching, Learning and Development

**Course Title**
Research in Teaching, Learning and Development

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admitted to EDUC-PHD

**Course Description**
An analysis and evaluation of scholarly research in teaching, learning, and development. Students will specify an area of interest and develop a research prospectus.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester

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2022-2023 Graduate Catalog
EDG7985 - Proposing and Implementing Data-Driven Decisions

Course Title
Proposing and Implementing Data-Driven Decisions

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Education Ed.D. program.

Course Description
Prepares the student for the capstone experience through the development of the capstone proposal and proposal defense.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional

EDG7987 - Dissertation in Practice

Course Title
Dissertation in Practice

Credits Hours
1 - 99

Prerequisites
- Admission to the Education Ed.D. program/completion of Ed.D. coursework.

Course Description
Guides the student through the completion of the capstone project experience. May be used in the degree program a maximum of 7 times.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Every Semester

EDH - Education: Higher

2022-2023 Graduate Catalog
EDH5917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

EDH5937 - Special Topics
Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

EDH6045 - First Year College Experience
Course Title
First Year College Experience

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Graduate standing or C.I.

Course Description
Focus on critical first year college experience through existing research and practice. Students design a first year experience program within an institution of their choice.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Odd Fall
EDH6047 - Theories of College Student Development

**Course Title**
Theories of College Student Development

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Study of the composition of student populations in American colleges and universities and the theories and factors within the learning environment which support student development.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Odd Fall

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EDH6053 - The Community College in America

**Course Title**
The Community College in America

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Study of the history, philosophy, goals, and mission of the community college. Functions, policies, practices to satisfy local needs.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Occasional
EDH6065 - History and Philosophy of Higher Education
Course Title
History and Philosophy of Higher Education
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- C.I.
Course Description
Early European and American universities, both state and private. Also considers small and private junior and senior colleges.
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education
Terms of Offering
Fall

EDH6081 - Contemporary Issues in Colleges
Course Title
Contemporary Issues in Colleges
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
Analysis of the critical issues facing colleges today and in the near future.
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education
Terms of Offering
Summer
Even Spring
EDH6105 - Retention Strategies in Colleges and Universities

Course Title
Retention Strategies in Colleges and Universities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Analyzing educational and political ramifications of college attrition, with focus on variation in retention practices and strategies.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Even Summer

EDH6204 - Leadership in College Organizations

Course Title
Leadership in College Organizations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
An analysis of the organizational structure and leadership functions of the college as they relate to instruction and curriculum.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Even Fall
Odd Spring
Even Summer
EDH6215 - The College Curriculum

Course Title
The College Curriculum

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
An examination of the background, development, function, and goals of the college curriculum.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Odd Fall
Even Spring

EDH6305 - Teaching and Learning in Colleges and Universities

Course Title
Teaching and Learning in Colleges and Universities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course focuses on teaching effectiveness in the college and university setting.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Even Fall
Odd Spring
Even Summer
EDH6407 - Ethical and Legal Issues in Student Personnel
Course Title
Ethical and Legal Issues in Student Personnel

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Studies of ethical and legal issues in College Student Personnel.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Summer

EDH6505 - Finance in Higher Education
Course Title
Finance in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of Phase II of Education Professional Preparation or C.I.

Course Description
Fundamental considerations in the finance of institutions of higher education.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Spring
EDH6632 - American Professoriate and College Presidency

Course Title
American Professoriate and College Presidency

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Similarities/differences among American professoriate and college presidency in various institutions and academic disciplines. Topics relevant to faculty careers, higher education administration, student affairs, and public policy.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Odd Spring

EDH6634 - Student Personnel Services in Higher Education

Course Title
Student Personnel Services in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
A basic introduction to student personnel services which covers philosophy, history, functions, theory, and issues.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education
EDH6635 - Organization and Administration of Higher Education

**Course Title**
Organization and Administration of Higher Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Major trends and challenges of higher education organization and administration; provides synthesis and integration of historical and contemporary issues of academic governance and leadership from theoretical and practical perspectives.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Even Fall

EDH6655 - Athletics in the American University

**Course Title**
Athletics in the American University

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
An examination of the historical and contemporary role of athletics in the American University with explicit focus on the student athlete and student support services of athletes.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Odd Fall
EDH6656 - Academic Success and the Student Athlete

**Course Title**
Academic Success and the Student Athlete

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
This course will examine the factors related to academic success including issues related to the organization and structure of athletic support services.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Odd Summer

EDH6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

EDH6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education
EDH6935 - Capstone Seminar in College Student Personnel

**Course Title**
Capstone Seminar in College Student Personnel

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
A study of current issues in college student personnel with primary emphasis on the role of professionals and the challenges they may encounter.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Fall

EDH6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

EDH6946 - Internship

**Course Title**
Internship

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education
EDH6947 - Practicum in Student Personnel

Course Title
Practicum in Student Personnel

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EDH 6634. Provides supervised learning experience and opportunities for assessments and evaluation.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Occasional

EDH7040 - Research on the College Student

Course Title
Research on the College Student

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing.

Course Description
Introduction to theoretical concepts and research findings related to student characteristics, college environments, choice, student development, attrition, persistence, cognitive and affective development, and general outcomes.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Even Spring
EDH7046 - Diversity Issues in Higher Education

Course Title
Diversity Issues in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing,

Course Description
Advanced examination of the application of theory to diversity and inclusion policies and practices in American Higher Education (institutional issues, administrators, faculty, and students).

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Odd Fall

EDH7066 - Higher Education: Philosophical/Historical Perspectives

Course Title
Higher Education: Philosophical/Historical Perspectives

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
This course examines basic philosophical positions and history of American higher education, historical research methods, and related applications: developing educational philosophy and historical research skills.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall
EDH7207 - Curriculum, Instruction, and Distance Learning in Higher Education

Course Title
Curriculum, Instruction, and Distance Learning in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Curriculum, Instruction, and Distance Learning in Higher Education examines curriculum and instructional methodologies and ways that distant learning can be used to improve student learning outcomes.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Summer

EDH7208 - International Perspectives of Higher Education

Course Title
International Perspectives of Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Doctoral standing or C.I. To increase understanding of global perspectives, this course explores worldwide tertiary education systems, related collaborations, issues and trends, and the impact of politics, economies, and cultures.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Summer
EDH7366 - Assessment Practices in Higher Education

Course Title
Assessment Practices in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Prepares higher education leaders with necessary knowledge, understanding, and skills to create and conduct effective assessment programs and activities.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall

EDH7401 - Higher Education and Public Policy

Course Title
Higher Education and Public Policy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing.

Course Description
Course examines development and analysis of US Higher Education policy issues, socio-political contexts at play in policy processes, and how competing policy agendas are negotiated.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Odd Summer
EDH7405 - Legal Issues in Higher Education

Course Title
Legal Issues in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Addresses legal framework of public and private institutions of higher education with emphasis on case law related to organization, governance, faculty, students, curriculum, and environment. Exploration of key laws and legal concepts applicable to American institutions of higher education, including how to weigh and balance competing rights and responsibilities of institutions, faculty, staff, and students.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Even Fall

EDH7508 - Finance in Higher Education

Course Title
Finance in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Doctoral standing or C.I. This course is designed to provide students with fundamental considerations, research, theory and practice regarding the funding of higher education institutions.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Spring
EDH7631 - Managing change, conflict, and stability in Higher Education

Course Title
Managing change, conflict, and stability in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Course introduces and defines nature of change, and reviews theories of transformation in higher education; investigates various higher education change models and practical change strategies.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Odd Fall

EDH7636 - Organizational Theory and Practices in Higher Education

Course Title
Organizational Theory and Practices in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Doctoral standing or C.I. Explores theories and models of organizations and their applicability to colleges and universities and the work done in them.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall
EDH7638 - Advanced Seminar in Higher Education

Course Title
Advanced Seminar in Higher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Course explores "the enduring enigmas" in Higher Education, those long-contested controversies forging the patterns and traditions of our colleges and universities.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Even Spring

EDH7665 - Higher Education Leadership

Course Title
Higher Education Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
To increase understanding of research, theories, models and issues related to higher education leadership including administration, college presidency, and faculty roles.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Fall
EDH7919 - Research
Course Title
Research
Credits Hours
0 - 6
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

EDH7934 - Higher Ed Literature, Research, and Professional Writing Seminar
Course Title
Higher Ed Literature, Research, and Professional Writing Seminar
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Graduate standing or C.I. Provides students with research strategies and writing skills for dissertation preparation, journal writing, publication and reviewing, and conference presentation skills.
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education

EDH7980 - Dissertation
Course Title
Dissertation
Credits Hours
1 - 99
Lab/Studio/Field Work Hours
Jan-99
Prerequisites
◆ Doctoral standing.
Course Description
Dissertation credits course for Higher Ed doctoral students.
College
College of Community Innovation and Education
Department
Department of Educational Leadership & Higher Education
Terms of Offering
Every Semester

2022-2023 Graduate Catalog
EDM - Education: Middle School

EDM5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

EDM5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Teacher Education

EDM6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

EDM6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education
EDM6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Teacher Education

EDP - Education: Psychology

EDP5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research

EDP5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research
EDP6213 - Seminar in Applied Learning and Instruction I  
**Course Title**  
Seminar in Applied Learning and Instruction I  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate standing or C.I.  
**Course Description**  
An overview of contemporary theories and research related to human learning and instruction with a focus on affective and motivational issues surrounding learning and instruction.  
**College**  
College of Community Innovation and Education  
**Department**  
Learning Sciences & Educational Research  
**Terms of Offering**  
Fall  

EDP6217 - Seminar in Applied Learning and Instruction II  
**Course Title**  
Seminar in Applied Learning and Instruction II  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- EDP 6213 or C.I.  
**Course Description**  
An overview of contemporary theories and research in human learning and instruction. Emphasis on cognition, critical thinking, problem-solving, individual differences, and assessment of learning outcomes.  
**College**  
College of Community Innovation and Education  
**Department**  
Learning Sciences & Educational Research  
**Terms of Offering**  
Spring
EDP6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research

EDP6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research

EDP6936 - Capstone in Applied Learning & Instruction
Course Title
Capstone in Applied Learning & Instruction
Credits Hours
1 - 6
Lab/Studio/Field Work Hours
0
Prerequisites
- EDP 6213, EDP 6217, EDF 6216, or C.I.
Course Description
Students use critical thinking and written communication skills to integrate and apply material learned in courses in learning, instruction, and motivation.
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research
Terms of Offering
Fall
Spring
EDP7517 - Facilitating Learning, Development and Motivation

Course Title
Facilitating Learning, Development and Motivation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Education Ed.D. program.

Course Description
Emphasizes using theory and research in learning, development, and motivation to diagnose and solve learning and motivational problems in diverse educational environments.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Fall

EDS - Education: Supervision

EDS5356 - Mentoring and Clinical Supervision of Pre-professional Educators

Course Title
Mentoring and Clinical Supervision of Pre-professional Educators

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- C.I.

Course Description
The practical application of coaching and mentoring practices that satisfy the standards of clinical supervision and assure attainment of the Florida Educator Accomplished Practices.

College
College of Community Innovation and Education

Department
Department of Educational Leadership & Higher Education

Terms of Offering
Every Semester
EDS6123 - Educational Supervisory Practices I

**Course Title**
Educational Supervisory Practices I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Basic Teacher Certificate or C.I.

**Course Description**
Analysis of effective supervisory behavior as it relates to human relations/communication skills; leadership; motivation; curriculum development; community relations; and service to teaching.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Every Semester

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EDS6130 - Educational Supervisory Practices II

**Course Title**
Educational Supervisory Practices II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDS 6123.

**Course Description**
Analysis of effective supervisory behavior as it relates to planning and change; observation and conferencing skills; staff and group development, problem solving; and decision making.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Spring
Fall
EDS6365 - Education and National Development

**Course Title**
Education and National Development

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
This course explores current issues and relationships between education and national development by studying multinational institutions and nongovernmental organizations engaged in educational planning worldwide.

**College**
College of Community Innovation and Education

**Department**
Department of Educational Leadership & Higher Education

**Terms of Offering**
Fall

EDS6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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**EEC - Education: Early Childhood**

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2022-2023 Graduate Catalog
EEC5205 - Programs and Trends in Early Childhood Education

Course Title
Programs and Trends in Early Childhood Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Regular Certificate or C.I.

Course Description
Philosophy, content, facilities, instructional materials, and activities appropriate for children ages 3 to 8 years; current research; issues and trends. Concurrent laboratory experiences.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer

EEC5745 - Child Life: Psychosocial Care of Children in Health Settings

Course Title
Child Life: Psychosocial Care of Children in Health Settings

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEC 3700 or C.I.

Course Description
Course teaches Child Life theory and practice to students wanting to work with children, youth, and their families in hospitals and pediatric health settings.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Odd Spring
**EEC5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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**EEC5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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**EEC6216 - Communicative Arts in Early Childhood Education**

**Course Title**
Communicative Arts in Early Childhood Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Study of young children's many forms of linguistic pictorial, and three-dimensional expression and communication.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring
EEC6269 - Play Development, Intervention, and Assessment

Course Title
Play Development, Intervention, and Assessment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Explores play development, facilitation, intervention, and assessment.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Even Summer

EEC6405 - Home-School-Community Interaction in Early Childhood Education

Course Title
Home-School-Community Interaction in Early Childhood Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Explores the knowledge and skills necessary to form partnerships with families and the community to enhance the care and education of young children.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall
EEC6406 - Guiding and Facilitating Social Competence

**Course Title**
Guiding and Facilitating Social Competence

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Provides students with techniques to facilitate and guide the behavior and emotional growth of young children.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring

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EEC6606 - Global Issues in Early Childhood

**Course Title**
Global Issues in Early Childhood

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
This course is designed to provide our students with global perspectives on early childhood development and engage our students in international research activities.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Fall
EEC6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring

EEC6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EEC6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education
**EEC6947 - Practicum in Child, Family, and Community Sciences**

**Course Title**
Practicum in Child, Family, and Community Sciences

**Credits Hours**
6 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Field-based placement in a social service agency, childcare center, hospital, or school, working with a mentor family liaison to develop skills/knowledge with diverse families.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester

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**EEC7055 - Advocacy, Public Policy, and Program Evaluation**

**Course Title**
Advocacy, Public Policy, and Program Evaluation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the program or C.I.

**Course Description**
Research-based practice as it relates to child advocacy and changes in public policy.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring
EEC7058 - Theoretical Foundations of Early Childhood
Course Title
Theoretical Foundations of Early Childhood
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the program or C.I.
Course Description
Theoretical bases of early childhood, philosophy, and current research in early childhood.
College
College of Community Innovation and Education
Department
School of Teacher Education
Terms of Offering
Fall

EEC7409 - Current Trends in Child, Family, and Community Sciences
Course Title
Current Trends in Child, Family, and Community Sciences
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the program or C.I.
Course Description
This course examines emerging and current trends in the field of Child, Family, and Community Sciences.
College
College of Community Innovation and Education
Department
School of Teacher Education
Terms of Offering
Summer
EEC7673 - Early Childhood: Professional Publishing and Grant Writing

**Course Title**
Early Childhood: Professional Publishing and Grant Writing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the program or C.I.

**Course Description**
This course examines the aspects of grant writing and writing of professional journals for the field of early childhood.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Fall

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EEC7676 - Critical Analysis of Early Childhood Research

**Course Title**
Critical Analysis of Early Childhood Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the program or C.I.

**Course Description**
This course examines research, theories, and trends in early childhood and how they influence perspectives related to young children.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring
EEC7945 - Early Childhood: Internship in Teaching and Supervision

**Course Title**
Early Childhood: Internship in Teaching and Supervision

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the program or C.I.

**Course Description**
Examine and practice the various roles of an early childhood college professor focusing on undergraduate teaching and supervision. May be used in the degree program a maximum of 4 times.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester

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EEC7948 - Early Childhood: Internship in Research

**Course Title**
Early Childhood: Internship in Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the program or C.I.

**Course Description**
Examine and practice the various roles of an early childhood college professor focusing on research. May be used in the degree program a maximum of 4 times.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester
**EEC7980 - Dissertation**

**Course Title**
Dissertation

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Prerequisites**
- Student must be in candidacy.

**Course Description**
Dissertation.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester

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**EEE - Eng: Electrical & Electronic**

**EEE5265 - Biomedical Effects and Applications of Electromagnetic Energy**

**Course Title**
Biomedical Effects and Applications of Electromagnetic Energy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
EEL 3470 or C.I. RF and microwave energy and their interaction with biological materials. Specific biomedical effects such as absorption, thermal therapy, hyperthermia, etc., will be discussed.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Even Spring
EEE5279 - Advanced Bioelectronics Systems

Course Title
Advanced Bioelectronics Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EEE 4309C or C.I. Advanced bioelectronics systems and techniques that enable recent biophysical and biomedical research will be discussed.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring

EEE5323 - Radio Frequency Integrated Circuit Design

Course Title
Radio Frequency Integrated Circuit Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 3307C and EEL 3470.

Course Description
This course introduce the principles, analysis, and design of Radio frequency (RF) integrated circuits for wireless communication systems.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall
EEE5332C - Thin Film Technology

Course Title
Thin Film Technology

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- EEE 3350 or equivalent.

Course Description
Presents the various thin film deposition techniques for the fabrication of microelectronic, semiconductor, and optical devices.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring

Current Fee Per Student
$70.00

EEE5352 - Semiconductor Material and Device Characterization

Course Title
Semiconductor Material and Device Characterization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 3350 or C.I.

Course Description
Semiconductor material characterization resistivity, mobility, doping carrier lifetime, device properties, threshold voltage, interface charge of MOS devices, optical and surface characterization of films.

College
College of Engineering and Computer Science

Department

Terms of Offering
Odd Fall
EEE5353 - Semiconductor Device Modeling and Simulation

Course Title
Semiconductor Device Modeling and Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 3307C.

Course Description
Large signal and small signal model development for semiconductor diodes, BJTs, and MOSFETs. Parameter extraction, numerical algorithm, and SPICE simulation are included.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring

EEE5356C - Fabrication of Solid-State Devices

Course Title
Fabrication of Solid-State Devices

Credits Hours
4

Lab/Studio/Field Work Hours
3

Prerequisites
- EEE 3350.

Course Description
Fabrication of microelectronic devices, processing technology, ion implantation and diffusion, device design, and layout. Laboratory includes device processing technology.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring
Fall

Current Fee Per Student
$70.00
EEE5370 - Operational Amplifiers

Course Title
Operational Amplifiers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 4309C.

Course Description

College
College of Engineering and Computer Science

Department

Terms of Offering
Even Fall

EEE5378 - CMOS Analog and Digital Circuit Design

Course Title
CMOS Analog and Digital Circuit Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 4309C.

Course Description
Advanced principles and design techniques for CMOS ICs including most recent published results.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall
EEE5390C - Full-Custom VLSI Design

**Course Title**
Full-Custom VLSI Design

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Course Description**
EEE 3307C and EEE 3342C with a "C" (2.0) or better grade. Provide background in integrated devices, circuits, and digital subsystems needed for design and implementation of silicon logic chips.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional

EEE5445 - Terahertz (THz) Integrated Systems

**Course Title**
Terahertz (THz) Integrated Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 4436.

**Course Description**
High-frequency nonlinear electronic devices, millimeter-wave and THz integrated circuits, broadband time- and frequency-domain signal generation and sampling techniques, on-chip antennas.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Fall
EEE5513 - Digital Signal Processing Applications

**Course Title**
Digital Signal Processing Applications

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 4750.

**Course Description**
The design and practical consideration for implementing Digital Signal Processing Algorithms including Fast Fourier Transform techniques, and some useful applications.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Spring

EEE5542 - Random Processes I

**Course Title**
Random Processes I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 3552C and STA 3032.

**Course Description**
Elements of probability theory, random variables, and stochastic processes.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Spring
Fall
EEE5555 - Surface Acoustic Wave Devices and Systems

Course Title
Surface Acoustic Wave Devices and Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 3552C.

Course Description
Course discusses SAW technology which includes the physical phenomenon, transducer design and synthesis, filter design and performance parameters. Actual devices and communication systems are presented.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEE5557 - Introduction to Radar Systems

Course Title
Introduction to Radar Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 3552C.

Course Description

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring
EEE5781 - Cyber-Physical Technologies for Smart Communities
Course Title
Cyber-Physical Technologies for Smart Communities
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate Standing, EEL 4781 or EEL 4515C or C.I.
Course Description
Introducing technologies that enable smart and connected communities; technologies include sensing, computing, communications, and device technologies related to smart grid, smart infrastructure, and intelligent transportation systems.
College
College of Engineering and Computer Science
Department
Terms of Offering
Fall

EEE5790 - Introduction to Secure Architectures
Course Title
Introduction to Secure Architectures
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- EEL 4768.
Course Description
This course will provide the students with basic understanding of the state-of-the-art support for implementing security primitives in commodity processors. Specifically, the course focus on Intel's Safe-Guard Extension(SGX), ARM's TrustZone and AMD's SME and SEV.
College
College of Engineering and Computer Science
Department
Terms of Offering
Spring
Fall
EEE5917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

EEE6317 - Power Semiconductor Devices and Integrated Circuits
Course Title
Power Semiconductor Devices and Integrated Circuits

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 3350 or equivalent or C.I.

Course Description
Fundamental understanding of modern power semiconductor devices and integrated circuits (ICs) in relation to their applications in power electronics systems.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring
EEE6326C - MEMS Fabrication Laboratory

**Course Title**
MEMS Fabrication Laboratory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- C.I.

**Course Description**
Silicon Nitride and Poly-silicon Depositions, Photolithography, Dry and Wet etching processes, Metal depositions and etching, MEMS device design and fabrication.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional

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EEE6327 - Design of Video Coding Systems

**Course Title**
Design of Video Coding Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 4768C and EEL 4750.

**Course Description**
VLSI architectures and image/video coding algorithms, image/video coding standards, and architectural issues related with area/power/performance.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Spring

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2022-2023 Graduate Catalog
EEE6338 - Advanced Topics in Microelectronics

Course Title
Advanced Topics in Microelectronics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Covers advanced topics in microelectronics such as semiconductor device physics, semiconductor device fabrication, and semiconductor device modeling.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEE6347 - Trustworthy Hardware

Course Title
Trustworthy Hardware

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EEE 5390C or EEL 5704 or C.I. Introduce the concept of trustworthy hardware. Review scientific publications in the area of trustworthy hardware. Design, analyze, and evaluate trustworthy embedded systems.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEE6358 - Advanced Semiconductor Device I

Course Title
Advanced Semiconductor Device I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 3350.

Course Description
First course in advanced semiconductor device physics and modeling. Main stream devices including junctions diode, bipolar transistor, and metal-oxide field-effect transistor.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring

EEE6406 - Modern EDA Algorithms in VLSI

Course Title
Modern EDA Algorithms in VLSI

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4783.

Course Description
This course covers all of the most important aspects of modern Electronic Design Automation (EDA) software: logic synthesis, circuit placement, and routing algorithms. Students will not only learn theory but also gain hands-on experience by doing a software project.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring
EEE6475 - CMOS Analog and Digital Integrated Circuit Design

**Course Title**
CMOS Analog and Digital Integrated Circuit Design

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEE 4309C or C.I.

**Course Description**
The objective of this class is to teach the graduate students the principle and techniques of CMOS IC design for high performance, low power, and RF applications.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Fall

EEE6504 - Adaptive Digital Signal Processing

**Course Title**
Adaptive Digital Signal Processing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEE 5513 or C.I.

**Course Description**
Weiner filtering, Least Mean Square and Recursive Least Squares based algorithms, adaptive prediction and identification with applications such as echo cancellation, etc.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Spring
EEE6505 - Multidimensional Digital Processing

**Course Title**
Multidimensional Digital Processing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
EEE 5513 or C.I. Multidimensional signals and systems. Two-dimensional transforms and filters. Image processing applications.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional

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EEE6527 - Compressive Sensing

**Course Title**
Compressive Sensing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
EEE 5542. This course offers a broad coverage of the emerging topic of compressive sensing. The focus of the course is on describing the ideas and techniques that have been developed in this field with emphasis on theoretical foundations, algorithm developments, and applications.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Fall
EEE6543 - Random Processes II

Course Title
Random Processes II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 5542.

Course Description

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEE6558 - Advanced Radar Systems

Course Title
Advanced Radar Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEE 5557.

Course Description
Advanced radar concepts: electromagnetic propagation and target scattering and fading; radar signal processing - target parameter estimation and information extraction, and radar system design.

College
College of Engineering and Computer Science

Department
EEE6712 - Modeling and Analysis of Networked Cyber-Physical Systems

**Course Title**

Modeling and Analysis of Networked Cyber-Physical Systems

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Graduate standing and (EEL 4781 or EEL 4515C) or C.I.

**Course Description**

Analysis, modeling and design of networked cyber-physical systems such as intelligent transportation systems and industrial control networks; stochastic hybrid systems, continuous and discrete system modeling approaches; industry standards in transportation, smart grid, industrial control, and their use and implication in design of distributed systems.

**College**

College of Engineering and Computer Science

**Department**

**Terms of Offering**

Spring

EEE6721 - Evolvable Hardware

**Course Title**

Evolvable Hardware

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Course Description**

EEL 5722C or C.I. Evolvable digital and analog computing hardware, including intrinsic and extrinsic reconfigurable architectures, self-adapting circuits, and autonomous computing architectures.

**College**

College of Engineering and Computer Science

**Department**

**Terms of Offering**

Occasional
EEE6780 - Advanced Topics in Real-Time Cyber Physical Systems

Course Title
Advanced Topics in Real-Time Cyber Physical Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 5862/4862.

Course Description
This course will provide students recent research in real-time and cyber-physical systems by exploring important papers in selected topics.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEE7919 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department

EEL - Engineering: Electrical
EEL5173 - Linear Systems Theory
Course Title
Linear Systems Theory
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- EEL 3657.
Course Description
Models and properties of linear systems, transformation, controllability and observability, control and observer designs, MFD, and realization theory.
College
College of Engineering and Computer Science
Department
Terms of Offering
Spring

EEL5185 - System Identification
Course Title
System Identification
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- EEL 3657 or C.I.
Course Description
Dynamic systems, models of time-invariant linear, time-varying and nonlinear systems, nonparametric frequency- and time-domain identification methods, kernel expansion techniques, parameter estimation methods, experiment design, and applications.
College
College of Engineering and Computer Science
Department
Terms of Offering
Spring
EEL5245 - Power Electronics

Course Title
Power Electronics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- EEE 4309C.

Course Description
Principles of power electronics, power semiconductor devices, inverter topologies, switch-mode and resonant dc-to-dc converters, cyclo-converters, applications.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall

EEL5250 - Power System Detection and Estimation

Course Title
Power System Detection and Estimation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- EEL 4216 or C.I.

Course Description
This is an advanced course to power engineering, designed to provide students with the knowledge of stability and outage detection and state estimation methods.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL5255 - Advanced Power Systems Analysis

Course Title
Advanced Power Systems Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4216 or C.I.

Course Description
This is an advanced course in power systems engineering, designed to provide a student with the knowledge of steady-state analysis in power system operation.

College
College of Engineering and Computer Science

Department

Terms of Offering
Even Spring

EEL5268 - Communications and Networking for Smart Grid

Course Title
Communications and Networking for Smart Grid

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4515C.

Course Description
Introduction to smart grid communication infrastructure, communication technologies in smart grid, communication networking in smart grid, communication for vehicle-to-grid systems, secure communication and networking.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL5272 - Biomedical Sensors

Course Title
Biomedical Sensors

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4750 or EEL 4832 or C.I.

Course Description
Study of engineering concepts behind the various biomedical sensors used to monitor a patient undergoing clinical therapy.

College
College of Engineering and Computer Science

Department
Department of Electrical and Computer Engineering

Terms of Offering
Occasional

EEL5291 - Distributed Control and Optimization for Smart Grid

Course Title
Distributed Control and Optimization for Smart Grid

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EEL 3657 and EEL 4216 or C.I. Electric power systems, transmission and distribution networks, voltage stability and VAR control, dispatch of distributed generation, optimization, frequency control, electricity markets and incentive controls.

College
College of Engineering and Computer Science

Department

Terms of Offering
Odd Fall
EEL5296 - Advanced Microgrid Design and Operation

Course Title
Advanced Microgrid Design and Operation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4216.

Course Description
Advanced course to power systems engineering, designed to provide students with the knowledge of microgrid system fundamentals, design, and operation.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEL5297 - Introduction to Smart Grid

Course Title
Introduction to Smart Grid

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- (EEE 3307C and EEL 3657) or EEL 4216 or C.I.

Course Description
Fundamentals of electric power systems, distributed generation and smart grid components, voltage control and VAR compensation, demand response, leader-follower optimization, resiliency.

College
College of Engineering and Computer Science

Department
Department of Electrical and Computer Engineering

Terms of Offering
Spring
EEL5432 - Satellite Remote Sensing

Course Title
Satellite Remote Sensing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 3470 or PHY 4324.

Course Description
Fundamentals of satellite remote sensing, orbits and geometry, radiative transfer theory, microwave and infrared sensing techniques, ocean, ice and atmosphere geophysical measurements.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEL5437C - Microwave Engineering

Course Title
Microwave Engineering

Credits Hours
4

Lab/Studio/Field Work Hours
3

Prerequisites
- EEL 3470 or C.I.

Course Description
Transmission line theory, Smith charts, S-parameters, simple impedance matching circuits, wave guides, resonators, basic microwave measurements.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall

Current Fee Per Student
$40.00
EEL5439C - RF and Microwave Active Circuits

Course Title
RF and Microwave Active Circuits

Credits Hours
4

Lab/Studio/Field Work Hours
3

Prerequisites
- EEL 4436C or EEL 5437C or equivalent.

Course Description
Transmission line, microwave network theory, impedance matching, noise, power gain amplifier, low noise amplifier, power amplifier, oscillator, mixer and microwave communication system.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring

Current Fee Per Student
$40.00

EEL5462 - Antenna Analysis and Design

Course Title
Antenna Analysis and Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 3470 or equivalent.

Course Description
Fundamentals of antennas; dipoles, loops, arrays, apertures, and horns. Analysis and design of various antennas.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring
EEL5582 - Fundamentals of Wireless Communications

Course Title
Fundamentals of Wireless Communications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- EEL 4515C and EEL 3021 Introduction to Randomness.

Course Description
Large and small scale radio propagation effects, performance of digital modulation over wireless channels, capacity analysis of wireless channels, signal processing techniques to mitigate fading effects and improve performance of wireless systems (diversity techniques, adaptive modulation, multiple antenna and MIMO systems).

College
College of Engineering and Computer Science

Department

Terms of Offering
Even Spring

EEL5625 - Applied Control Systems

Course Title
Applied Control Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
C.I. Designed to develop basic understanding of advanced control methods for nonlinear systems described by ordinary and partial differential equations and to expose recent results and ongoing research issues in the area of MEMS.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL5630 - Digital Control Systems
Course Title
Digital Control Systems
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- EEL 3657.
Course Description
Real-time digital control system analysis and design, Z-transforms, sampling and reconstruction, time and frequency response, stability analysis, digital controller design.
College
College of Engineering and Computer Science
Department
Terms of Offering
Fall

EEL5659 - Introduction to Sensors
Course Title
Introduction to Sensors
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- EEL 3123C.
Course Description
Basics of measurements, physics of energy transduction, sensor specifications (range, sensitivity, accuracy, repeatability, noise), applications, basics of signal conditioning.
College
College of Engineering and Computer Science
Department
Terms of Offering
Fall
EEL5669 - Introduction to Robotics and Autonomous Vehicles

Course Title
Introduction to Robotics and Autonomous Vehicles

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 5173 or C.I.

Course Description
Forward and inverse kinematics, velocity kinematics, dynamics, constrained motions, path and trajectory planning, position and trajectory control, single and multivariable control, introduction to force/impedance control, introduction to consensus-based control.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall

EEL5690 - Medical Robotics

Course Title
Medical Robotics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 3657 or Medical students in their second year or later.

Course Description
Medical robots for minimally invasive surgery, kinematics, constrained workspace and dexterity, haptics, tele-operation and network based control, basics of laparoscopic surgery.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL5706 - Resilient Computer System Design

Course Title
Resilient Computer System Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EEL 4768 or CDA 5106 or EEL 5708, or C.I. Advanced concepts in hardware/software fault tolerance: fault models, coding in computer systems, module and system level fault detection mechanisms, such as TMR, rollback, and recovery.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEL5722C - Field-Programmable Gate Array (FPGA) Design

Course Title
Field-Programmable Gate Array (FPGA) Design

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- EEE 3342C with a "C" (2.0) or better grade.

Course Description
FPGA architectures, design flow, technology mapping, placement, routing, reconfigurable computing applications, and evolvable hardware.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall
EEL5780 - Wireless Networks

Course Title
Wireless Networks

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4781 or C.I.

Course Description
The wireless networking topics include: cellular networks, multiple access protocols, channel assignment and resource allocation, mobility and location management, handoffs, routing, authentication, call admission control and QoS provisioning, network layer issues, wireless data networking (WAP, GSM, GPRS, CDMA, WCDMA.).

College
College of Engineering and Computer Science

Department

Terms of Offering
Even Spring

EEL5789 - Software-Defined Networking

Course Title
Software-Defined Networking

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4781.

Course Description
Fundamentals of software-defined networking (SDN). Control, data, and management plane separation. Northbound and southbound APIs. Network function virtualization (NFV), network orchestration, service chaining. SDN and NFV protocols and controllers such as OpenFlow, OpenDaylight, Floodlight, and Open Network Operating System (ONOS).

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL5796 - Big Data Computer Architecture and Systems

**Course Title**
Big Data Computer Architecture and Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
EEL 4768 or CGS 3763 or C.I. Computer hardware architecture and operating systems design, implementation and administrative techniques for big data computing platforms which run applications to analyze datasets of massive size and dimensionality.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Even Fall
Odd Spring

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EEL5820 - Image Processing

**Course Title**
Image Processing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAP 2302, EEL 4750 or C.I.

**Course Description**
Two-dimensional signal processing techniques; pictorial image representation; spatial filtering; image enhancement and encoding; segmentation and feature extraction; introduction to image understanding techniques.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Odd Spring

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2022-2023 Graduate Catalog
EEL5825 - Machine Learning and Pattern Recognition  
**Course Title**  
Machine Learning and Pattern Recognition  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- EEL 3021 or STA 3032 or similar course in probability.  

**Course Description**  
Preliminaries of machine learning and pattern recognition, classification and regression, Neural Networks, decision tree classifiers, unsupervised learning, and other state-of-the-art topics.  

**College**  
College of Engineering and Computer Science  

**Department**  
Department of Electrical and Computer Engineering  

**Terms of Offering**  
Occasional  
Fall  

EEL5860 - Software Requirements Engineering  
**Course Title**  
Software Requirements Engineering  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate standing or C.I.  

**Course Description**  
Excellent oral and written communication skills. Excellent problem solving skills. In-depth study of software requirements engineering within a process centered framework. Methods for requirements elicitation, analysis, description, and validation. Formal and informal specification.  

**College**  
College of Engineering and Computer Science  

**Department**  

**Terms of Offering**  
Occasional
EEL5862 - Real-Time Systems

Course Title
Real-Time Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 4600 or EEL 4768 or EEL 4742C.

Course Description
Introduction to specification, analysis, design, and validation techniques for real-time (operating) systems with an emphasis on real-time scheduling theory.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring

EEL5874 - Expert Systems and Knowledge Engineering

Course Title
Expert Systems and Knowledge Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4872 or CAP 4630 C.I.

Course Description
Introduction to expert systems in engineering. Expert systems tools and interviewing techniques. This course is hands-on and project oriented.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring
EEL5917 - Directed Research  
**Course Title**  
Directed Research  

**Credits Hours**  
1 - 99  

**College**  
College of Engineering and Computer Science  

**Department**  

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EEL5937 - ST: Software Engineering I  
**Course Title**  
ST: Software Engineering I  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Course Description**  
Provides students with knowledge and expertise on critical processes associated with software engineering.  

**College**  
College of Engineering and Computer Science  

**Department**  
Department of Electrical and Computer Engineering  

**Terms of Offering**  
Fall  

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EEL5937ST1 - Introduction to Electronic Design Automation  
**Course Title**  
Introduction to Electronic Design Automation  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Course Description**  
Introduction to electronic design automation (EDA) for the synthesis of circuits based on transistor and memristor technology with a focus on algorithms and data structures.
EEL5937ST2 - Real-Time Systems
Course Title
Real-Time Systems
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Introduction to specification, analysis, design, and validation techniques for real-time (operating) systems with an emphasis on real-time scheduling theory.

EEL5937ST3 - Attacks and Defenses in Secure Architectures
Course Title
Attacks and Defenses in Secure Architectures
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
The course will bring students insights on the cutting-edge research in processor security with the understanding of the interactions between software and the underlying hardware.

EEL5937ST4 - Power System Dynamics and Stability
Course Title
Power System Dynamics and Stability
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
This is an advanced course to power systems engineering designed to provide students with the knowledge of power system dynamics and stability.

EEL5937ST5 - Future Computing Systems for Emerging Workloads
Course Title
Future Computing Systems for Emerging Workloads
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Introduction to future computing systems based on emerging technology and its application to emerging workloads as artificial intelligence and big data.
EEL6026 - Optimization of Engineering Systems

**Course Title**
Optimization of Engineering Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing and C.I.

**Course Description**
A unified treatment of optimization methods often used to solve problems in engineering and applied sciences. Software packages are used when appropriate.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional

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EEL6208 - Advanced Machines

**Course Title**
Advanced Machines

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 4205.

**Course Description**
Theory of electric machines using reference frame transformations: Basic principles of dc and ac machines, including induction and synchronous, are included. Simulation techniques for steady state and dynamic performance analysis will be used to analyze operation of electric machines with solid state drives.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional
EEL6246 - Power Electronics II

Course Title
Power Electronics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
● EEL 5245.

Course Description
Advanced topics in power electronics, soft-switching techniques, small-signal modeling of PWM and resonant converters, control techniques, power factor correction circuits.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEL6253 - Power System Resilience

Course Title
Power System Resilience

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
● EEL 5255.

Course Description
This is an advanced course to power systems engineering, designed to provide students with the knowledge of power system resilience.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL6254 - Power Systems Reliability
Course Title
Power Systems Reliability
Credits Hours
3
Prerequisites
- EEL 4216
Course Description
Advanced course to power systems engineering, designed to provide a student with a comprehensive understanding of quantitative reliability evaluation of modern power systems.
College
College of Engineering and Computer Science
Department
Terms of Offering
Even Fall

EEL6257 - Data Analytics in Energy Systems
Course Title
Data Analytics in Energy Systems
Credits Hours
3
Lab/Studio/Field Work Hours
2
Prerequisites
- EEL 5255 or equivalent with a grade "C" or above, or C.I.
Course Description
Graduate level course. Introductions of data analytical methods for power system applications. Topics include energy forecasting, state estimation, demand response, load disaggregation, asset management, power system cybersecurity, grid-interactive buildings, and solar energy.
College
College of Engineering and Computer Science
Department
Terms of Offering
Spring
EEL6266 - Power System Optimization

Course Title
Power System Optimization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
♦ EEL 5255.

Course Description
This is an advanced course to power systems engineering designed to provide students with the knowledge of optimization technologies and their applications in power systems.

College
College of Engineering and Computer Science

Department
Department of Electrical and Computer Engineering

Terms of Offering
Occasional

EEL6269 - Advanced Topics in Power Engineering

Course Title
Advanced Topics in Power Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
♦ EEL 6255.

Course Description
A current topic will be discussed such as power system transients, system protection, TandD, and dielectric engineering.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL6272 - Smart Power Grids Protection

**Course Title**
Smart Power Grids Protection

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 4216 or C.I.

**Course Description**
Different aspects of protection of smart grids. Provides a comprehensive understanding of protection of modern power systems including protection of renewable energies and protection of automated power systems.

**College**
College of Engineering and Computer Science

**Department**
Department of Electrical and Computer Engineering

**Terms of Offering**
Spring

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EEL6278 - Attacks and Defenses in Secure Cyber-Physical Systems

**Course Title**
Attacks and Defenses in Secure Cyber-Physical Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL4294 Introduction to Smart Grid or equivalent or C.I.

**Course Description**
Topics to include basics of cyber-physical systems (CPSs), security challenges and issues for CPSs, and defense approaches to enhance their security.

**College**
College of Engineering and Computer Science

**Department**
Department of Electrical and Computer Engineering

**Terms of Offering**
Occasional
EEL6361 - Emerging Device Computing Architectures

Course Title
Emerging Device Computing Architectures

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Post-CMOS logic devices. Spintronic logic and memory systems. Memristor-based processing elements. Logic-In-Memory and non-Boolean computing approaches. System design and performance assessment, and applications.

College
College of Engineering and Computer Science

Department
Department of Electrical and Computer Engineering

Terms of Offering
Occasional

EEL6364 - Neuromorphic Computing Architecture, Circuit and Device

Course Title
Neuromorphic Computing Architecture, Circuit and Device

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EEL 5825 or EEE 5390 or C.I. Advanced concepts in neuromorphic computing architectures and its hardware implementations using nano-scale emerging spin-transfer torque and memristor devices.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall
EEL6425C - RF and Microwave Measurement Techniques

Course Title
RF and Microwave Measurement Techniques

Credits Hours
4

Lab/Studio/Field Work Hours
3

Prerequisites
- EEL 4436C or EEL 6482 or EEL 5439C or C.I.

Course Description
RF and Microwave components in wireless systems; i.e., antennas, passive components, active circuits, as well as noise, modulation are characterized by measurement and designed/verified by EM/circuit software.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall

Current Fee Per Student
$40.00

EEL6481 - Numerical Techniques in Electromagnetics

Course Title
Numerical Techniques in Electromagnetics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 6488 or C.I.

Course Description
Applications of finite difference methods (FDTD), finite element method, integral equation method (method of moments) to electromagnetics.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL6482 - Electromagnetic Theory I

**Course Title**
Electromagnetic Theory I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 5439C or C.I.

**Course Description**
Maxwell's equations, boundary conditions, propagation and reflection, electromagnetic theorems and principles, guided waves and scattering.

**College**
College of Engineering and Computer Science

**Department**
Department of Electrical and Computer Engineering

**Terms of Offering**
Fall

EEL6489 - Advanced Topics in Electromagnetics and Microwaves

**Course Title**
Advanced Topics in Electromagnetics and Microwaves

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Advanced and current topics in EM fields, antennas, and microwaves.

**College**
College of Engineering and Computer Science

**Department**
Department of Electrical and Computer Engineering

**Terms of Offering**
Occasional
EEL6504 - Communications Systems Design

**Course Title**
Communications Systems Design

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 6530.

**Course Description**
Information and coding theory. Modem design. Binary and M-ary modulations. Intersymbol interference and pulse shaping. DS and FS spread-spectrum systems.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Fall

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EEL6530 - Communication Theory

**Course Title**
Communication Theory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEE 5542 or C.I.

**Course Description**
Communication in the presence of noise; analog and pulse modulation; use of phase-locked loops, synthesizers, VCOs, system implementations.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Spring
EEL6532 - Information Theory and Coding  
**Course Title**  
Information Theory and Coding  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- EEE 5542 or C.I.  

**Course Description**  
Concepts regarding information: Covers entropy, channel capacity, Shannon's theorems, Fano's inequality, coding theory, linear, Hamming, and cyclic codes, Hamming, Singleton, Gilbert-Varshamov, and Plotkin Bounds.  

**College**  
College of Engineering and Computer Science  

**Department**  

**Terms of Offering**  
Spring  

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EEL6537 - Detection and Estimation  
**Course Title**  
Detection and Estimation  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Course Description**  
EEE 5542. Use of hypothesis testing (Bayes, Minimax, Neyman-Pearson) and estimation theory (Bayes, Maximum-likelihood) for detecting or estimating signals in noise. Application in communications and radar.  

**College**  
College of Engineering and Computer Science  

**Department**  

**Terms of Offering**  
Occasional
EEL6590 - Advanced Topics in Communications

**Course Title**
Advanced Topics in Communications

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Advanced and current topics in communications, such as coding theory, information theory, spread spectrum, etc.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional

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EEL6616 - Adaptive Control

**Course Title**
Adaptive Control

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 5173.

**Course Description**
System identification and adaptive control design, including identification algorithms, MRAC, STR, and stochastic adaptive control. Lyapunov stability and input-output stability.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional
EEL 6618 - Probabilistic Methods for Neural Coding and Control

**Course Title**
Probabilistic Methods for Neural Coding and Control

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEE 5542 and EEL 5173, both with a C or better or C.I.

**Course Description**
This course provides an overview of advanced, state-of-the-art probabilistic methods used in the encoding/decoding of neural signals and control of neural systems.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Fall

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EEL 6619 - Nonlinear Robust Control and Applications

**Course Title**
Nonlinear Robust Control and Applications

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 5173 and EEL 6621.

**Course Description**
Stability, performance and robustness of nonlinear systems with uncertainties, Lyapunov-based designs, recursive designs and nonlinear optimal designs.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional
EEL6621 - Nonlinear Control Systems

**Course Title**
Nonlinear Control Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 5173.

**Course Description**
Phase plane descriptions of nonlinear phenomena, limit cycles, jump conditions, stability, describing functions, Liapunov and Popov theory, time and frequency domain analysis for nonlinear systems.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Even Fall

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EEL6662 - Advanced Robotics

**Course Title**
Advanced Robotics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 5559 or C.I.

**Course Description**
Geometric Nonlinear Control, Control of Redundant Robots, Computer Vision and Vision-based control, Formation Control, and Cooperative Rules and Behaviors of Robotic Vehicles.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Odd Spring
EEL6667 - Mobile Robotic Systems

Course Title
Mobile Robotic Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 5173 or EEL 5630.

Course Description
Non-holonomic systems, kinematics and dynamics, trajectory planning and obstacle avoidance, canonical terms, control design, stability, performance, and robustness.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEL6671 - Modern and Optimal Control Systems

Course Title
Modern and Optimal Control Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 5173.

Course Description

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL6674 - Optimal Estimation for Control

Course Title
Optimal Estimation for Control

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 5173 or C.I.

Course Description
Optimal filtering, smoothing, and prediction methods are analyzed with applications to a number of linear and nonlinear dynamic systems.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEL6675 - Stochastic Control

Course Title
Stochastic Control

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 3657 and EEL 4612C.

Course Description
Models and solution techniques for decision-making problems in the presence of uncertainty; optimal control of systems with stochastic dynamics with perfect and imperfect state information.

College
College of Engineering and Computer Science

Department

Terms of Offering
Spring

2022-2023 Graduate Catalog
EEL6683 - Cooperative Control of Networked Autonomous Systems

Course Title
Cooperative Control of Networked Autonomous Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL5173 or consent of instructor.

Course Description
Fundamentals of cooperative control theory for autonomous vehicles and agents, with emphasis on consensus, effects of intermittent and delayed communication/sensing network, and cooperative control designs.

College
College of Engineering and Computer Science

Department

Terms of Offering
Odd Fall

EEL6723 - Reconfigurable Logic Applications

Course Title
Reconfigurable Logic Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 5722C or C.I.

Course Description
Field-programmable gate array (FPGA) architectures, reconfigurable computing applications, and emerging central processing unit CPU+FPGA hybrid platform. The overall objective is to investigate the state-of-the-art FPGA-based reconfigurable computing both from a hardware and software perspective.

College
College of Engineering and Computer Science

Department

Terms of Offering
Odd Spring
EEL6760 - Data Intensive Computing

Course Title
Data Intensive Computing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CDA 5106 or C.I.

Course Description
Data intensive computing and its enabling systems architectures such as MapReduce, cloud computing and storage, with a focus on system architecture, middleware and building blocks, programming models, algorithmic design, and application development.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEL6762 - Performance Analysis of Computer and Communication Systems

Course Title
Performance Analysis of Computer and Communication Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4742C and STA 3032 or C.I.

Course Description
Stochastic modeling and discrete-event simulation; Markov chains; networks of queues; SemiMarkov models; application to multiprocessor systems, switching and multi-user communications.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL6785 - Computer Network Design

Course Title
Computer Network Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4768C or C.I.

Course Description
Network types and network protocols. Design of networks and analysis of their performance.

College
College of Engineering and Computer Science

Department

Terms of Offering
Fall

EEL6788 - Advanced Topics in Computer Networks

Course Title
Advanced Topics in Computer Networks

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4781 or C.I.

Course Description
Advanced topics in the networking field, driven by the latest research and technology developments.

College
College of Engineering and Computer Science

Department

Terms of Offering
Odd Fall
EEL6812 - Introduction to Neural Networks and Deep Learning

Course Title
Introduction to Neural Networks and Deep Learning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• EEL 5825 or EEL 4798 or EEL 4750 or C.I.

Course Description

College
College of Engineering and Computer Science

Department
Department of Electrical and Computer Engineering

Terms of Offering
Even Spring

EEL6843 - Machine Perception

Course Title
Machine Perception

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• EEL 5820 or EEL 5825 or C.I.

Course Description
Advanced methods of machine understanding; simulation of intelligent machine systems; automatic recognition systems; visual tracking systems; multispectral feature analysis.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL6865 - Architecture and Design of Software Intensive Systems

Course Title
Architecture and Design of Software Intensive Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I.; and EEL 4851C or equivalent; and EEL 4884C or EEL 5881. In depth study of software architecture and design of engineering complex software-intensive systems. Theory and practice.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional

EEL6875 - Autonomous Agents

Course Title
Autonomous Agents

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4872 or CAP 4630 or C.I.

Course Description
Agent architectures, including behavioral, decision theoretic and logic (BDI) based. Multi-agent systems, agent communication languages. Negotiation, argumentation, coalition formation. Project oriented.

College
College of Engineering and Computer Science

Department

Terms of Offering
Occasional
EEL6878 - Modeling and Artificial Intelligence

**Course Title**
Modeling and Artificial Intelligence

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 4872 or CAP 4630 or C.I.

**Course Description**
Introduction to artificial intelligence techniques applied to computer-based modeling, simulation, and training.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Occasional

EEL6883 - Software Engineering II

**Course Title**
Software Engineering II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EEL 5881 or equivalent; C.I.

**Course Description**
Continuation of EEL 5881. Emphasis on term projects and case studies.

**College**
College of Engineering and Computer Science

**Department**

**Terms of Offering**
Spring

EEL6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**

2022-2023 Graduate Catalog
EEL6918 - Directed Research

Course Title
Directed Research

Credits Hours
0 - 99

College
College of Engineering and Computer Science

Department

EEL6938 - ST: Integrated Grid-Tied PV Systems with Storage

Course Title
ST: Integrated Grid-Tied PV Systems with Storage

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- EEL 3004.

Course Description
This course is designed to equip students with knowledge on new energy technologies, specifically on grid-connected PV systems and energy storage systems.

College
College of Engineering and Computer Science

Department

EEL7919 - Research

Course Title
Research

Credits Hours
0 - 99

College
College of Engineering and Computer Science

Department

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EES - Environmental Engineering Science
EES5318 - Industrial Ecology

Course Title
Industrial Ecology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ENV 3001, ENV 4341.

Course Description
Discussion of similarities between ecological systems and industrial systems with the emphasis on material cycles, energy flow, pollution prevention, organizational structures, and environmental management.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

EES5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

EES5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering
EES6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

EES6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

EES6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

EES6971 - TREATISE (THESIS OR Research Report)

Course Title
TREATISE (THESIS OR Research Report)

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

EEX - Education: Exceptional-Care Competencies
EEX5051 - Exceptional Children in the Schools

Course Title

Exceptional Children in the Schools

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- Senior standing or C.I.

Course Description

Characteristics, definitions, educational problems, and appropriate educational programs for the exceptional children in schools.

College

College of Community Innovation and Education

Department

School of Teacher Education

Terms of Offering

Summer
Fall

EEX5702 - Planning Curriculum for Pre-Kindergarten Children with Disabilities

Course Title

Planning Curriculum for Pre-Kindergarten Children with Disabilities

Credits Hours

3

Lab/Studio/Field Work Hours

0

Course Description

Focus on curriculum planning: developmentally appropriate practices and implementation of individualized instruction for pre-kindergarten children with disabilities.

College

College of Community Innovation and Education

Department

School of Teacher Education

Terms of Offering

Spring
EEX5750 - Communication with Parents and Agencies

Course Title
Communication with Parents and Agencies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Presentation of methods of interacting with community agencies, supporting and collaborating with families, developing a case management system, and facilitating program transition.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer

EEX5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EEX5937 - Special Topics in Except Education

Course Title
Special Topics in Except Education

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education
EEX6017 - Typical and Atypical Applied Child Development

Course Title
Typical and Atypical Applied Child Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Focus on the stages and sequence of development and the impact of disabilities and biomedical risk factors on learning and development.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall

EEX6061 - Instructional Strategies Pre-K-6

Course Title
Instructional Strategies Pre-K-6

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
A varying exceptionalities strategies (SLD, EH, MH) course using a cross-categorical model. The course is concerned with the pre-k handicapped child through grade 6. A required field experience must be completed with the class depending on prior experience.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
EEX6065 - Programming for Students with Disabilities at the Secondary Level

Course Title
Programming for Students with Disabilities at the Secondary Level

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I. and EEX 5051.

Course Description
Addresses instructional needs of secondary students with disabilities. It provides information on instruction, academic and social-personal skills, and transition planning.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring

EEX6107 - Teaching Spoken and Written Language

Course Title
Teaching Spoken and Written Language

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Diagnosis and remediation of spoken and written language problems found in the exceptional populations. Overview of alternative methods of communication.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall
EEX6218 - Diagnostic Assessment and Intervention Planning in Exceptional Education

Course Title
Diagnostic Assessment and Intervention Planning in Exceptional Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course develops advanced instructional and intervention planning and decision-making knowledge and skills using school and classroom-based instructional data in reading and mathematics.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer

EEX6222 - Observation and Assessment of Young Children

Course Title
Observation and Assessment of Young Children

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Study of formal and informal observation and assessment.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer
EEX6246 - Nature of Autism: Theory and Educational Practice

Course Title
Nature of Autism: Theory and Educational Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Theory and teaching applications for students with autism spectrum disorders includes 20 hour field-based experience. Designed for application towards requirements for State Endorsement in Autism.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall

EEX6295 - Assessment and Curriculum Prescriptions for the Exceptional Population

Course Title
Assessment and Curriculum Prescriptions for the Exceptional Population

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Addresses contemporary assessments and models for assessing exceptional children. Also addresses curriculum and prescription.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer

2022-2023 Graduate Catalog
EEX6297 - Assessment, Diagnosis, and Curriculum Prescriptions for Students with Autism

Course Title
Assessment, Diagnosis, and Curriculum Prescriptions for Students with Autism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Contemporary assessments and models for assessing exceptional children to address curriculum and prescription. Specific emphasis is placed on assessment of students with autism spectrum disorders.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall

EEX6342 - Seminar-Critical Issues in Special Education

Course Title
Seminar-Critical Issues in Special Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEX 5051.

Course Description
An examination of research and current literature dealing with some of the critical issues in all areas of special education.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer
EEX6524 - Organization and Collaboration in Special Ed

Course Title
Organization and Collaboration in Special Ed

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Addresses evaluation, assessment, personnel resource, grant writing, and other administrative issues. Presents collaborative models of intervention and service delivery.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring

EEX6608 - Concepts and Principles in Applied Behavior Analysis

Course Title
Concepts and Principles in Applied Behavior Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
This course is designed to develop students' competence in the use of technical terminology pertaining to the concepts and principles of behavior analysis. This course includes content tailored to fulfill the concepts and principles of behavior analysis coursework requirements of the Behavior Analyst Certification Board® (http://www.bacb.com) fourth edition task list.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall
EEX6612 - Methods of Behavioral Management

Course Title
Methods of Behavioral Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Analysis of the principles of behavior management and precision teaching and application of these principles to the solving of classroom management problems.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall

EEX6618 - Single Case Research Methodology

Course Title
Single Case Research Methodology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
This is an initial course in the use of single subject research methodology. It includes an overview of behavioral measurement, single subject research designs, and methods of data analysis. This course includes content tailored to fulfill the behavior analysis coursework requirements of the Behavior Analyst Certification Board® (http://www.bacb.com).

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
**EEX6619 - Advanced Behavior Analysis**

**Course Title**
Advanced Behavior Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
EEX 6612. This course prepares practitioners to use the principles of advanced behavior analysis (ABA) to assess and teach communication skills to individuals with autism and develop knowledge of current augmentative and alternative communication (AAC) technology.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer

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**EEX6668 - Radical Behaviorism**

**Course Title**
Radical Behaviorism

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
This course is designed to provide students with a complex understanding of the differences between radical behaviorism and other philosophies, and their impact on science. This course includes content tailored to fulfill the coursework requirements of the Behavior Analyst Certification Board® (http://www.bacb.com) fourth edition task list.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer
Spring
EEX6669 - Supervision and Personnel Management in Applied Behavior Analysis

Course Title
Supervision and Personnel Management in Applied Behavior Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
3

Course Description
Prepare students in Behavior Management using Performance-based assessment, performance-based measures, and performance management systems. Course requirements are consistent with Applied Behavior Analysis International for the Verified Course Sequence coursework in Applied Behavior Analysis.

College
College of Community Innovation and Education

Department
School of Teacher Education

EEX6747 - Ethics and Legal Issues in Applied Behavior Analysis

Course Title
Ethics and Legal Issues in Applied Behavior Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
This course is designed to develop students' competence in applying behavior analytic principles in both a legal and ethical manner. This course includes content tailored to fulfill the Ethical and Professional Conduct coursework requirements of the Behavior Analyst Certification Board® (http://www.bacb.com), fourth edition task list.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer
EEX6759 - Transition Planning and Interdisciplinary Teaming for Students with Disabilities

Course Title
Transition Planning and Interdisciplinary Teaming for Students with Disabilities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Interdisciplinary teaming to include available resources, the recognition of the role of parents, teachers, and other professionals; functional community-based curriculum; employability skills; and transition planning.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer
Fall

EEX6863 - Supervised Teaching Practicum with Exceptional Children

Course Title
Supervised Teaching Practicum with Exceptional Children

Credits Hours
2 - 7

Prerequisites
- Bachelor's degree, approved program, and C.I.

Course Description
Supervised observation and teaching of an exceptional student.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional
EEX6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EEX6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EEX6938 - Special Topics in Except Education

Course Title
Special Topics in Except Education

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education
EEX7320 - Program Evaluation and Planning in Special Education

Course Title
Program Evaluation and Planning in Special Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Education PhD program.

Course Description
Focus on evaluation models and summative program evaluations. Students are required to demonstrate knowledge of systemic program planning, models of program funding and program change.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Odd Spring

EEX7428 - Personnel Preparation: Special Education

Course Title
Personnel Preparation: Special Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Education PhD program.

Course Description
Focus on issues and strategies in preparation of teachers for students with disabilities; course development, implementation, adaptations/ modifications for pre-service personnel with disabilities.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
EEX7466 - Universal Design for Learning (UDL): A framework for Exceptional Education Research

**Course Title**

Universal Design for Learning (UDL): A framework for Exceptional Education Research

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- IDS 7501 or equivalent.

**Course Description**

Examines learner variability and barriers to effective instruction and assessment. The Universal Design for Learning (UDL) framework is presented as a means to design and implement interventions maximizing the accessibility and learning outcomes of individuals with and without disabilities.

**College**

College of Community Innovation and Education

**Department**

School of Teacher Education

**Terms of Offering**

Spring

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EEX7527 - Professional Writing Grant Writing in Special Education

**Course Title**

Professional Writing Grant Writing in Special Education

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission to Education PhD program.

**Course Description**

Writing for professional publication in special education; review and edit works of others; grant writing and review for private foundations and state and federal agencies.

**College**

College of Community Innovation and Education

**Department**

School of Teacher Education

**Terms of Offering**

Spring

Fall
EEX7766 - Technology Research Training in Special Education

Course Title
Technology Research Training in Special Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Education PhD program.

Course Description
Computer-assisted instruction and technology with special needs populations, demonstrates emerging technologies and provides instruction in personal productivity tools for special educators in higher education.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Even Spring

EEX7865 - Internship in College Instruction in Special Education

Course Title
Internship in College Instruction in Special Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Education PhD program.

Course Description
Supervised experience in design, delivery, and evaluation of a college course in special education or disability services.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall
EEX7866 - Internship in Practicum Supervision in Special Education

Course Title
Internship in Practicum Supervision in Special Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Education PhD program.

Course Description
Supervised experience in observing, supervising, and evaluating student teacher performance in a practicum setting in special education or disability services.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall

EEX7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
EEX7936 - Current Issues Trends in Special Education

**Course Title**
Current Issues Trends in Special Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to PhD Education program.

**Course Description**
Analysis and review of contemporary issues and trends in special education, selecting and defending a position on efficacy, legal, ethical, social, and policy issues.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Fall

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EEX7947 - Internship in Special Education Policy and Leadership

**Course Title**
Internship in Special Education Policy and Leadership

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to Exceptional Education track of the Ph.D. in Education or C.I.

**Course Description**
Supervised internship experience in policy analysis and application in special education and disability services. May be used in the degree program a maximum of 3 times only when course content is different.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer

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EGC - Guidance and Counseling
EGC5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

EGC5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

EGC6431 - Guiding Human Relationships I

Course Title
Guiding Human Relationships I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• C.I.

Course Description
Human relationship skills that will enhance intrapersonal and interpersonal relationship skills in classrooms.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Occasional
EGC6432 - Guiding Human Relationships II

**Course Title**
Guiding Human Relationships II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Advanced human relationship skills that will enhance intrapersonal and interpersonal relationship skills in classrooms.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Occasional

EGC6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

EGC6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology
**EGC6938 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

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**EGI - Education: Gifted**

**EGI5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

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**EGI5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research
EGI 6051 - Understanding the Gifted/Talented Student

**Course Title**
Understanding the Gifted/Talented Student

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A study of characteristics of the gifted/talented students; theories and research; identification procedures; special problems; educational forces.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Occasional

EGI 6245 - Curriculum and Instruction for Teaching Advanced, Gifted, and Talented Learners

**Course Title**
Curriculum and Instruction for Teaching Advanced, Gifted, and Talented Learners

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
This course will develop knowledge, skills, and evidenced-based strategies to design curriculum appropriate for the advanced, gifted, and talented learner through a range of services.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Fall
EGI6246 - Education of Special Populations of Gifted Students

**Course Title**
Education of Special Populations of Gifted Students

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Focuses on needs of gifted subgroups, including females, minorities, handicapped, and students with learning and emotional problems. S.E.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Occasional

EGI6247 - Developing Advanced Programs and Services: Acceleration and Enrichment for Academically and Intellectually Gifted Learners

**Course Title**
Developing Advanced Programs and Services: Acceleration and Enrichment for Academically and Intellectually Gifted Learners

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Servicing and teaching academically gifted learners through content acceleration and enrichment. (Clusters, honors, advanced coursework, at middle and secondary levels; compacted elementary curricula).

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Summer
EGI6305 - Theory and Development of Creativity

Course Title
Theory and Development of Creativity

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
This course focuses on the concept of creativity and explores various means of integrating creative strategies and instructional content areas.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional

EGI6417 - Guidance and Counseling Strategies for Teachers of Gifted and Talented Individuals

Course Title
Guidance and Counseling Strategies for Teachers of Gifted and Talented Individuals

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Guidance and counseling procedures and strategies for teachers of gifted/talented students, including student group dynamics; communication with parents; career goals; alternative educational opportunities.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring
EGI6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research

EGI6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research

EGI6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
Learning Sciences & Educational Research

EGM - Engineering Science
EGM6653 - Theory of Elasticity and Plasticity

Course Title

Theory of Elasticity and Plasticity

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- EML 5237.

Course Description

Review of stress and strain; solution by tensor stress and potential functions; linear and nonlinear elasticity; constitutive models; for elastic-(visco)plastic solids.

College

College of Engineering and Computer Science

Department

Department of Mechanical and Aerospace Engineering

Terms of Offering

Occasional

EGN - Engineering: General

EGN5640 - Entrepreneurship for Defense

Course Title

Entrepreneurship for Defense

Credits Hours

3

Lab/Studio/Field Work Hours

0

Course Description

Teaches entrepreneurship via Lean Startup. Students work in teams to rapidly design products and services that solve real problems for the Defense and Intelligence Community.

College

College of Engineering and Computer Science

Department

Department of Computer Science

Terms of Offering

Spring

EIN - Engineering: Industrial
EIN5108 - The Environment of Technical Organizations

Course Title
The Environment of Technical Organizations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or CI; EGS 4624 recommended.

Course Description
Presentation and investigation into the principles required to transform technologists into managers focusing on engineers, scientists, and other professionals providing services in technically-oriented organizations.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall

EIN5115 - Engineering MIS Control Systems in Healthcare

Course Title
Engineering MIS Control Systems in Healthcare

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Consideration is given to the organizational, managerial, and economic aspects of MIS design, implementation and use for planning and control functions in large-scale Health Systems.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems
EIN5117 - Management Information Systems I

Course Title
Management Information Systems I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
The design and implementation of computer-based Management Information Systems. Consideration is given to the organizational, managerial, and economic aspects of MIS.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring

EIN5140 - Project Engineering

Course Title
Project Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Role of engineer in project management with emphasis on project life cycle, quantitative and qualitative methods of cost, schedule, and performance control.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
Fall
EIN5248 - Ergonomics

Course Title
Ergonomics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EIN 4360 or C.I.

Course Description
Applications of anthropometry, functional anatomy, mechanics, and physiology of musculoskeletal system concepts in the design of industrial tools, equipment, and workstations.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall

EIN5251 - Usability Engineering

Course Title
Usability Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032 or equivalent.

Course Description
Usability paradigms/principles; cognitive walk-throughs; heuristic, review-based, model-based, empirical and storyboard evaluation; techniques; query techniques; laboratory techniques; and field study approaches.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
EIN5255C - Interactive Simulation

Course Title
Interactive Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Graduate standing or C.I.

Course Description
Introduction to significant topics relative to the development and use of simulators for knowledge transfer in the technical environment.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall

EIN5346 - Engineering Logistics

Course Title
Engineering Logistics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ESI 5306 or ESI 4312.

Course Description
Study of the logistics life cycle involving planning, analysis and design, testing, production, distribution, and support.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Occasional
EIN5356 - Cost Engineering

**Course Title**
Cost Engineering

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Cost estimation and control of engineering systems throughout the product life cycle.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Occasional

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EIN5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems
EIN6182 - Engineering Management

**Course Title**
Engineering Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EIN 5140, EIN 5108, EIN 6370.

**Course Description**
Capstone investigation and analysis of topics for improving engineering enterprises in national and international competitive environments. Quantitative engineering tools/methods will be used.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Spring

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EIN6215 - System Safety Engineering and Management

**Course Title**
System Safety Engineering and Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Spring
EIN6258 - Human Computer Interaction

**Course Title**
Human Computer Interaction

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Course Description**
Computer task analysis, human-computer design guidelines and history, usability testing, next generation user interfaces, human-virtual environment interaction.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Fall

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EIN6271 - Human Reliability

**Course Title**
Human Reliability

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ESI 5219.

**Course Description**
Methods for analysis and quantification of human performance; human error probability; applications to design and analysis of new and redesign of existing aviation, industrial, management, and power generation systems.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Occasional
EIN6326 - Technology Strategy

Course Title
Technology Strategy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status.

Course Description
This course is designed to expose engineering management students to cutting edge tools and concepts for managing technology and product strategy. May be repeated for credit.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Occasional

EIN6336 - Production and Inventory Control

Course Title
Production and Inventory Control

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EIN 4333C or equivalent.

Course Description
Review of models and techniques used in forecasting, production control and inventory control. Includes aggregate planning, production scheduling, inventory management, models, etc.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
EIN6339 - Operations Engineering

Course Title
Operations Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EIN 6357, ESI 5306, or C.I.

Course Description
Methods and models for design, management, and control of operational processes in engineering and technical organizations. Includes considerations of quality, productivity, performance, benchmarking, constraints, and strategy.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall

EIN6357 - Advanced Engineering Economic Analysis

Course Title
Advanced Engineering Economic Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGN 3613; STA 3032 or equivalent.

Course Description
Topics include measuring economic worth, economic optimization under constraints. Analysis of economic risk and uncertainty, foundations of utility functions.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
Fall
EIN6358 - Engineering Economic Analysis in Health Systems

Course Title
Engineering Economic Analysis in Health Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Healthcare Systems Engineering track of the Industrial Engineering MS program.

Course Description
Topics include Grossman's model on health economics, economics, economic optimization, economic risk, and uncertainty, utility functions, and the allocation of resources within health systems.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring

EIN6370 - Innovation in Engineering Design

Course Title
Innovation in Engineering Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Explores techniques for innovation and presents methods for engineers to foster innovation when designing new products or systems.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall
EIN6528 - Simulation Based Life Cycle Engineering

Course Title
Simulation Based Life Cycle Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EIN 5255C or DIG 5875C or EIN 5117.

Course Description
This course examines the phenomenon of simulation based life cycle engineering. Case studies illustrate infrastructure and organization change necessary to gain operational and strategic advantage.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Occasional

EIN6893 - Healthcare Systems Engineering Capstone

Course Title
Healthcare Systems Engineering Capstone

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Previous 9 courses of the HSE MS.

Course Description
Capstone course to depict role of a healthcare systems engineer with emphasis on project life cycle, quantitative and qualitative methods of cost, schedule, and performance.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Summer
Fall
EIN6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

EIN6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
0 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

EIN6936 - Seminar in Advanced Industrial Engineering

**Course Title**
Seminar in Advanced Industrial Engineering

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Topical seminar. Potential topic areas include quality function deployment, axiomatic design, design quality, benchmarking, re-engineering processes.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Occasional
EIN6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

EIN6950 - Industrial and Systems Engineering Capstone

Course Title
Industrial and Systems Engineering Capstone

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
ESI 6551 and (ESI 5219 or ESI 6247) and department consent. Project-based course where students work on theoretical and applied research issues related to industrial and systems engineering.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
Fall

EIN7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

ELD - Education: Specific Learning Disabilities
ELD5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

ELD5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Teacher Education

ELD6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

ELD6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education
EMA - Engineering: Materials

EMA5060 - Polymer Science and Engineering

Course Title
Polymer Science and Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
♦ EGN 3365.

Course Description
Structure and properties of polymers, preparation and processing of polymers, mechanical properties, use in manufacturing and high tech applications.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA5104 - Intermediate Structure and Properties of Materials

**Course Title**
Intermediate Structure and Properties of Materials

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EGN 3365.

**Course Description**

**College**
College of Engineering and Computer Science

**Department**
Department of Materials Science and Engineering

**Terms of Offering**
Fall

EMA5106 - Metallurgical Thermodynamics

**Course Title**
Metallurgical Thermodynamics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EGN 3365.

**Course Description**
Laws of thermodynamics, phase equilibria, reactions between condensed and gaseous phases, reaction equilibria in condensed solution and phase diagrams.

**College**
College of Engineering and Computer Science

**Department**
Department of Materials Science and Engineering

**Terms of Offering**
Occasional
EMA5108 - Surface Science

Course Title
Surface Science

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGN 3365 or EMA 3706 or C.I.

Course Description
This course focuses on the physics underlying the techniques used to analyze the surface region of materials. This course also addresses the fundamentals of these processes.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA5140 - Introduction to Ceramic Materials

Course Title
Introduction to Ceramic Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGN 3365.

Course Description
Uses, structure, physical and chemical properties, and processing of ceramic materials. Discussions will include recent developments for high technology applications.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA5317 - Materials Kinetics

Course Title
Materials Kinetics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Mass and thermal transport, phase transformations and Arrhenius rate processes.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA5326 - Corrosion Science and Engineering

Course Title
Corrosion Science and Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGN 3365.

Course Description
Electrochemical principles and applications to detecting and monitoring corrosion processes. Various forms of corrosion, their causes and control. Techniques of corrosion protection.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA5415 - Electronic Principles of Materials Properties

Course Title
Electronic Principles of Materials Properties

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGN 3365 or EMA 3706 or C.I.

Course Description
This course will cover the fundamental concepts of band structure and bonding of materials, electrical and thermal conduction in metals, semiconductors and dielectric. The interaction between light and matter will be addressed and the important concepts such as excitons will be introduced.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA5504 - Modern Characterization of Materials

Course Title
Modern Characterization of Materials

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- EMA 5104 or C.I.

Course Description
This course overviews the mondern characterization instrumentation for contemporary materials science and engineering studies and aims to understand their scientific significance, and operation principles, and technological applications.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA5505 - Scanning Electron Microscopy

**Course Title**
Scanning Electron Microscopy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- EMA 5104 or C.I.

**Course Description**
A review of electron optics, beam/specimen interactions, image formation, X-ray analysis, specimen preparation, microelectronic applications and crystallography in the SEM.

**College**
College of Engineering and Computer Science

**Department**
Department of Materials Science and Engineering

**Terms of Offering**
Occasional

EMA5584 - Biomaterials

**Course Title**
Biomaterials

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EGN 3365.

**Course Description**
Properties of natural biological materials and their relation to microstructure, biocompatibility, specific applications in orthopedic, cardiovascular, visual, neural, and reconstruction implants.

**College**
College of Engineering and Computer Science

**Department**
Department of Materials Science and Engineering

**Terms of Offering**
Even Spring
EMA5585 - Materials Science of Thin Films
Course Title
Materials Science of Thin Films
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
Interaction of thin film processing techniques with the structure and properties of the materials deposited.
College
College of Engineering and Computer Science
Department
Department of Materials Science and Engineering
Terms of Offering
Odd Fall

EMA5586 - Photovoltaic Solar Energy Materials
Course Title
Photovoltaic Solar Energy Materials
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- EGN 3365.
Course Description
Materials properties basic to photovoltaics, structures, homojunction, heterojunction, and surface barrier solar cells, AMDS-1D modeling of c-Si, GaAs bulk and a-Si:H, CIGS, and CdTe thin film solar cells. May be repeated for credit.
College
College of Engineering and Computer Science
Department
Department of Materials Science and Engineering
Terms of Offering
Occasional
EMA5588 - Biocompatibility of Materials

Course Title
Biocompatibility of Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGN 3365 or C.I.

Course Description
Biocompatibility and bioactivity; cell-biomaterials interactions; engineering bone and cartilage; soft-tissue replacements; total hip replacements; nanostructured biomaterials, imaging techniques, preservation techniques for biomaterials, MSDS and FDA compatibility data.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA5610 - Laser Materials Processing

Course Title
Laser Materials Processing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGN 3343 or EMA 5106 or C.I.

Course Description
Laser beam optics; laser-material interactions; laser heating, melting, vaporization. Plasma formation; laser surface treatment, welding, machining; laser material synthesis. Thin film deposition, crystal growth.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA5705 - High Temperature Materials

Course Title
High Temperature Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 5104 or C.I.

Course Description
The course covers the principles of strengthening alloys for high temperature service, alloy and process selection, alloy development and design principles for elevated temperature applications.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

EMA5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering
EMA6017 - Nanostructured Materials

Course Title
Nanostructured Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 5104 or C.I.

Course Description
The course covers the science of the building blocks of nanostructured materials, their chemical and structural characterization, material behavior, and the technological implications of these materials.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA6096 - Research Methods in Materials Science and Engineering

Course Title
Research Methods in Materials Science and Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - EMA5104 - Intermediate Structure and Properties of Materials (3)

Course Description
A study of research experiences including literature review, experimental design, data analysis, writing technical manuscripts, presentations, and evaluating research as a peer reviewer.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Spring
EMA6126 - Physical Metallurgy

Course Title
Physical Metallurgy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 5104 or EMA 3124.

Course Description
Analytical methods in crystallography, dislocation theory, annealing, solid solutions, phases and phase diagrams, ferrous and non-ferrous alloy systems.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Fall

EMA6129 - Solidification and Microstructure Evolution

Course Title
Solidification and Microstructure Evolution

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EML 4142, EMA 5104, or C.I. Cooling process, nucleation, spinodal decomposition, interface instability, cells, dendrites, eutectic and peritectic microstructures, solute segregation, modeling project.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA6130 - Advanced Phase Transformations in Materials

Course Title
Advanced Phase Transformations in Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
EMA 5104 and EMA 5106 or C.I.

Course Description
Principles of thermodynamics, kinetics, and phase diagrams for the understanding of diffusion and diffusionless phase transformations in ferrous and non-ferrous alloys.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA6136 - Diffusion in Solids

Course Title
Diffusion in Solids

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
EMA 5104 and EML 5060 or C.I.

Course Description
Fundamental equations and mechanisms of diffusion. Diffusion in metallic, ionic, and semiconducting materials with emphasis on measurement techniques.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA6149 - Imperfections in Crystals

Course Title
Imperfections in Crystals

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 5104 or C.I.

Course Description
Describes point, line, and planar defects in crystalline materials. Discusses vacancy formation, dislocation theory, plasticity, grain boundary modeling, and the interaction between defects.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA6319 - Colloids and Interface Engineering

Course Title
Colloids and Interface Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 5104 or EMA 5060 or C.I.

Course Description
Surface and interfacial tension of liquids, self-assembled monolayers, applications of scanning probe microscopes in interfaces, forces in colloidal systems, stability of macro emulsions, formation and properties of microemulsions, self-assembly.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA6516 - X-ray Diffraction and Crystallography

Course Title
X-ray Diffraction and Crystallography

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 5104 or C.I.

Course Description
Theory and experimental techniques of X-ray diffraction of materials. Topics include the structure of crystalline solids, including lattices, point group and space group theory.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA6518 - Transmission Electron Microscopy

Course Title
Transmission Electron Microscopy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 5104 or C.I.

Course Description
An introduction to the theory and operation of a transmission electron microscope. Electron diffraction techniques, contrast from images, analytical microscopy, and specimen preparation.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA6605 - Materials Processing Techniques

Course Title
Materials Processing Techniques

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 5104 or C.I.

Course Description
Phase transformation; grain size; surface, powder, and composite processing; shape forming; polymer processes; liquid and vapor phase synthesis; radiation-induced processes, mathematical analysis, project.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional

EMA6611 - Optoelectronics Materials Processing

Course Title
Optoelectronics Materials Processing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EMA 4413, graduate standing or C.I.

Course Description
Electronic Theory for Materials Preparation, Doping, Metallization, Effect of Materials Properties on Device (e.g. Solar Cells, LEDs, and Detectors) Performances.

College
College of Engineering and Computer Science

Department
Department of Materials Science and Engineering

Terms of Offering
Occasional
EMA6626 - Mechanical Behavior of Materials

**Course Title**
Mechanical Behavior of Materials

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EMA 5104 or EMA 4223.

**Course Description**
Fundamentals of the mechanical behavior of materials; advanced treatment of elasticity, plasticity, viscoelasticity, creep, fracture and fatigue in a variety of material classes.

**College**
College of Engineering and Computer Science

**Department**
Department of Materials Science and Engineering

**Terms of Offering**
Spring

EMA6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Materials Science and Engineering

EMA6918 - Research

**Course Title**
Research

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Materials Science and Engineering
EMA6938 - Special Topics

**Course Title**

Special Topics

**Credits Hours**

3

**College**

College of Engineering and Computer Science

**Department**

Department of Materials Science and Engineering

EMA7919 - Research

**Course Title**

Research

**Credits Hours**

0 - 99

**College**

College of Engineering and Computer Science

**Department**

Department of Materials Science and Engineering

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**EME - Education: Technology Media**

EME5050 - Fundamentals of Technology for Educators

**Course Title**

Fundamentals of Technology for Educators

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Post bac or C.I.

**Course Description**

Designed to provide participants with an introduction to the field of educational technology content with emphasis on using and integrating technology in K-12 to improve the teaching and learning process.

**College**

College of Community Innovation and Education

**Department**

Learning Sciences & Educational Research

**Terms of Offering**

Spring

Fall

2022-2023 Graduate Catalog
EME5053 - Electronic Resources for Education

Course Title
Electronic Resources for Education

Credits Hours
3

Prerequisites
- Graduate standing or C.I.

Course Description
Study and application of electronic resources available for education including techniques for locating, evaluating, and integrating them into the classroom.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Fall

EME5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research
EME6053 - Teaching and Learning with Emerging Technologies

Course Title
Teaching and Learning with Emerging Technologies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Study and application of traditional and emerging technological applications available for education including techniques for locating, evaluating, and integrating them into the classroom.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Fall

EME6055 - Current Trends in Instructional Technology

Course Title
Current Trends in Instructional Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Survey of current trends and issues of importance to the field of instructional technology.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring
Fall
EME6062 - Research in Instructional Technology

**Course Title**
Research in Instructional Technology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDF 6481

**Course Description**
Critical review and evaluation of landmark research in the areas of educational media, instructional design, and instructional systems.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Summer
Spring

EME6209 - Multimedia Instructional Systems II

**Course Title**
Multimedia Instructional Systems II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EME 6507 and EME 6613.

**Course Description**
Advanced techniques in delivery and management of web-based multimedia instructional content. Integration of media into web-based instruction. Discussion of delivery and management issues.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Spring
EME6226 - Instructional Development and Evaluation

Course Title
Instructional Development and Evaluation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EME 6613 - Instructional System Design.

Course Description
The course addresses basic instructional development skills and formative and summative evaluation methods for training in business and industry with application to training educational settings.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring

EME6405 - Adapting and Integrating Innovative Technologies in Education

Course Title
Adapting and Integrating Innovative Technologies in Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EME 6053 or C.I.

Course Description
Use of traditional and emerging technological applications in instructional settings by students and teachers. Includes integrated software packages, multimedia productivity suites, Web 2.0 applications, and desktop publishing, as they relate to K-12 curriculum, students, and teacher productivity.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring
EME6417 - Interactive Online and Virtual Teaching Environments

Course Title
Interactive Online and Virtual Teaching Environments

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
◆ EME 6507.

Course Description
Explores issues and trends in educational and human to computer interactions theories as applied to virtual and online participatory learning environments.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Fall

EME6457 - Distance Education: Technology Process Product

Course Title
Distance Education: Technology Process Product

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
◆ EME 6507.

Course Description
Instruction and how it is delivered at a distance. Examines technologies, processes, and products of distance education with emphasis on e-learning.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring
Fall
EME6458 - Virtual Teaching and the Digital Educator

Course Title
Virtual Teaching and the Digital Educator

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
EME 6417.

Course Description
Explores practical applications of instructional theories related to virtual and online participatory learning environments.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Spring

EME6465 - Intelligent Tutoring System Design: Theory and Practice

Course Title
Intelligent Tutoring System Design: Theory and Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Graduate standing or C.I.

Course Description
Authoring adaptive instructional elements, analyzing learner data, classifying/predicting learner states, and evaluating the effectiveness of ITSs and their components.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Occasional
EME6507 - Multimedia for Education and Training

**Course Title**
Multimedia for Education and Training

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Emphasis on the elements and applications of multimedia and technology in multiple instructional settings. Includes authoring, design, alternative delivery systems, hardware, and software.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Every Semester

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EME6601 - Instructional Simulation Design for Training and Education

**Course Title**
Instructional Simulation Design for Training and Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EME 6613.

**Course Description**
Integration of ISD methods with simulation systems design, including analysis, design, development and formative evaluation of leading-edge training and educational simulation technologies.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Occasional
EME6602 - Integration of Technology into the Learning Environments

**Course Title**
Integration of Technology into the Learning Environments

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EME 6053, EME 6405, EME 6507 or C.I.

**Course Description**
Resources, materials, and strategies for systemic achievement of curriculum goals; investigation of innovative and effective technological advances and practices for use in teaching and learning.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Fall

EME6607 - Planned Change in Instructional Technology

**Course Title**
Planned Change in Instructional Technology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
In-depth study of the processes of planned change and adoption/rejection of innovations in educational settings.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Spring
Fall
EME6613 - Instructional System Design

**Course Title**
Instructional System Design

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
This course focuses on the systematic analysis and design of instruction, including task, learner, and context analyses, objectives and learner assessments, media selection, flowcharting and storyboarding.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Spring
Fall

EME6614 - Instructional Game Design for Training and Education

**Course Title**
Instructional Game Design for Training and Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EME 6613.

**Course Description**
Integration of instructional design and game development processes, analysis of existing instructional games and game engines and the design of an instructional game.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research
EME6646 - Instructional Game Design for Training and Education

**Course Title**
Instructional Game Design for Training and Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I. for students not in the Instructional Design and Technology program.

**Course Description**
The course examines the application of cognitive neuroscience research and physiological explanations of human learning and for designing training and educational systems.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Summer

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EME6705 - Administration of Instructional Systems

**Course Title**
Administration of Instructional Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EME 6613.

**Course Description**
Provides opportunities for students to examine parameters, problems, and areas of importance in the management of instructional systems.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Fall
EME6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

EME6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

EME6938ST1 - Theoretical Foundations of the Learning Sciences

Course Title
Theoretical Foundations of the Learning Sciences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description

Research reveals that students often face challenges engaging in effective processes for successful learning, leading to the development of advanced learning technologies (ALTs), which aim to foster the use of effective problem solving, metacognitive monitoring, decision making during learning. There are multiple types of data that can be used for assessing how students learn with these ALTs. However, some data channels may not capture all processes a learner uses. Thus, using a combination of data channels will provide more detailed information about how learners are progressing through a task they are given. Depending on the context and research goals, some data channels will be more appropriate than others. The goal of this graduate seminar is to explore and critically examine theoretical, methodological, and analytical approaches for using multimodal data to assess learning with advanced learning technologies. This will include: (1) reading key publications in the fields of learning sciences, self-regulated learning, affective computing, and computer science and generating thought-provoking questions; (2) integrating key challenges in the literature and leading class discussions to examine these challenges; (3) selecting the most appropriate data channels to investigate learning processes; (4) understanding the types of variables data channels can generate; and (5) presenting an idea for developing a new advanced learning technology. In this seminar, we will address how we can use multimodal data to examine learning processes, how advanced learning technologies can be developed to foster the use of these processes, and how studies have been conducted to examine learning and performance with these different types of advanced learning technologies. The course outcomes align with the 5 goals of the seminar outlined above. Specifically, you will be able to: Read and critique academic papers in various disciplines Run stimulating class discussions about key issues in learning sciences Understand, apply, and critique the use of multimodal data Propose how to best use different types of data for assessing learning with an ALT Generate ideas for developing a new advanced learning technology
EME6938ST2 - ST: Research on Advanced Learning Technologies

Course Title
ST: Research on Advanced Learning Technologies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Research reveals that students often face challenges engaging ineffective processes for successful learning, leading to the development of advanced learning technologies (ALTs), which aim to foster the use of effective problem solving, metacognitive monitoring, decision making during learning. There are multiple types of data that can be used for assessing how students learn with these ALTs. However, some data channels may not capture all the processes a learner uses. Thus, using a combination of data channels will provide more detailed information about how learners are progressing through a task they are given. Depending on the context and research goals, some data channels will be more appropriate than others. The goal of this graduate seminar is to explore and critically examine theoretical, methodological, and analytical approaches for using multimodal data to assess learning with advanced learning technologies. This will include: (1) reading key publications in the fields of learning sciences, self-regulated learning, affective computing, and computer science and generating thought-provoking questions; (2) integrating key challenges in the literature and leading class discussions to examine these challenges (3) selecting the most appropriate data channels to investigate learning processes ; (4) understanding the types of variables data channels can generate; and (5) presenting an idea for developing a new advanced learning technology. In this seminar, we will address how we can use multimodal data to examine learning processes, how advanced learning technologies can be developed to foster the use of these processes, and how studies have been conducted to examine learning and performance with these different types of advanced learning technologies. The course outcomes align with the 5 goals of the seminar outlined above. Specifically, you will be able to: Read and critique academic papers in various disciplines Run stimulating class discussions about key issues in learning sciences Understand, apply, and critique the use of multimodal data Propose how to best use different types of data for assessing learning with an ALT Generate ideas for developing a new advanced learning technology

EME6938ST3 - ST: Metacognition

Course Title
ST: Metacognition

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
The goal of this graduate seminar is to critically examine contemporary interdisciplinary research in the area of metacognition.

EME6938ST4 - ST: Story Design for Instruction

Course Title
ST: Story Design for Instruction

Credits Hours
3

Lab/Studio/Field Work Hours
3

Course Description
The course considers story as an instructional approach for knowledge transfer to meet learning outcomes through instructional design. Stories can enhance instruction, training, and communication.
EME6940 - Theory into Practice in Educational Technology

**Course Title**
Theory into Practice in Educational Technology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of all core courses in educational technology.

**Course Description**
Practicum in facilitating the utilization of instructional media and information technologies.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Summer

EME7634 - Advanced Instructional Systems Design

**Course Title**
Advanced Instructional Systems Design

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EME 6613.

**Course Description**
Analysis of fundamental concepts of theoretical and procedural instructional systems design models with an emphasis on their cognitive origins, pedagogical bases, current and future values.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Spring
EME7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

EME7942 - Doctoral Internship in Educational Technology

Course Title
Doctoral Internship in Educational Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of PhD core and 75 percent specialization.

Course Description
Higher education teaching assignment as an intern under a senior faculty mentor in Educational Technology or Instructional Systems.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Occasional

EML - Engineering: Mechanical
EML5026C - Computational Engineering Analysis

Course Title
Computational Engineering Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- EML 4024C.

Course Description
Principle understanding and project based hands-on experience on computational engineering analysis including Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), and Multi-body Dynamics (MBD).

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML5060 - Mathematical Methods in Mechanical and Aerospace Engineering

Course Title
Mathematical Methods in Mechanical and Aerospace Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 2302.

Course Description
Vector field theory, generalized coordinates, complex variables, contour integration and Laplace and Fourier transforms and inversions, variable coefficient ODEs and solution of PDEs for governing equations of heat transfer, ideal fluid flow, and mechanics.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Fall
EML5066 - Computational Methods in Mechanical and Aerospace Engineering

Course Title
Computational Methods in Mechanical and Aerospace Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 3034C.

Course Description
Error Norms, interpolation and extrapolation, quadratures and adaptive quadratures, solutions of linear and nonlinear systems of equations, functional approximation, solution of ODE's and MWR.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML5090 - Mechanical and Aerospace Seminar

Course Title
Mechanical and Aerospace Seminar

Credits Hours
0 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
The course is intended to help MAE graduate students practice public speaking, learn skills of scientific communication, expand their width of knowledge, and promote collaborations. May be repeated.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring
Fall
EML5105 - Gas Kinetics and Statistical Thermodynamics

Course Title
Gas Kinetics and Statistical Thermodynamics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EAS 4134 or EML 4703.

Course Description
Molecular and statistical viewpoint of gases and thermodynamics; Boltzmann collision integral, partition functions, non-equilibrium flows. Applications in thermo-fluid systems.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

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EML5152 - Intermediate Heat Transfer

Course Title
Intermediate Heat Transfer

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 4142, EML 5060.

Course Description
An intermediate-level course dealing with heat and mass diffusion, boundary layer problems, and radiation from real bodies. Emphasis on combined modes, numerical methods.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

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2022-2023 Graduate Catalog
EML5228C - Modal Analysis

Course Title
Modal Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 3303C, EML 4225, and EML 5060.

Course Description
Theoretical basis. Measurement techniques, excitation, transducers, data acquisition. Detailed data analysis, modal parameter extraction, curve-fitting procedures. Modeling.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML5237 - Intermediate Mechanics of Materials

Course Title
Intermediate Mechanics of Materials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 3500 or EAS 4200.

Course Description

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Fall
EML5271 - Intermediate Dynamics

Course Title
Intermediate Dynamics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
EGN 3321.

Course Description
Dynamics of particles, rigid bodies, and distributed mass systems. Topics include: Hamilton's principle, Lagrange's equations, Numerical methods, and Mechanisms.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring

EML5290 - Introduction to MEMS and Micromachining

Course Title
Introduction to MEMS and Micromachining

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Graduate standing or C.I.

Course Description

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Odd Fall
EML5291 - MEMS Materials

**Course Title**  
MEMS Materials

**Credits Hours**  
3

**Lab/Studio/Field Work Hours**  
0

**Prerequisites**  
- EML 5060, EML 6211, or C.I.

**Course Description**  
Introduction of materials that are frequently used for MEMS applications such as silicon, metal, ceramics and polymers. The course will focus on fundamental principles involved in structures and properties of the materials, and their applications in MEMS.

**College**  
College of Engineering and Computer Science

**Department**  
Department of Mechanical and Aerospace Engineering

**Terms of Offering**  
Even Spring

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EML5311 - System Control

**Course Title**  
System Control

**Credits Hours**  
3

**Lab/Studio/Field Work Hours**  
0

**Prerequisites**  
- EML 4225.

**Corequisites**  
- EML 5060.

**Course Description**  
Modern control theory for linear and non-linear systems; controllability and observability. Linear state feedback and state estimators, compensator design.

**College**  
College of Engineering and Computer Science

**Department**  
Department of Mechanical and Aerospace Engineering

**Terms of Offering**  
Occasional
EML5402 - Turbomachinery

**Course Title**
Turbomachinery

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EML 3101, EML 4703 or EAS 4134.

**Course Description**
Application of the principles of fluid mechanics, thermodynamics, and aerodynamics to the design and analysis of steam and gas turbines, compressors, and pumps.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional

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EML5403 - Science and Technology of Fuel Cells

**Course Title**
Science and Technology of Fuel Cells

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EGN 3365, EMA 4102 or C.I.

**Course Description**
Fundamental knowledge along with hands-on experience with design, manufacturing and operation of fuel cells.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional
EML5430C - Design for Manufacturing in Turbomachinery: Gas/Steam/Wind Turbines and Generators
Course Title
Design for Manufacturing in Turbomachinery: Gas/Steam/Wind Turbines and Generators
Credits Hours
3
Lab/Studio/Field Work Hours
3
Prerequisites
EGN 3365 or EMA 3706.
Course Description
Overall assembly of rotating and stationary components in power generation powertrains; probabilistic design, materials, coatings, manufacturing steps, defects for gas/steam/wind turbines and generators.
College
College of Engineering and Computer Science
Department
Department of Mechanical and Aerospace Engineering
Terms of Offering
Fall

EML5431C - Design for Mechanical and Dynamic Integrity and Reliability in Turbomachinery
Course Title
Design for Mechanical and Dynamic Integrity and Reliability in Turbomachinery
Credits Hours
3
Lab/Studio/Field Work Hours
3
Prerequisites
EGM 3601, EML 4220 or EML 4225, EGN 3365 or EMA 3706.
Course Description
Mechanical and dynamic integrity issues such as creep, fatigue, fracture, rotordynamics, vibration, flutter, as related to turbines and generators; reliability; cost-time-performance trade-off in design.
College
College of Engineering and Computer Science
Department
Department of Mechanical and Aerospace Engineering
Terms of Offering
Spring
EML5456 - Turbines for Sustainable Power
Course Title
Turbines for Sustainable Power

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EGM 3601, (EGN 3365 or EMA 3706), (EML 3701 or EAS 3101)

Corequisites
- EML 4142.

Course Description
Multidisciplinary aspects of turbine design for sustainable power generation including aerodynamics to combustion and emissions to reliability; covers multiple applications of convention and green technology.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Fall

EML5532C - Computer-Aided Design for Manufacture
Course Title
Computer-Aided Design for Manufacture

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- EGN 4535C.

Course Description
Builds on introductory material covered in EML 4535C. Topics include computer modeling for the synthesis, simulation, design and manufacture of mechanical, thermal, and aerospace systems.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML5545 - Smart and Adaptive Structures

**Course Title**
Smart and Adaptive Structures

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
(EAS 4200 or EML 3500) and EML 4225 and (EGN 3365 or EMA 3706) or C.I. Modeling and design of structures with integrated active materials: piezoelectric ceramics and polymers, shape memory alloys and polymers, magneto- / electro-rheological fluids, magneto- / electro-strictives. Multi-stable structures.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Even Spring

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EML5546 - Engineering Design with Composite Materials

**Course Title**
Engineering Design with Composite Materials

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EML 5237.

**Course Description**
Mechanics of structural components of composite materials under static, thermal, vibratory loads. Instability. Lamina and laminate theory, energy methods, failure theories, and structural joining methods.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional
EML5713 - Intermediate Fluid Mechanics

**Course Title**
Intermediate Fluid Mechanics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EML 4703.

**Corequisites**
- EML 5060.

**Course Description**
Fluid kinematics; conservation equations; Navier-Stokes equations; boundary layer flow, inviscid flow, circulation and vorticity; low Reynolds number flow; turbulence.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional

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EML5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

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2022-2023 Graduate Catalog
EML5937 - Special Topics: Advanced Manufacturing

Course Title
Special Topics: Advanced Manufacturing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - Course Not Found

Course Description
This course covers theories and applications of advanced manufacturing science and technologies.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Fall

EML6062 - Boundary Element Methods in Engineering

Course Title
Boundary Element Methods in Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5237 or EML 5713 or C.I.

Course Description
Integral (numerical) solution of potential, Poisson and diffusion equations; applications to heat transfer and fluid flow; complex variable boundary element methods.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML6067 - Finite Elements in Mechanical, Materials, and Aerospace Engineering I

Course Title
Finite Elements in Mechanical, Materials, and Aerospace Engineering I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5237 or EML 5713.

Course Description

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring

EML6068 - Finite Elements in Mechanical, Materials, and Aerospace Engineering II

Course Title
Finite Elements in Mechanical, Materials, and Aerospace Engineering II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 6067 or C.I.

Course Description

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML6085 - Research Methods in Mechanical and Aerospace Engineering

Course Title
Research Methods in Mechanical and Aerospace Engineering

Credits Hours
3 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5060.

Course Description
Research project is an MAE option under supervision of an adviser. A project report is due at the end of the semester.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring

EML6104 - Classical Thermodynamics

Course Title
Classical Thermodynamics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 3101 or C.I.

Course Description
A general postulative approach to classical macroscopic thermodynamics featuring states as fundamental constructs. Conditions of equilibrium, stability criteria, thermodynamic potentials. Maxwell relations and phase transitions.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML6131 - Combustion Phenomena

Course Title
Combustion Phenomena

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5152.

Course Description
Physical and chemical aspects of combustion phenomena. Rate processes, chemical kinetics, structure, propagation and stability of premixed and diffusion flames.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML6144 - Boiling and Condensation Heat Transfer

Course Title
Boiling and Condensation Heat Transfer

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 4142 or C.I.

Course Description

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
**EML6154 - Conduction Heat Transfer**

**Course Title**
Conduction Heat Transfer

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EML 5152 or C.I.

**Course Description**
Classical and numerical techniques applied to the solution of steady and transient conduction problems. Applications to the design of thermal systems.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional

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**EML6155 - Convection Heat Transfer**

**Course Title**
Convection Heat Transfer

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EML 5152, EML 5713, or C.I.

**Course Description**
Convection heat, mass and momentum transfer in laminar and turbulent flows. Applications to the design of thermal systems.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional
EML6157 - Radiation Heat Transfer

Course Title
Radiation Heat Transfer

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5152 or C.I.

Course Description
Radiation properties of surfaces and analysis of radiative heat transfer between black, gray, non-gray and non-diffuse surfaces. Multimode problems.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML6211 - Continuum Mechanics

Course Title
Continuum Mechanics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5237.

Course Description
Introduction to tensors; deformation and strain; stress; balance laws; constitutive equations; applications in linear elasticity.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring
EML6223 - Advanced Vibrational Systems

Course Title
Advanced Vibrational Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 4220, EML 5271 or C.I.

Course Description

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML6226 - Analytical Dynamics

Course Title
Analytical Dynamics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5271.

Course Description
Kane method for kinematics and dynamics of particle and rigid bodies is developed and contrasted with Newton and Lagrange methods. Multibody dynamics.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML6227 - Nonlinear Vibration

Course Title
Nonlinear Vibration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EML 5060 and EML 5271. Robust, reliable algorithms for simulation of nonlinear phenomena; phase planes; limit cycles; stability; period-multiplying bifurcations; strange attractors; Poincare maps; Floquet theory; Lyapunov exponents; applications to mechanical and aerospace systems.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML6233 - Fundamentals of Fatigue Analysis

Course Title
Fundamentals of Fatigue Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 6211 or C.I.

Course Description
A review of classical and modern methods of fatigue life prediction and the physical process therein. Primary emphasis relates to metallic materials.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Even Spring
EML6238 - Plates and Shells

Course Title
Plates and Shells

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EGM 3601, EML 6211, EML 5060. This course introduces the reduction of 3D elasticity to an equivalent 2D counterpart; basic assumptions; field equations of the theory of plates and shells; linear and nonlinear theories; buckling and vibrations; refined plate and shell theories.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML6295 - Sensors and Actuators for Micro Mechanical Systems

Course Title
Sensors and Actuators for Micro Mechanical Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5060, EML 6211, or C.I.

Course Description

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML6296 - MEMS Mechanism and Design

Course Title
MEMS Mechanism and Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 3500, EGM 3601, EML 4142.

Course Description
Miniature Electro Mechanical Systems (MEMS) working mechanisms (mechanical, thermal, electric, piezoelectric, magnetic, etc.). Design rules. May be repeated for credit.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring

EML6297 - MEMS Characterization

Course Title
MEMS Characterization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5060, EML 6211, or C.I.

Course Description
Introduction of methods, techniques and philosophies being used to characterize MEMS for engineering applications. Materials characterization, systems characterization (mechanical, electrical, optical, etc). Test methods and sample preparation. Test results analysis.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML6299 - Advanced Topics on Miniaturization

Course Title
Advanced Topics on Miniaturization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5060, EML 6211, or C.I.

Course Description
Advanced sensor and actuator devices, advanced micro-thermal systems, advanced topics on materials for MEMS, advanced topics on tribology for MEMS/NEMS, advanced topics on miniature power generation systems.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML6305C - Experimental Mechanics

Course Title
Experimental Mechanics

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- EML 4304C, EML 5237.

Course Description
Selected topics in strain measurements, photoelasticity, holographic interferometry; laser speckle measurement; acoustic emission, measurement of correlation and coherence functions.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

Current Fee Per Student
$25.00
EML6308C - Thermofluids Measurements and Instrumentation

Course Title
Thermofluids Measurements and Instrumentation

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- EML 4703, EML 3303C, EML 5060, EML 5152 or C.I.; not open to students that have credit for EAS 6807C.

Course Description
Surface pressure and shear measurements, hotwire anemometry, heat transfer coefficient measurement, LDV, PDPA and PIV flow field measurements.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML6547 - Engineering Fracture Mechanics in Design

Course Title
Engineering Fracture Mechanics in Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5237 or C.I.

Course Description
General understanding of elementary concepts. Practical application enabling useful prediction of fracture safety and characteristics. Some general knowledge of fracture mechanisms and fracture criteria.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML6572 - Probabilistic Methods in Mechanical Design

Course Title
Probabilistic Methods in Mechanical Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
STA 3032 and EML 3500 or EAS 4200.

Course Description
Uncertainty modeling in design and analysis of industrial equipment and engineering systems (data analytics, quality control, and reliability engineering).

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional

EML6712 - Mechanics of Viscous Flow

Course Title
Mechanics of Viscous Flow

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
EML 5060, EML 5713.

Course Description
Principal concepts and methods for viscous fluid motion. Incompressible and compressible boundary layer analysis for laminar and turbulent flows.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Odd Fall
EML6725 - Computational Fluid Dynamics and Heat Transfer I

Course Title
Computational Fluid Dynamics and Heat Transfer I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 5152 or C.I.

Course Description
Finite Difference methods; error and stability analysis; applications to model equations and further developments; matrix methods.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Spring

EML6726 - Computational Fluid Dynamics and Heat Transfer II

Course Title
Computational Fluid Dynamics and Heat Transfer II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EML 6725.

Course Description
Development of governing equations; turbulence modeling; numerical solution of Euler and potential equations, Navier-Stokes equations, and boundary layer equations; grid generation.

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

Terms of Offering
Occasional
EML6808 - Analysis and Control of Robot Manipulators

**Course Title**
Analysis and Control of Robot Manipulators

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EML 4312C, EML 5271, or C.I.

**Course Description**
Kinematics and dynamics of multibody systems, especially robot manipulators. Design and control of robot manipulators.

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

**Terms of Offering**
Occasional

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EML6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering

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EML6918 - Research

**Course Title**
Research

**Credits Hours**
0 - 99

**College**
College of Engineering and Computer Science

**Department**
Department of Mechanical and Aerospace Engineering
EML7908 - Independent Study

Course Title
Independent Study

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Mechanical and Aerospace Engineering

EMR - Education: Mental Retardation

EMR5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EMR5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education
EMR6235 - Nature of Severe and Profound Disabilities: Theory and Educational Practice

Course Title
Nature of Severe and Profound Disabilities: Theory and Educational Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Overview of theory and teaching applications for students with severe and profound disabilities including major theories and trends, appropriate learning goals, teaching approaches, and environmental arrangements.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall

EMR6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

EMR6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
EMR6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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ENC - English

ENC5237 - Writing for the Business Professional

**Course Title**
Writing for the Business Professional

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or senior standing or C.I.

**Course Description**
A study of the major document designs for professionals in business, focusing on audience, purpose, style, arrangements, and content.

**College**
College of Arts and Humanities

**Department**
Department of Writing and Rhetoric

**Terms of Offering**
Spring
Fall
ENC5276 - Theory and Practice of Tutoring Writing

Course Title
Theory and Practice of Tutoring Writing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the M.A. in Rhetoric and Composition program, graduate standing or C.I.

Course Description
The theory and practice of assessing and responding to writing as a collaborator (as opposed to evaluator).

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Fall

ENC5337 - Rhetorical Theory

Course Title
Rhetorical Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Overview of theory and history of classical and modern rhetorical theory and rhetorical instruction.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Fall
Odd Summer
ENC5703 - Composition Histories and Theories

Course Title
Composition Histories and Theories

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Intensive seminar on historical, theoretical, and intellectual traditions and approaches to composition and rhetoric.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Spring
Fall

ENC5705 - Approaches to Teaching College Composition

Course Title
Approaches to Teaching College Composition

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
Intensive pedagogical and theoretical seminar on teaching composition at the college level.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Spring
Fall
ENC5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of English

ENC5920 - Colloquium in Rhetoric and Composition

**Course Title**
Colloquium in Rhetoric and Composition

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Foundational concepts, readings, and journals in the areas of composition, literacy, and rhetoric.

**College**
College of Arts and Humanities

**Department**
Department of Writing and Rhetoric

**Terms of Offering**
Fall
ENC5930 - Current Topics in Professional Writing

**Course Title**
Current Topics in Professional Writing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or C.I.

**Course Description**
Students will learn how to produce texts for specialized fields of discourse, including the medical and legal profession, as well as for general publication.

**College**
College of Arts and Humanities

**Department**
Department of Writing and Rhetoric

**Terms of Offering**
Occasional

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ENC5933 - Seminar for Peer Writing Consultants

**Course Title**
Seminar for Peer Writing Consultants

**Credits Hours**
0 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Explore writing center research and practice on a professional level.

**College**
College of Arts and Humanities

**Department**
Department of Writing and Rhetoric

**Terms of Offering**
Spring
Fall
ENC5937 - Special Topics
Course Title
Special Topics
Credits Hours
0 - 3
College
College of Arts and Humanities
Department
Department of English

ENC6216 - Editing Professional Writing
Course Title
Editing Professional Writing
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
The study of major issues in editing, includes theory and scholarship of professional editing.
College
College of Arts and Humanities
Department
Department of Writing and Rhetoric
Terms of Offering
Spring
ENC6217 - Technical Editing

Course Title
Technical Editing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in English, or C.I.

Course Description
A study of the strategies for editing the prose, design, and illustrations of print and online technical documents.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

ENC6225 - User-Centered Design for Technical Communication

Course Title
User-Centered Design for Technical Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to English MA or C.I.

Course Description
Covers multiple user-centered design methods, including usability testing; prototyping; and user research. Applies methods to a technical communication design problem.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Fall
ENC6245 - Teaching Professional Writing  
**Course Title**  
Teaching Professional Writing  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate standing or C.I.  

**Course Description**  
Theory and practice of teaching professional writing in college and the workplace. Includes historical and contemporary approaches.

**College**  
College of Arts and Humanities  

**Department**  
Department of Writing and Rhetoric  

**Terms of Offering**  
Occasional  

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ENC6247 - Proposal Writing  
**Course Title**  
Proposal Writing  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate standing in English or C.I.  

**Course Description**  
Theory and practice of writing proposals.

**College**  
College of Arts and Humanities  

**Department**  
Department of Writing and Rhetoric  

**Terms of Offering**  
Occasional
ENC6255 - International Technical Communication
Course Title
International Technical Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the English MA program or C.I.

Course Description
Documentation for international audiences and the challenges of communicating across cultures.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Spring

ENC6257 - Visual Technical Communication
Course Title
Visual Technical Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in English or C.I.

Course Description
Creation and editing of graphics in technical documents.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional
ENC6261 - Technical Writing, Theory and Practice

**Course Title**
Technical Writing, Theory and Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A study of major trends in technical communication theory and the practices this theory generates.

**College**
College of Arts and Humanities

**Department**
Department of English

**Terms of Offering**
Occasional

ENC6292 - Project Management for Technical Writers.

**Course Title**
Project Management for Technical Writers.

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Managing a writing project from inception to production; planning, budgeting, personnel, writing, and editing.

**College**
College of Arts and Humanities

**Department**
Department of English

**Terms of Offering**
Occasional
ENC6296 - Interactive Design in Technical Communication

Course Title
Interactive Design in Technical Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
The theory and practice of writing and designing interactive systems for users, including online help tutorials, procedures, and demonstrations.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

ENC6297 - Production and Publication Methods

Course Title
Production and Publication Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in English or C.I.

Course Description
Production of technical documents including typography, visual rhetoric, layout and design, and planning and managing documentation projects.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

2022-2023 Graduate Catalog
ENC6306 - Persuasive Writing

Course Title
Persuasive Writing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in English or C.I.

Course Description
Theory and practice of writing persuasively.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Occasional

ENC6332 - Gendered Rhetoric

Course Title
Gendered Rhetoric

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in English or C.I.

Course Description
Questions women's and men's linguistic choices, the influence of medium and discipline of discourse, and consequences of status, power, and oppression.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Occasional
ENC6333 - Contemporary Rhetoric and Composition Theory
Course Title
Contemporary Rhetoric and Composition Theory
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
Instruction on politics of basic writing programs, rhetoric, ideology and cultural production, poststructuralism and rhetoric or reminist pedagogies.
College
College of Arts and Humanities
Department
Department of Writing and Rhetoric
Terms of Offering
Occasional

ENC6335 - Rhetorical Traditions
Course Title
Rhetorical Traditions
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing in English or C.I.
Course Description
Philosophy and techniques of classical rhetoricians such as Isocrates, Aristotle, and Cicero with special attention to their application to contemporary rhetorical situations.
College
College of Arts and Humanities
Department
Department of Writing and Rhetoric
Terms of Offering
Spring
Fall

2022-2023 Graduate Catalog
ENC6338 - The Rhetorics of Public Debate
Course Title
The Rhetorics of Public Debate
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing in English or C.I.
Course Description
How rhetorical theories further community goals, including activist, political, legislative, and other significant public debates.
College
College of Arts and Humanities
Department
Department of English
Terms of Offering
Occasional

ENC639 - Rhetorical Movements
Course Title
Rhetorical Movements
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
To study the principal rhetorical theories of the classical period and rhetoric of the eighteenth and nineteenth centuries.
College
College of Arts and Humanities
Department
Department of Writing and Rhetoric
Terms of Offering
Occasional
ENC6421 - Digital Rhetorics

Course Title
Digital Rhetorics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Study of rhetorical theory and practice shaped by digital environments, technologies, and texts, including contemporary issues around rhetorical invention, identity, and multimodality.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Occasional

ENC6425 - Hypertext Theory and Design

Course Title
Hypertext Theory and Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing in English or C.I. Theoretical and practical study of the uses and premises of hypertext.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional
ENC6426 - Visual Texts and Technology
Course Title
Visual Texts and Technology
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing.
Course Description
Studies visual dimensions of the texts of digital discourse.
College
College of Arts and Humanities
Department
College of Arts and Humanities Dean's Office
Terms of Offering
Occasional

ENC6428 - Digital Literacies
Course Title
Digital Literacies
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
Study of digital technology's impact on literacy theory, activities, and pedagogy, including reading and writing practices, as well as larger cultural shifts in communication and patterns of thinking.
College
College of Arts and Humanities
Department
Department of Writing and Rhetoric
Terms of Offering
Occasional
ENC6429 - Teaching Writing With Computers

Course Title
Teaching Writing With Computers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in English or C.I.

Course Description
Immersion in the theories and practices of writing in electronic spaces including current discourse conventions from speech and print media.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

ENC6484 - Rhetoric of Health and Medicine

Course Title
Rhetoric of Health and Medicine

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
How health and medical rhetorics function in society; will study the rhetorical dimensions of clinical care, public health, patient advocacy, and personal health management.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Occasional
ENC6701 - Professional Writing Studies
Course Title
Professional Writing Studies
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
• Graduate Standing or C.I.
Course Description
Foundational theories and practices in rhetoric and professional writing.
College
College of Arts and Humanities
Department
Department of Writing and Rhetoric
Terms of Offering
Fall

ENC6712 - Studies in Literacy and Writing
Course Title
Studies in Literacy and Writing
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
• Graduate standing in English or C.I.
Course Description
Theories of cultural and critical literacy, definitions of literacy, and current political issues in literacy studies.
College
College of Arts and Humanities
Department
Department of Writing and Rhetoric
Terms of Offering
Odd Fall
ENC6720 - Research Methods in Rhetoric and Composition

Course Title
Research Methods in Rhetoric and Composition

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Study and practice in research methods of Rhetoric and Composition Studies, with emphasis on textual and qualitative approaches.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Spring

ENC6740 - Topics in Rhetoric and Composition

Course Title
Topics in Rhetoric and Composition

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
In-depth exploration of important historical, theoretical, and/or pedagogical topics in Rhetoric and Composition Studies. May be used in the degree program a maximum of 2 times only when course content is different.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Occasional
ENC6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

ENC6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

ENC6934 - Writing for Graduate Research Fellowships

Course Title
Writing for Graduate Research Fellowships

Credits Hours
0 - 3

Lab/Studio/Field Work Hours
0-3

Prerequisites
- Graduate status or C.I.

Course Description
Study and practice of strategies for writing graduate research fellowship proposals for organizations such as National Science Foundation.

College
College of Arts and Humanities

Department
Department of Writing and Rhetoric

Terms of Offering
Fall
ENC6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
Department of English

ENC6945 - Community Literacy Practicum

**Course Title**
Community Literacy Practicum

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in English or C.I.

**Course Description**
Designed to deepen theoretical understanding of literacy through participation in a community literacy project.

**College**
College of Arts and Humanities

**Department**
Department of Writing and Rhetoric

**Terms of Offering**
Occasional

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**ENG - English: General**
ENG5009 - Methods of Bibliography and Research

Course Title
Methods of Bibliography and Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
Bibliographical, library and systematic approaches to research at the graduate level in language and literature.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Fall

ENG5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

ENG5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of English
ENG6005 - Dissertation Research Design in Texts and Technology

Course Title
Dissertation Research Design in Texts and Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ENG 6812 or ENC 6720 or DIG 6825 or HIS 6159 or C.I.

Course Description
Preparation for the initial stages of dissertation development, including planning, research question development, and methodology determination.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Fall

ENG6074 - Historical Movements in Literary, Cultural, and Textual Studies

Course Title
Historical Movements in Literary, Cultural, and Textual Studies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Theories of literature, cultural, and textual formation from ancient Greece to the mid 20th century.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional
ENG6078 - Contemporary Movements in Literary, Cultural, and Textual Theory

**Course Title**
Contemporary Movements in Literary, Cultural, and Textual Theory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in English or C.I.

**Course Description**
Theories of literature, cultural, and textual formation since the mid 20th century.

**College**
College of Arts and Humanities

**Department**
Department of English

**Terms of Offering**
Fall

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ENG6624 - Social Media Research for Humanities

**Course Title**
Social Media Research for Humanities

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Fundamentals of humanist research in social media. Students read canonical and contemporary social media research and learn to collect and analyze social media data.

**College**
College of Arts and Humanities

**Department**
College of Arts and Humanities Dean's Office

**Terms of Offering**
Occasional
ENG6800 - Introduction to Texts and Technology

Course Title
Introduction to Texts and Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Basic concepts of graduate study in Texts and Technology.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Fall

ENG6801 - Texts and Technology in History

Course Title
Texts and Technology in History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Acceptance into the Texts and Technology program, graduate standing, or C.I.

Course Description
Explores the history of relations between the Texts and Technology. We examine how various technologies have influenced the nature of texts they produce.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Spring
ENG6806 - Digital Editing and Databases

Course Title
Digital Editing and Databases

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Enrollment in Texts and Technology PhD program or Digital Media master's program.

Course Description
Applied aspects of textual reproduction and editing, including scanning (OCR) and XML coding, as such processes relate to database content and use.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

ENG6808 - Narrative Information Visualization

Course Title
Narrative Information Visualization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Exploration of theory and practice of information visualization, with emphasis on visualization in interactive digital texts. Includes working with large datasets to develop narrative visualizations.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Occasional
ENG6810 - Theories of Texts and Technology

Course Title
Theories of Texts and Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Acceptance into the Texts and Technology program, graduate standing, or C.I.

Course Description
Introduces general theoretical concepts as a basis for the advanced study of Texts and Technology.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Spring

ENG6811 - Cultural Contexts in Texts and Technology

Course Title
Cultural Contexts in Texts and Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Selected cultural contexts in which texts and technologies converge and where reciprocal mediation, definition, or transformation occurs. May be used in the degree program a maximum of 2 times.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Fall
ENG6812 - Research Methods for Texts and Technology

Course Title
Research Methods for Texts and Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Acceptance into the Texts and Technologies program, graduate standing, or C.I.

Course Description
Prepares students to design, conduct, and critique empirical research in textual technologies, broadly conceived.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Fall

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ENG6813 - Interdisciplinary Teaching

Course Title
Interdisciplinary Teaching

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Theory and practice of designing interdisciplinary courses and curricula for the humanities. Includes strategies, theories, and best practices.

College
College of Arts and Humanities

Department
College of Arts and Humanities Dean's Office

Terms of Offering
Spring
ENG6814 - Gender in Texts and Technology

**Course Title**
Gender in Texts and Technology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Relationships among text, science, technology and gender.

**College**
College of Arts and Humanities

**Department**
College of Arts and Humanities Dean's Office

**Terms of Offering**
Occasional

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ENG6819 - Critical Making for Humanist Scholarship

**Course Title**
Critical Making for Humanist Scholarship

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Critical making is making as scholarship, grounded in the humanities, interweaving design, function, and theory through attention to code, software, and hardware.

**College**
College of Arts and Humanities

**Department**
College of Arts and Humanities Dean's Office

**Terms of Offering**
Occasional
ENG6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

ENG6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

ENG6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of English
ENG6939 - Topics in Text and Technology

**Course Title**
Topics in Text and Technology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Experimental methods of writing and research, possibly including photography, cinema, Internet, and other transformations of narrative form. May be used in the degree program a maximum of 3 times.

**College**
College of Arts and Humanities

**Department**
College of Arts and Humanities Dean's Office

**Terms of Offering**
Spring
Fall

ENG6947 - Internship in Texts and Technology

**Course Title**
Internship in Texts and Technology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Texts and Technology PhD program or C.I.

**Course Description**
Internship in opportunity to integrate practical experience with theory and content from Texts and Technology program.

**College**
College of Arts and Humanities

**Department**
College of Arts and Humanities Dean's Office

**Terms of Offering**
Fall
ENG6949 - Cooperative Education in English: General

Course Title
Cooperative Education in English: General

Credits Hours
0 - 99

College
College of Arts and Humanities

Department
Department of English

ENG6950 - Capstone Course

Course Title
Capstone Course

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in English and at least 18 graduate credit hours in English.

Course Description
Systematic and comprehensive revision of previous graduate writing with special attention to use of theory and professionalization towards the goal of publication and/or conference presentation.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Spring

ENL - English Literature

ENL5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English
ENL5937 - Special Topics
Course Title  
Special Topics
Credits Hours  
3
College  
College of Arts and Humanities
Department  
Department of English

ENL6909 - Research Report
Course Title  
Research Report
Credits Hours  
1 - 99
College  
College of Arts and Humanities
Department  
Department of English

ENL6918 - Directed Research
Course Title  
Directed Research
Credits Hours  
1 - 99
College  
College of Arts and Humanities
Department  
Department of English

ENL6938 - Special Topics
Course Title  
Special Topics
Credits Hours  
3
College  
College of Arts and Humanities
Department  
Department of English

ENT - Entrepreneurship
ENT5016 - New Venture Design

Course Title
New Venture Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Applies contemporary methodologies to guide the creation, validation, and ongoing development of new business models for startup businesses and other new ventures.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Fall

ENT5185 - Technological Entrepreneurship

Course Title
Technological Entrepreneurship

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Examines how technology and innovation processes affect social and organizational change, and the distinct challenges associated with launching, managing and growing technology-based business ventures.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Spring
ENT5206 - New Venture Implementation
Course Title
New Venture Implementation
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
ENT 5XXX New Venture Design. Explains how to execute a well-researched business model by implementing required and strategic actions necessary to launch a new venture.

College
College of Business Administration
Department
Department of Management
Terms of Offering
Spring

ENT5619 - Creativity and Entrepreneurship
Course Title
Creativity and Entrepreneurship
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate Standing.
Course Description
This course presents contemporary methods for characterizing customer problems, designing creative solutions, and assessing value propositions for startup business ventures.

College
College of Business Administration
Department
Department of Management
Terms of Offering
Fall
ENT5946 - Small Business Consulting

Course Title
Small Business Consulting

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
This is a highly experiential course where students are assigned to teams that complete consulting projects for local small businesses.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Fall

ENT6418 - Small Business Accounting and Finance

Course Title
Small Business Accounting and Finance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master's of Science in Management Integrated Business track.

Course Description
Introduces accounting concepts, financial statements, ratio analysis, time value of money, cash flow management, forecasting, funding sources, cost of capital, and capital budgeting.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Spring
ENT6617 - Innovation and Entrepreneurship Strategy

Course Title
Innovation and Entrepreneurship Strategy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing. An in-depth examination of strategies that promote the diffusion of innovations and the success of innovation-driven business and social ventures.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Summer
Fall

ENT6900 - Entrepreneurship Portfolio

Course Title
Entrepreneurship Portfolio

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the graduate college.

Course Description
This course provides students with an opportunity to achieve new venture development milestones, demonstrate specific entrepreneurial competencies associated with those milestones, and connect with community experts tasked with assessing their efforts. It emphasizes entrepreneurship as practice, and rewards students for making tangible progress on connecting with customers, developing solutions, and organizing startup ventures.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional

ENV - Engineering: Environmental
ENV5410 - Water Treatment

Course Title
Water Treatment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- EES 4202C or ENV 5517 or C.I.

Course Description
Potable water regulations, standards, chemical reactors, oxidation, disinfection, disinfection by-products, ultraviolet irradiation. Internal corrosion and microbial control in municipal and industrial water distribution systems.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Odd Spring

ENV5505 - Sludge Management Operations in Environmental Engineering

Course Title
Sludge Management Operations in Environmental Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- ENV 4561.

Course Description
Theory and design of sludge management operations and processes in environmental engineering, including stabilization dewatering and ultimate disposal.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
ENV5517 - Engineering Chemical and Biological Processes

Course Title
Engineering Chemical and Biological Processes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Corequisites
- ENV 4561 (or equivalent) or C.I.

Course Description
Coverage of equilibrium/aquatic chemistry, softening and coagulation, and disinfection of water. Microbiology and biochemistry as applied to activated sludge system design.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Fall

ENV5636 - Environmental and Water Resources Systems Analysis

Course Title
Environmental and Water Resources Systems Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ENV 3001 or C.I.

Course Description
Discussion of environmental and water resources systems with the emphasis on cost-effectiveness, pollution prevention, and sustainability to aid in environmental engineering decision-making.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
ENVS917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering

ENVS937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering

ENV6015 - Physical/Chemical Treatment Systems in Environmental Engineering
Course Title
Physical/Chemical Treatment Systems in Environmental Engineering
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- ENV 4561 and EES 4202C or C.I.
Course Description
Theory and design of physical and chemical operations and processes in environmental engineering using latest technologies.
College
College of Engineering and Computer Science
Department
Department of Civil, Environmental, and Construction Engineering
Terms of Offering
Fall
ENV6016 - Biological Treatment Systems in Environmental Engineering

Course Title
Biological Treatment Systems in Environmental Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EES 4111C and ENV 4561 or C.I.

Course Description
Theory and design of biological operations and processes in environmental engineering using the latest technologies.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring

ENV6030 - Environmental Biotechnology

Course Title
Environmental Biotechnology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EES 4111C.

Course Description
Environmental Biotechnology teaches graduate students the management of microorganism-based engineer systems for applications in waste treatment and energy generation.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Even Spring
ENV6046 - Membrane Mass Transfer

Course Title
Membrane Mass Transfer

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ENV 6015 or C.I.

Course Description
Introduction to modeling of mass transfer in membrane systems; membrane morphology, mathematical development of mass transfer coefficients; fouling mechanisms, system modeling, and applications.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

ENV6047 - Environmental Informatics and Remote Sensing

Course Title
Environmental Informatics and Remote Sensing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Discussion of how the environmental informatics, including hydroinformatics, can be applied for sustainable decision making with the emphasis on remote sensing, GIS, expert systems, decision support systems, data mining, and environmental management.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
ENV6106 - Theory and Practice of Atmospheric Dispersion Modeling

Course Title
Theory and Practice of Atmospheric Dispersion Modeling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Atmospheric composition and dynamics. Engineering methods of mathematical modeling, both for point source and mobile source. Current computer models will be used.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Even Spring

ENV6126 - Design of Air Pollution Controls

Course Title
Design of Air Pollution Controls

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Current methods for engineering design and performance analysis of air pollution control equipment to include scrubbers, baghouses, electrostatic precipitators, VOC incinerators, others.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Odd Spring
ENV6128 - Smart Air Quality Monitoring and Air Pollution Control

Course Title
Smart Air Quality Monitoring and Air Pollution Control

Credits Hours
3

Prerequisites
- CGN 5555.

Course Description
This course will introduce science and engineering principles in smart air pollution measurement and control. Hands-on experiences are also provided.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Fall

ENV6519 - Aquatic Chemical Processes

Course Title
Aquatic Chemical Processes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EES 4202C and EES 4111C or C.I.

Course Description
The applicability of water chemistry and physical chemistry on natural waters and waste-water with emphasis on environmental engineering problems.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
ENV6533 - Smart Water and Wastewater Management

Course Title
Smart Water and Wastewater Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ENV 3001 with a grade of "C" (2.0) or better or C.I.

Course Description
This course introduces the concepts of smart water and wastewater systems and how advanced technology are being used for sustainable urban development.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Fall

ENV6558 - Industrial Waste Treatment

Course Title
Industrial Waste Treatment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ENV 4561.

Course Description
Theories, methods, unit operations of management, reduction, treatment, disposal of industrial wastes.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
ENV6616 - Ecological Engineering and Receiving Water Impacts

Course Title
Ecological Engineering and Receiving Water Impacts

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• ENV 5517 or C.I.

Course Description
Ecological engineering principles, ecosystem restoration and receiving water impacts. Introduction of green building design and integration of new ecosystem associated with green infrastructures and applications for eco-city design.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

ENV6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

ENV6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering
ENV6938 - Special Topics
 Course Title
 Special Topics
 Credits Hours
 3
 College
 College of Engineering and Computer Science
 Department
 Department of Civil, Environmental, and Construction Engineering

ENV7919 - Research
 Course Title
 Research
 Credits Hours
 1 - 99
 College
 College of Engineering and Computer Science
 Department
 Department of Civil, Environmental, and Construction Engineering

ENY - Entomology

ENY5006C - Entomology
 Course Title
 Entomology
 Credits Hours
 4
 Lab/Studio/Field Work Hours
 6
 Course Description
 Morphology, physiology, ontogeny, behavior, ecology and population biology of insects
 College
 College of Sciences
 Department
 Department of Biology
 Terms of Offering
 Odd Fall
 Current Fee Per Student
 $40.00
ENY5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology

ENY5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Biology

ESE - Education: Secondary

ESE5344 - Managing the Secondary Classroom

Course Title
Managing the Secondary Classroom

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Strategies, methods, materials, and technologies for managing the secondary classroom. Creating positive classroom environments, maintaining/increasing appropriate behaviors, and teaching behavior appropriate to all students.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall
ESE5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Education and Human Performance
Department
Teaching and Learning Principles Department

ESE6036 - Contemporary Issues in Secondary Education
Course Title
Contemporary Issues in Secondary Education
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Graduate Standing or C.I. Examination of contemporary issues in secondary education at the local and national levels. Students will identify, define, and analyze important problems facing secondary schools.
College
College of Community Innovation and Education
Department
School of Teacher Education
Terms of Offering
Spring
ESE6217 - Curriculum Design

Course Title
Curriculum Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Basic Teacher Certificate or C.I.

Course Description
Goal analysis, task analysis, needs assessment, and writing performance objectives for developing courses of study.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Fall

ESE6256 - Critical Issues in Secondary Education

Course Title
Critical Issues in Secondary Education

Credits Hours
1 - 3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDG 6415

Corequisites
- Graduate Internship.

Course Description
Examination of critical issues in secondary education including topics such as classroom and behavior management, technology, and current issues.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Odd Spring
Even Spring
ESE6416 - Curriculum Evaluation

Course Title

Curriculum Evaluation

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- ESE 6217 or an equivalent curriculum course.

College

College of Community Innovation and Education

Department

Learning Sciences & Educational Research

ESE6427 - Capstone: Action Research in Secondary Education

Course Title

Capstone: Action Research in Secondary Education

Credits Hours

3

Lab/Studio/Field Work Hours

0

Course Description

ESE 5XXX Managing Secondary Classroom, EDF 6472, ESE 6XXX (Contemporary Issues in Secondary Education), EME 6602, LAE 5496. Capstone course for Secondary Education MEd. Engage in action research analyzing an issue or challenge in their own classroom practice.

College

College of Community Innovation and Education

Department

School of Teacher Education

Terms of Offering

Fall

ESE6909 - Research Report

Course Title

Research Report

Credits Hours

1 - 99

College

College of Community Innovation and Education

Department

School of Teacher Education
ESE6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

ESE6935 - Introductory Seminar in Secondary Education

Course Title
Introductory Seminar in Secondary Education

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate program or C.I.

Course Description
Overview of Master of Teaching policies and expectations, and exploration on the teaching profession in terms of professional organizations, accomplished practices, publications, issues, and terminology.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional
ESE6936 - Capstone Seminar in Secondary Education

Course Title
Capstone Seminar in Secondary Education

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
• ESE 6935 or C.I.

Course Description
As a culminating experience, this seminar provides students with the opportunity to synthesize what they have learned throughout their Master of Arts in Teaching program through completion of a portfolio and reflective analysis of learning.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional

ESE6938 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

ESI - Engineering System-Industrial
ESI5219 - Engineering Statistics

Course Title
Engineering Statistics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Discrete and continuous probability distributions, hypothesis testing, regression, nonparametric stats and ANOVA.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
Fall

ESI5227 - Total Quality Improvement

Course Title
Total Quality Improvement

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032 or equivalent.

Course Description
Quality improvement (QI) tools and techniques, advanced QI techniques, quality improvement systems, total quality management concepts and implementation, planning and management tools, and case studies.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Occasional
ESI5236 - Reliability Engineering

Course Title
Reliability Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ESI 4234 or equivalent, or C.I.

Course Description
Reliability theory and modeling approaches. Topics include: failure data analysis, maintainability, reliability standards (DOD), software reliability, reliability in design, and electronic systems reliability.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall

ESI5250 - Engineering Statistics in Health Systems

Course Title
Engineering Statistics in Health Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Healthcare Systems Engineering track of the Industrial Engineering MS Program.

Course Description
Data collection, descriptive statistics, discrete and continuous probability distributions, sampling techniques, statistical estimation, hypothesis testing, regression, nonparametric stats and ANOVA applied to Health Systems.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Summer
Fall
ESI5306 - Operations Research

Course Title
Operations Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032.

Course Description
Methods of operations research, including formulation for models and derivation of solutions; linear programming, network models, queueing theory, simulation, and nonlinear optimization techniques.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall

ESI5359 - Risk Assessment and Management

Course Title
Risk Assessment and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ESI 5219 or STA 3032.

Course Description
Problems and complexities involved in risk assessment and management. Selected methodologies are illustrated through realistic applications in engineering and the sciences.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Occasional
ESI5526C - Discrete Event Simulation in Health Systems

Course Title
Discrete Event Simulation in Health Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ESI 5219 (or equivalent statistics course)

Course Description
Topics include operational modeling of patient flow, provider assignment, facility and asset utilization, care protocol planning, and optimization through Health Technology Assessment in Health Systems.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall

ESI5531 - Discrete Systems Simulation

Course Title
Discrete Systems Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032.

Course Description
Methods for performing discrete systems simulation, including network modeling, will be treated.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
ESI5917 - Directed Research  
**Course Title**  Directed Research  
**Credits Hours**  1 - 99  
**College**  College of Engineering and Computer Science  
**Department**  Department of Industrial Engineering and Management Systems  

ESI5937 - Special Topics  
**Course Title**  Special Topics  
**Credits Hours**  3  
**College**  College of Engineering and Computer Science  
**Department**  Department of Industrial Engineering and Management Systems  

ESI6217 - Statistical Aspects of Digital Simulation  
**Course Title**  Statistical Aspects of Digital Simulation  
**Credits Hours**  3  
**Lab/Studio/Field Work Hours**  0  
**Prerequisites**  
- ESI 5219 or C.I.  
**Course Description**  
Statistical issues in digital simulation including input data analysis, pseudorandom number generation, experimental design, and simulation output analysis.  
**College**  College of Engineering and Computer Science  
**Department**  Department of Industrial Engineering and Management Systems  
**Terms of Offering**  Odd Spring
ESI6224 - Quality Management

Course Title
Quality Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032 or equivalent or C.I.

Course Description
Philosophy and concepts of quality management, organization for quality, quality cost, quality audits and corrective actions, tools and techniques for improvement.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring

ESI6225 - Quality Design and Control

Course Title
Quality Design and Control

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032 or equivalent.

Course Description
Concepts and methods for quality design and control, including statistical process control (SPC), control charts, process capability, product and process design and improvement, Taguchi methods, case studies. May be repeated for credit.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall
ESI6247 - Experimental Design and Taguchi Methods

Course Title
Experimental Design and Taguchi Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032 or ESI 4234.

Course Description
Introduction to Taguchi Concepts and Methodologies, use of design of experiments for quality design and improvement.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring

ESI6251C - Engineering Quality in Health Systems

Course Title
Engineering Quality in Health Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Risk Assessment and Management in Health Systems and Advanced Engineering Economics in Health Systems.

Course Description
Topics include quality management in health systems, engineering roles for the organization, quality costing, quality auditing, and corrective action activities; including tools and techniques for improvement.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
ESI6252C - Managing Engineering Risk in Health Systems

Course Title
Managing Engineering Risk in Health Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Healthcare Systems Engineering track of the MS in Industrial Engineering program in the UCF College of Engineering and Computer Science.

Course Description
Topics include risk assessment, management, spectrum of risks for near miss and adverse event management. Selected methodologies are illustrated through realistic applications in Health systems.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring

ESI6261 - Service System Quality Engineering

Course Title
Service System Quality Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 3032 or equivalent or C.I.

Course Description
Philosophy and concepts of managing, organizing, planning, controlling and motivating for quality, quality cost, tools, and techniques for improvement, special topics in travel and analytics.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall
ESI6336 - Queueing Systems

**Course Title**
Queueing Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ESI 5219.

**Course Description**
Analysis of queueing systems and waiting line problems using analytical and Monte Carlo methods. Laboratory assignments.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Odd Spring

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ESI6358 - Decision Analysis

**Course Title**
Decision Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ESI 4312 or ESI 5306.

**Course Description**
Classical Bayesian analysis; utility and its measurement; multiattribute utility methods; influence diagrams; Analytic Hierarchy Process; behavioral aspects; simulation.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Fall
ESI6418 - Linear Programming and Extensions  
**Course Title**  
Linear Programming and Extensions  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- ESI 4312 or ESI 5306  
**Course Description**  
Simplex and Revised Simplex Method; interior-point methods; duality; large-scale optimization; decomposition algorithms; upper bounds; linearization; parametric LP; goal programming.  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Industrial Engineering and Management Systems  
**Terms of Offering**  
Even Spring

ESI6511 - Systems Integration and Testing  
**Course Title**  
Systems Integration and Testing  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- ESI 6552  
**Course Description**  
This course focuses on the application of systems engineering principles to the integration and test and evaluation of system elements and, ultimately, of the total system.  
**College**  
College of Engineering and Computer Science  
**Department**  
Department of Industrial Engineering and Management Systems  
**Terms of Offering**  
Fall
ESI6532 - Object-Oriented Simulation

Course Title
Object-Oriented Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
2

Course Description

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Even Spring

ESI6534 - Agent-Based Modeling of Social Systems

Course Title
Agent-Based Modeling of Social Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing.

Course Description
The goal of this course is to teach students the fundamentals methods for building Agent-Based Models of social, economic, and engineered systems

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
ESI6535 - Advanced Agent-Based Modeling

Course Title
Advanced Agent-Based Modeling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
This course discusses advanced methods for building agent-based models of social, economic, biological and engineered systems. Methods include machine learning, data science, network science, and inverse generative processes.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring

ESI6550 - Systems Thinking in Engineering

Course Title
Systems Thinking in Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ESI 6551 or C.I.

Course Description
This class shows how it is possible to use system thinking in order to properly define, conceive, develop, and articulate complex systems and explore 2nd and 3rd order effects of their behavior.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
ESI6551 - Systems Engineering

Course Title
Systems Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing with an earned graduate degree in a technical discipline (waivable for significant industry experience).

Course Description
Introduction to heuristics approach to the process of systems architecting in business, economics, social, urban, military and government domains emphasizing the conceptual representation and acceptance phases.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Fall

ESI6552 - Systems Architecture

Course Title
Systems Architecture

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ESI 6551.

Course Description
This course discusses the processes and fundamentals of system architecting to include software such as SySML, modeling system, requirements, structure, and behavior.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Spring
ESI6609 - Industrial Engineering Analytics for Healthcare

**Course Title**
Industrial Engineering Analytics for Healthcare

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
ESI 5219 or C.I. Course includes an overview of major data analytics algorithms and methods introduced through examples from Healthcare.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Fall

ESI6891 - IEMS Research Methods

**Course Title**
IEMS Research Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- ESI 5219.

**Course Description**
Assist students in producing publishable research and to introduce new tools which may be needed for collection and analysis of research data.

**College**
College of Engineering and Computer Science

**Department**
Department of Industrial Engineering and Management Systems

**Terms of Offering**
Fall
ESI6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Industrial Engineering and Management Systems

ESI6918 - Directed Study
Course Title
Directed Study
Credits Hours
1 - 99
College
College of Engineering and Computer Science
Department
Department of Industrial Engineering and Management Systems

ESI6938 - Seminar in Advanced Industrial Engineering
Course Title
Seminar in Advanced Industrial Engineering
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing.
Course Description
This course will teach advanced methods and applications in the field of agent-based modeling, simulation and analysis.
College
College of Engineering and Computer Science
Department
Department of Industrial Engineering and Management Systems
ESI7480 - Optimization and Data Mining for Industrial Engineers

Course Title
Optimization and Data Mining for Industrial Engineers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ESI 5306 or ESI 6418.

Course Description
The course introduces basic optimization theory and related data analysis algorithms for industrial engineering and data mining applications.

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

Terms of Offering
Odd Fall

ESI7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Industrial Engineering and Management Systems

EUH - European History
EUH5208 - Colloquium in Early Modern History

**Course Title**
Colloquium in Early Modern History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Readings and discussion on selected topics in the historiography of Early Modern Europe (circa 1400 to 1800).

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

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EUH5419 - Colloquium in Roman History

**Course Title**
Colloquium in Roman History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Readings in selected topics in the history of Ancient Rome. May be used in the degree program a maximum of 2 times only when course content is different.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional
EUH5459 - Colloquium in French History

**Course Title**
Colloquium in French History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Readings in selected topics in French History. May be used in the degree program a maximum of 3 times.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Even Summer

EUH5546 - Colloquium: British History

**Course Title**
Colloquium: British History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or senior standing or C.I.

**Course Description**
Selected topics in British history. No standard syllabus because content is different with each offering. May repeat for credit only when course content is different.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional
EUH5579 - Colloquium in Soviet Russia

**Course Title**
Colloquium in Soviet Russia

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or senior standing or C.I.

**Course Description**
Reading and class discussion of the literature on selected topics in Russian history, 1911-present.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

EUH5905 - European Imperialism

**Course Title**
European Imperialism

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Readings in selected topics in the history of European Imperialism. May be used in the degree program a maximum of 3 times only when course content is different.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional
**EUH5917 - Directed Research**

*Course Title*
Directed Research

*Credits Hours*
1 - 99

*College*
College of Arts and Humanities

*Department*
Department of History

**EUH5925 - Colloquium in Medieval Europe**

*Course Title*
Colloquium in Medieval Europe

*Credits Hours*
3

*Lab/Studio/Field Work Hours*
0

*Prerequisites*
- Graduate standing or C.I.

*Course Description*
Readings in selected topics in the history of medieval Europe. May be used in the degree program a maximum of 3 times only when course content is different.

*College*
College of Arts and Humanities

*Department*
Department of History

*Terms of Offering*
Occasional

**EUH5937 - Special Topics**

*Course Title*
Special Topics

*Credits Hours*
3

*College*
College of Arts and Humanities

*Department*
Department of History
EUH6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of History

EUH6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of History

EUH6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
Department of History
EUH6939 - Seminar in European History
Course Title
Seminar in European History
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Research seminar on selected topics in European history. May be repeated for credit only when course content is different.
College
College of Arts and Humanities
Department
Department of History
Terms of Offering
Odd Spring

EUH6971 - Treatise (Thesis or Research Report)
Course Title
Treatise (Thesis or Research Report)
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of History

EXP - Experimental Psychology
**EXP5208 - Sensation and Perception**  
**Course Title**  
Sensation and Perception  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate status or senior standing or C.I.  
**Course Description**  
A study involving human information processing with regard to physical and psychological variables in sensory and perceptual phenomena.  
**College**  
College of Sciences  
**Department**  
Department of Psychology  
**Terms of Offering**  
Odd Spring

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**EXP5254 - Human Factors and Aging**  
**Course Title**  
Human Factors and Aging  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate status, or C.I.  
**Course Description**  
Drawing from human factors, ergonomics, and aging, this course discusses methods for enhancing the independence and quality of life of older adults and caregivers.  
**College**  
College of Sciences  
**Department**  
Department of Psychology  
**Terms of Offering**  
Even Fall
EXP5256 - Human Factors I  
Course Title  
Human Factors I  
Credits Hours  
3  
Lab/Studio/Field Work Hours  
0  
Prerequisites  
- Graduate status or senior standing or C.I.  
Course Description  
Survey of human factors literature. Introduction to topics including human capabilities and human interfaces with human-machine systems.  
College  
College of Sciences  
Department  
Department of Psychology  
Terms of Offering  
Fall  

EXP5917 - Directed Research  
Course Title  
Directed Research  
Credits Hours  
1 - 99  
College  
College of Sciences  
Department  
Department of Psychology  

EXP5937 - Special Topics  
Course Title  
Special Topics  
Credits Hours  
3  
College  
College of Sciences  
Department  
Department of Psychology
EXP6116 - Visual Performance

Course Title
Visual Performance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EXP 5208 or C.I.

Course Description
The psychology, physics and physiology of vision with an emphasis on the human visual response and applications of vision research.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring

EXP6255 - Human Performance

Course Title
Human Performance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EXP 6506 and (EXP 5256 or EXP 6257), or C.I.

Course Description
Human performance dimensions and concepts of assessment of human capabilities; performance acquisition, information processing and decision making; applications of principles to the understanding of stress and performance effectiveness.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall
EXP6257 - Human Factors II

**Course Title**
Human Factors II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EXP 5256.

**Course Description**
The second in the series of basic human factors courses involving an in-depth examination of issues.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Spring

EXP6258 - Human Factors III

**Course Title**
Human Factors III

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EXP 5256, EXP 6257.

**Course Description**
The third in the series of basic human factors courses. Current topics in human factors, exchange of information on practical field experience in human factors.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Fall

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2022-2023 Graduate Catalog
EXP6506 - Human Cognition and Learning

Course Title
Human Cognition and Learning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EXP 3404C and EXP 3604C.

Course Description
Research and theory relating to attention, memory, problem solving, and reasoning.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

EXP6541 - Advanced Human Computer Interaction

Course Title
Advanced Human Computer Interaction

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EIN 6258 or C.I.

Course Description
Principles and guidelines of advanced human computer interaction as they apply to a variety of complex human machine systems.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring

2022-2023 Graduate Catalog
EXP6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Psychology

EXP6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Psychology

EXP6939 - Teaching Seminar

Course Title
Teaching Seminar

Credits Hours
3 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Orientation to and supervision in teaching assigned courses.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
EXP6945 - Human Factors Internship

Course Title
Human Factors Internship

Credits Hours
8

Lab/Studio/Field Work Hours
12

Prerequisites
- EXP 5256, EXP 6257, PSY 6216C, PSY 7218C, EXP 6255, or C.I.

Course Description
Supervised placement in an industrial, governmental, or consulting setting. Student completes a specific project under the supervision of an organizational sponsor and a faculty member.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

EXP7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Psychology

FIL - Film
FIL5141C - Feature/TV Writing

Course Title
Feature/TV Writing

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
Admitted to the Emerging Media MFA, Entrepreneurial Digital Cinema Track, and C.I.

Course Description
Writing workshop, examination of mythic storytelling, and ethics of scriptwriting.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

FIL5370C - Documentary Production I

Course Title
Documentary Production I

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
Graduate standing and C.I.

Course Description
Tutorial-based studio course (part 1 of 2). Students’ author/apply narrative structure and production techniques to nonfiction film, author two chapters of their ETD.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall
FIL5371C - Documentary Production II

Course Title
Documentary Production II

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- C.I. and graduate-level Documentary Production I

Course Description
Tutorial-based studio course in which students author and apply narrative structure and production techniques to nonfiction film.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring

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FIL5406 - Theories of Film Production

Course Title
Theories of Film Production

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Film MFA student or C.I.

Course Description
Comparative analysis of motion picture production methodologies, including the studio industrial model, from a historical/critical perspective.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
FIL5419 - Developing the Film Screenplay

Course Title
Developing the Film Screenplay

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MFA Film and Digital Media-Entre Dig Cin track, or C.I.

Course Description
Development of an existing, original screenplay to fit the demands, limits, and possibilities of the microbudget, digital film paradigm.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

FIL5422C - Experimental Cinema II

Course Title
Experimental Cinema II

Credits Hours
3

Lab/Studio/Field Work Hours
4

Prerequisites
- Graduate student standing, FIL5421C and C.I.

Course Description
Tutorial-based studio course in which students author and apply narrative structure and production techniques to experimental film.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
FIL5426C - Experimental Cinema I

**Course Title**
Experimental Cinema I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
4

**Prerequisites**
- Graduate student standing & C.I.

**Course Description**
Tutorial-based studio course in which students author creative work within the modality of experimental cinema and develop ideas for their thesis films.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall

FIL5800 - Research Methods in Film and Digital Media

**Course Title**
Research Methods in Film and Digital Media

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Film and Digital Media graduate program or C.I.

**Course Description**
Research methodology for the study and production of film and new media.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Spring
FIL5809 - Independent Cinema

**Course Title**
Independent Cinema

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Emerging Media MFA, Feature Film Production Track or C.I.

**Course Description**
Advanced analysis and research of independent cinema.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional

FIL5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media
FIL5924 - Graduate Seminar
Course Title
Graduate Seminar
Credits Hours
1
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to MFA Film and Digital Media/Entrepreneurial Digital Cinema track, or C.I.
Course Description
Strategies for a successful graduate experience, and forum for modes of inquiry, film technique, production and distribution issues; and thesis defense preparation.
College
College of Sciences
Department
Nicholson School of Communication and Media
Terms of Offering
Fall

FIL5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Nicholson School of Communication and Media

FIL5944 - Internship
Course Title
Internship
Credits Hours
1 - 99
College
College of Sciences
Department
Nicholson School of Communication and Media
FIL6146 - Screenplay Refinement

Course Title
Screenplay Refinement

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Emerging Media MFA program, FIL 5419 or C.I. Refining a feature film script into an effective, compelling, easy to read, and "marketable" shooting script that forms the foundation for thesis film production. May be used in the degree program a maximum of 2 times.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring

FIL6454 - Microbudget Production Design

Course Title
Microbudget Production Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Film and Digital Media graduate program or C.I.

Course Description
Aesthetic principles as applied to production design of low-budget projects.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
FIL6596 - Advanced Directing Workshop for Film and Digital Media

Course Title
Advanced Directing Workshop for Film and Digital Media

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to MFA Film and Digital Media-Entre Dig Cin track or C.I.

Course Description
Advanced directorial concepts and techniques used in film to elicit, support and direct compelling film performances. May be used in the degree program a maximum of 2 times only when course content is different.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
Fall

Current Fee Per Student
$70.00

FIL6614 - Domestic and International Models of Distribution

Course Title
Domestic and International Models of Distribution

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to Film or Digital Media graduate program or C.I.

Course Description
Global media distribution business models, with emphasis on independent film distribution in a variety of markets, including theatrical, home video, and internet.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
FIL6619 - Guerilla Marketing and Models of Distribution

Course Title
Guerilla Marketing and Models of Distribution

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Emerging Media MFA program, graduate standing, or C.I. Grass roots and non-traditional marketing strategies for film and media products. Global media distribution business models in a variety of markets.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

FIL6640 - Microbudget Production Management

Course Title
Microbudget Production Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Film or Digital Media graduate program or C.I.

Course Description
Strategies for budgeting and scheduling low-budget films and digital media products.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
FIL6644 - Microbudget Pre-Production

Course Title
Microbudget Pre-Production

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Emerging Media MFA program, FIL 6146, or C.I.

Course Description
Examination of pre-production issues facing filmmakers working with low budgets, with focus on creative concept, design, style, and location selection.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

FIL6649 - Microbudget Post-Production

Course Title
Microbudget Post-Production

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Emerging Media MFA program, FIL 6644, or C.I.

Course Description
Continued examination of production challenges that are unique to filmmakers working with extremely limited budgets, including casting, schedules, and set management.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Spring
FIL6673 - Arts and Media Entrepreneurship

**Course Title**
Arts and Media Entrepreneurship

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to Emerging Media MFA program, graduate standing, or C.I. Application of core business concepts to create a company and develop a sales proposal suited to a variety of potential arts and emerging investors.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall

FIL6908 - Independent Study

**Course Title**
Independent Study

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

FIL6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media
FIL6938 - Special Topics/Seminar

**Course Title**
Special Topics/Seminar

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

FIL6958 - Study Abroad

**Course Title**
Study Abroad

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional

FIL6971 - Thesis

**Course Title**
Thesis

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

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FIN - Finance

FIN5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Business Administration

**Department**
Department of Finance
FIN5937 - Special Topics  
**Course Title**  
Special Topics

**Credits Hours**  
3

**College**  
College of Business Administration

**Department**  
Department of Finance

FIN6406 - Strategic Financial Management  
**Course Title**  
Strategic Financial Management

**Credits Hours**  
3

**Lab/Studio/Field Work Hours**  
0

**Prerequisites**  
- MBA Professional Core I or C.I.

**Course Description**  
Emphasis on the theory and analytical techniques associated with the major financial decisions of corporate management, including risk analysis, capital budgeting, short- and long-term financial management.

**College**  
College of Business Administration

**Department**  
Department of Finance

**Terms of Offering**  
Spring
Fall
FIN6465 - Financial Analysis Seminar

Course Title
Financial Analysis Seminar

Credits Hours
3

Lab/Studio.Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Seminar in financial analysis; examining financial statements, annual reports and other sources of information. Not open to students who have completed or are enrolled in GEB 6895.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Occasional

FIN6515 - Analysis of Investment Opportunities

Course Title
Analysis of Investment Opportunities

Credits Hours
3

Lab/Studio.Field Work Hours
0

Prerequisites
- Graduate standing, FIN 6406 or C.I.

Course Description
Deals with the theory and tools of analysis required in the management of financial assets.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Fall
FIN6777 - FinTech Entrepreneurship

Course Title
FinTech Entrepreneurship

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission into the FinTech MS program.

Corequisites
- Complete the following:
  - FIN6779 - FinTech in Decision Making (3)

Course Description
This course will help students identify financial sectors that have been disrupted by FinTech or those that are ripe for disruption.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Fall

FIN6778 - Foundations of FinTech

Course Title
Foundations of FinTech

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission into the FinTech MS program.

Course Description
This course provides an overview of the emerging Fintech discipline and how innovations and new technologies are transforming conventional financial markets and services.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Spring
FIN6779 - FinTech in Decision Making
Course Title
FinTech in Decision Making
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission into the FinTech MS program.
Course Description
The objective of this course is to provide an introduction to business intelligence and analytics applied to the financial world.
College
College of Business Administration
Department
Department of Finance
Terms of Offering
Fall

FIN6909 - Research Project
Course Title
Research Project
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Finance

FIN6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Finance
FIN6938 - Special Topics: Foundations of FinTech

Course Title
Special Topics: Foundations of FinTech

Credits Hours
3

Prerequisites
- FIN 6406 Strategic Financial Management.

Course Description
This course provides an overview of the emerging Fintech discipline and how innovations and new technologies are transforming conventional financial markets and services.

College
College of Business Administration

Department
Department of Finance

FIN7807 - Corporate Finance Theory

Course Title
Corporate Finance Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Business doctoral program and FIN 6406 or equivalent; ECO 6416 or equivalent; or C.I.

Course Description
Elaborate coverage of significant theoretical/classical literature and review of empirical literature to provide a sound framework of conceptual knowledge for doctoral students.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Odd Fall
FIN7808 - Introduction to the Theory of Finance

Course Title
Introduction to the Theory of Finance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Business PhD program and FIN 6406 or equivalent, or C.I.

Course Description
This course provides an introduction to decisions and equilibrium under uncertainty, portfolio theory, asset pricing models, option pricing, capital structure, and agency theory.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Occasional

FIN7816 - Investment Theory

Course Title
Investment Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to business doctoral program, FIN 7807, QMB 7565 , and C.I.

Course Description
Extensive coverage of theoretical and empirical literature dealing with modern investment thought, portfolio theory, capital market equilibrium, and related topics.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Even Fall
FIN7845 - Empirical Methods I

Course Title
Empirical Methods I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Business doctoral program.

Course Description
Course will provide a rigorous introduction to the modern empirical toolkit that is used in corporate finance and investments.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Fall

FIN7864 - Empirical Methods II

Course Title
Empirical Methods II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to doctoral program; completion of FIN 7845 and FIN 7808.

Course Description
Course covers advanced topics in empirical methods in studies of asset pricing and corporate finance.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Spring
FIN7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Finance

FIN7935 - Finance Research Forum
Course Title
Finance Research Forum
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Business PhD program and FIN 6406 or equivalent, or C.I.
Course Description
Research and pedagogical issues in finance, including research presentations by faculty, doctoral students, and invited scholars. May be used in the degree program a maximum of 6 times.
College
College of Business Administration
Department
Department of Finance
Terms of Offering
Occasional

FIN7939 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Finance

FLE - Foreign Language Education
FLE5345 - Teaching World Languages in K-12 Schools

Course Title
Teaching World Languages in K-12 Schools

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing.

Course Description
Methods of teaching another language at the K-12 level within a communicative framework. Includes examination and practice of current instructional techniques in listening, speaking, reading, writing skills, testing, and error correction.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring

FLE5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

FLE5937 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
FLE6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

FLE6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

FLE6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Teacher Education

FSS - Food Service Systems

FSS5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management
FSS5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management

FSS6365 - Management of Food Service Operations
Course Title
Management of Food Service Operations
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing.
Course Description
The examination of techniques and mechanisms employed in the management of food service operations. Comparisons, case studies, and selected topics focus on private and public operations.
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management
Terms of Offering
Odd Spring

FSS6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management
GEB - General Business

GEB5516 - Technological Entrepreneurship
Course Title
Technological Entrepreneurship

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Focus of the course is on identification, evaluation and commercialization of new technologies. Emphasis will be placed on the legal, financial and strategy aspects of technology transfer and development.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional
GEBS917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Management

GEBS937 - Special Topics
Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Management

GEBS6037 - Business Foundations and Career Development
Course Title
Business Foundations and Career Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Integrated Business track of the Masters of Science in Management.

Course Description
Provides an introduction to the essential functions of modern business management. Students identify personal interests, knowledge, skills, and abilities and connect them to career opportunities.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Fall
GEB6115 - Entrepreneurship

Course Title
Entrepreneurship

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Seminar on topics concerning the entrepreneurial process in small and large organizations, including needs assessment, sources and methods of innovation, financing, and barriers to entrepreneurship.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Fall
Odd Summer

GEB6116 - Business Plan Formation

Course Title
Business Plan Formation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- GEB 6115 or GEB 6518 or MBA Foundation Core.

Course Description
Professional development and preparation of company business plan. Full analysis of plan and outside evaluation and ranking.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional
GEB6156 - The Business of Hip-Hop Innovation and Entrepreneurship

**Course Title**
The Business of Hip-Hop Innovation and Entrepreneurship

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Hip-Hop culture has evolved from two turntables and a microphone to a billion-dollar industry with infinite business lessons related to innovation and entrepreneurship.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Summer

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GEB6365 - International Business Analysis

**Course Title**
International Business Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MBA Professional Core I.

**Course Description**
Extensive coverage of international business environment with emphasis on the functional operation of multinational firms.

**College**
College of Business Administration

**Department**
Department of Finance

**Terms of Offering**
Spring
GEB6518 - Strategic Innovation

Course Title
Strategic Innovation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
An in-depth examination of strategic and innovation processes as they relate to emerging technologies from invention to commercialization.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional

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GEB6895 - Business Intelligence

Course Title
Business Intelligence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Consent of College of Business Graduate Studies.

Course Description
Study of the sources, acquisition, warehousing, analysis, and application of data pertaining to business decision-making in the firm.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional
GEB6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Management

GEB6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Management

GEB6938 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Management

GEB6949 - Cooperative Education in General Business

Course Title
Cooperative Education in General Business

Credits Hours
0 - 99

College
College of Business Administration

Department
Department of Management
GEB7911 - Structural Equation Modeling for Business Research

Course Title
Structural Equation Modeling for Business Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 7423, MAR 7626.

Course Description
Applications of structural equation modeling (SEM) for business research including factor analysis, aspects of measurement theory, mathematical and technical issues about model fitting are covered.

College
College of Business Administration

Department
Department of Management

GEB7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Management

GEB7939 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Management

GEO - Geography
GEOS917 - Directed Research

Course Title: Directed Research
Credits Hours: 1 - 99

College: College of Sciences
Department: School of Politics, Security, and International Affairs

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GEY - Gerontology

GEY5007 - Women and Healthy Aging

Course Title: Women and Healthy Aging
Credits Hours: 3
Lab/Studio/Field Work Hours: 0

Prerequisites:
- Graduate standing or senior undergraduate.

Course Description:
The examination of the health promotion opportunities and bio-psycho-social challenges of women as they age.

College: College of Nursing
Department: Department of Nursing Systems
Terms of Offering:
Spring
GEY5648 - Gerontology: An Interdisciplinary Approach

Course Title
Gerontology: An Interdisciplinary Approach

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
The study of aging will be presented from an interdisciplinary and multidisciplinary approach spanning the social sciences and health.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Occasional

GEY5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Psychology

GEY5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Psychology

GLY - Geology
GLY5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Chemistry

GLY5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Chemistry

GMS - Graduate Medical Sciences

GMS6860 - Statistics for Biomedical Scientists

Course Title
Statistics for Biomedical Scientists

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Introductory graduate course for Biomedical Sciences or related majors; outlines basic probabilistic and statistical concepts tailored to biomedical scientists. The course will be taught jointly by the Burnett School of Biomedical Sciences and Statistics Department with 50/50 work load split.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional

HFT - Hotel and Restaurant
HFT6949 - Cooperative Education in Hotel and Restaurant

**Course Title**
Cooperative Education in Hotel and Restaurant

**Credits Hours**
0 - 99

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management

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**HIM - Health Information Management**

HIM5118C - Health Care Informatics and Information Technology

**Course Title**
Health Care Informatics and Information Technology

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to M.S. in Health Care Informatics or C.I.

**Course Description**
An overview of the current state of health care informatics including existing and future technologies. Areas of emphasis include EHR, HIE, Standards, and clinical decision making.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Fall

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HIM5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics
HIM5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

HIM6007 - Survey of Health Information Management

**Course Title**
Survey of Health Information Management

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Care Informatics or C.I.

**Course Description**
Provide students with an understanding of computer information systems utilized in a health care environment.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Fall
HIM6119C - Biostatistics and Decision Analysis

Course Title
Biostatistics and Decision Analysis

Credits Hours
4

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to M.S in Health Care Informatics or C.I.

Course Description
Selected decision structure and solution techniques. Selection, implementation, and results analysis of key statistical methods to support decision making and policy analysis in health care organizations.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall

HIM6121C - Privacy and Security in Health Care Informatics

Course Title
Privacy and Security in Health Care Informatics

Credits Hours
4

Lab/Studio/Field Work Hours
1

Course Description
Admission to the Health Care Informatics program or C.I. Focuses on privacy and security issues associated with health care information. Students will evaluate security audits, regulatory policies/laws, and release of information procedures.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Summer
HIM6122C - System Analysis and Design

**Course Title**
System Analysis and Design

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to M.S. in Health Care Informatics or C.I.

**Course Description**
Analyzing workflow in health care organizations to identify data needs and system elements to support work. Modeling system elements with a variety of traditional and object oriented tools.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring

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HIM6123C - Project Management in Health Care Informatics

**Course Title**
Project Management in Health Care Informatics

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to M.S. in Health Care Informatics or C.I.

**Course Description**
This course integrates clinical, financial and administrative data to resolve managerial and patient care problems.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring
HIM6124C - Health Care Data Architecture and Modeling

Course Title
Health Care Data Architecture and Modeling

Credits Hours
4

Lab/Studio/Field Work Hours
1

Prerequisites
- HIM 5118C or C.I.

Course Description
The course integrates the key issues and techniques surrounding data architecture, modeling and standards in health care informatics.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring

HIM6125 - Health Care Informatics Capstone

Course Title
Health Care Informatics Capstone

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- All courses in the M.S. in Health Care Informatics program.

Course Description
This course serves as a culminating experience for the HCI program. Students will apply knowledge gained in all courses to a health care informatics related area of study.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring
HIM6217C - Health Care Database Management

**Course Title**
Health Care Database Management

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- HIM 5118C.

**Course Description**
Design and implementation of relational database structures for health care operations. Use of structured query language and reporting tools to manage data.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Fall

HIM6267 - Foundation of Health Services Administration

**Course Title**
Foundation of Health Services Administration

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Care Informatics or C.I.

**Course Description**
Provides students with an understanding of the managerial and administrative aspects in a health care environment, as it relates to health care informatics.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring
HIM6293 - Health Care Coding and Diagnosis

Course Title
Health Care Coding and Diagnosis

Credits Hours
4

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to Health Care Informatics master's degree or HIA certificate.

Course Description
Medical Coding and the role it plays in informatics emphasizing document usage and extracting needed data for proper code selection. Data mapping related to ICD-9-CM and ICD-10-CM is explored.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall

HIM6464C - Epidemiology, Analytics and Quality Management

Course Title
Epidemiology, Analytics and Quality Management

Credits Hours
4

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to M.S. in Health Care Informatics or C.I.

Course Description
This course introduces epidemiological principles and analytics for enhancing utilization management, quality improvement and outcome assessment in the service delivery system.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Summer
HIM6477 - Medical Terminology for Informatics Professionals

Course Title
Medical Terminology for Informatics Professionals

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Care Informatics or C.I.

Course Description
Provides students with medical terminology used or found in the medical environments and discuss the role the language of medicine plays in informatics.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall

HIM6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics
HIM6927 - MS Healthcare Informatics Orientation

Course Title
MS Healthcare Informatics Orientation

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites

- Admission to M.S. in Health Care Informatics or C.I.

Course Description
An orientation course designed to ensure students fully prepare for, identify, and secure an appropriate masters-level healthcare informatics internship.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall

HIM6935 - Seminar on Current Issues in Health Care Informatics and Enterprise Management

Course Title
Seminar on Current Issues in Health Care Informatics and Enterprise Management

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites

- HIM 5118C; HIM 6119C; HIM 6122C; HIM 6123C.

Course Description
This course provides an overview of project management and will expose students to the principles of project management and health care information systems.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Summer
HIM6947 - MS Healthcare Informatics Internship

Course Title
MS Healthcare Informatics Internship

Credits Hours
2

Lab/Studio/Field Work Hours
240

Prerequisites
- HIM 6998, HIM 5118C, HIM 6122C and HIM 6123C.

Course Description
Experiential learning course where students apply informatics competencies to solve real-world informatics projects of substantive value under the supervision of an internship site preceptor.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring

HIM6971 - Thesis

Course Title
Thesis

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

HIS - General History and Histriography
HIS5067 - Introduction to Public History

Course Title
Introduction to Public History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
Examine and discuss the practice of history in museums, archives, documentary editing, historical publication, media, historical societies, and government agencies.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

HIS5069 - Colloquium in Historical Theories and Methodologies

Course Title
Colloquium in Historical Theories and Methodologies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Students examine texts that influence specific areas of historical theory and methods. Includes canonical readings that shape the development of history and historiography.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

Current Fee Per Student
0
HIS5073 - Oral History

**Course Title**
Oral History

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Theories and practices of oral history. Fieldwork required.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

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HIS5083 - Cultural Heritage Management

**Course Title**
Cultural Heritage Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing, HIS 5067, or C.I. Readings in the debates and issues of international management of cultural heritage and property, including introduction to UNESCO standards.

**College**
College of Arts and Humanities

**Department**
Department of History
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits Hours</th>
<th>Lab/Studio/Field Work Hours</th>
<th>Prerequisites</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS5088 - Readings in Curation and Public History</td>
<td>3</td>
<td>0</td>
<td>Graduate standing or C.I.</td>
<td>Readings in the theories, principles, methods, and design for publicly engaged history content and visualization.</td>
</tr>
<tr>
<td>HIS5503 - History of Technology</td>
<td>3</td>
<td>0</td>
<td>Graduate standing or C.I.</td>
<td>Introduces the historiography of technology's role in historical events, and society's role in shaping technology.</td>
</tr>
</tbody>
</table>
HIS5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of History

HIS5925 - History in the Digital Age

Course Title
History in the Digital Age

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Readings in the history, theory, and methodologies of digital historical practices from precedents in New Social History to the present, including use in Public History.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Even Fall
HIS5926 - Colloquium: History of Women and Gender

Course Title
Colloquium: History of Women and Gender

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or senior standing or C.I.

Course Description
Readings on selected topics in the history of gender and women.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

HIS5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of History
HIS6094 - Seminar in Curation and New Media

**Course Title**
Seminar in Curation and New Media

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Historical research and application of the theories, principles, methods, and design for visual public history projects produced through new media installations.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Odd Spring

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HIS6096 - Seminar in Historic Preservation

**Course Title**
Seminar in Historic Preservation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Seminar in the theory and work of historic preservation. Research methods, theory, law, and professional standards will be explored through student generated preservation projects.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional
HIS6159 - Historiography

Course Title
Historiography

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Selected topics in the study of history. May be repeated for credit.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Fall
Spring

HIS6165 - Digital Tools for Historians

Course Title
Digital Tools for Historians

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Background, theory, and methods of digital history. Students will develop a working knowledge for evaluating and employing digital tools for historical research and presentation.

College
College of Arts and Humanities

Department
Department of History
HIS6167 - Spatial History

Course Title
Spatial History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Discussion of the scholarly literature as well as the application of spatial history research, including geospatial and digital storytelling technologies. May be repeated for credit two times.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

HIS6592 - Seminar in Oral History

Course Title
Seminar in Oral History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Research in oral history. Fieldwork required.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional
HIS6905 - History Capstone Class

**Course Title**
History Capstone Class

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Satisfactory completion of 21 - 24 hours of graduate level course work.

**Course Description**
Advanced historiographical and bibliographical readings for preliminary exams and submission of a research plan for thesis topic.

**College**
College of Arts and Humanities

**Department**
Department of History

**Terms of Offering**
Occasional

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HIS6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of History

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HIS6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of History
HIS6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of History

HIS6942 - Internship

Course Title
Internship

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Graduate internship in public history. Subject may vary. May be used in the degree program a maximum of 2 times.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

HIS6946 - Teaching Practicum

Course Title
Teaching Practicum

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Student observation, participation, direction, and leadership in a college survey course. May be repeated for credit.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional
HMG - Hospitality Management Graduate

**HMG5907 - Independent Study**

**Course Title**
Independent Study

**Credits Hours**
1 - 99

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management

**HMG5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management

**HMG5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
1 - 99

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management

**HMG5944 - Internship**

**Course Title**
Internship

**Credits Hours**
1 - 99

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management
HMG5947 - Experiential Learning Internship

Course Title
Experiential Learning Internship

Credits Hours
0 - 6

College
Rosen College of Hospitality Management

Department
Department of Foodservice and Lodging Management

HMG5957 - Study Abroad

Course Title
Study Abroad

Credits Hours
1 - 99

College
Rosen College of Hospitality Management

Department
Department of Foodservice and Lodging Management

HMG6002 - Advanced Event Design

Course Title
Advanced Event Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - HMG6507 - Event Trends, Technology and the Macroenvironment (3)

Course Description
Analysis of strategic design principles including technology that affect the production of, and stakeholder experiences with, an event.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Every Semester
HMG6010 - Relationship Management in Events

Course Title
Relationship Management in Events

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - HMG6012 - Events Across Borders (3)

Course Description
Synthesis of relationship management constructs as they relate to the various exchanges between event industry organizers, suppliers, sponsors, and human capital.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Every Semester

HMG6011 - Contemporary Issues in Event Management

Course Title
Contemporary Issues in Event Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - HMG6604 - Legal Environment of Events (3)

Course Description
Examining and analyzing contemporary issues facing and shaping the event industry.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Every Semester
HMG6012 - Events Across Borders

**Course Title**
Events Across Borders

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Complete the following:
  - HMG6568 - Destination Planning for Events (3)

**Course Description**
Analysis of events from an international perspective including evaluation of the design, location and organization of events across international borders.

**College**
Rosen College of Hospitality Management

**Department**
Department of Tourism, Events, and Attractions

**Terms of Offering**
Every Semester

HMG6220 - The Reflective Leader

**Course Title**
The Reflective Leader

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Complete the following:
  - HMG6011 - Contemporary Issues in Event Management (3)

**Course Description**
Leadership through the lens of reflective learning skills, connecting theory with practice and thought with transformative action, to facilitate event strategy development and implementation.

**College**
Rosen College of Hospitality Management

**Department**
Department of Tourism, Events, and Attractions

**Terms of Offering**
Every Semester
HMG6223 - Leading Innovation and Change in Hospitality and Tourism

Course Title
Leading Innovation and Change in Hospitality and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Concepts, managerial tools, and techniques aimed to assist leaders through innovation and change management initiatives in hospitality and tourism.

College
Rosen College of Hospitality Management

Department
Department of Foodservice and Lodging Management

Terms of Offering
Fall

HMG6224 - Leadership in Hospitality and Tourism

Course Title
Leadership in Hospitality and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Incorporates different leadership theories, evaluates best practices in leadership development within the hospitality and tourism industry.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Fall
Spring

Current Fee Per Student
NA
HMG6227 - Advanced Training and Development in the Hospitality Industry

Course Title
Advanced Training and Development in the Hospitality Industry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
This course is designed to give students detailed information on developing, delivering, assessing, and evaluating training and development programs for various segments of the hospitality industry.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Occasional

HMG6228 - Critical Issues in Hospitality Human Resources

Course Title
Critical Issues in Hospitality Human Resources

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate student status.

Course Description
Analysis of HR critical factors affecting operation and profitability of hospitality enterprises. Examination of emotional labor, empowerment, burnout, service orientation, turnover, absenteeism, compensation.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Spring
Fall
HMG6229 - Corporate Social Responsibility and Ethics in the Hospitality and Tourism Industry

**Course Title**
Corporate Social Responsibility and Ethics in the Hospitality and Tourism Industry

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing.

**Course Description**
An interactive approach to the impact of corporate social values and ethical strategy on management of hospitality and tourism enterprises.

**College**
Rosen College of Hospitality Management

**Department**
Department of Hospitality Services

**Terms of Offering**
Fall

HMG6245 - Managing Hospitality and Guest Services Organizations

**Course Title**
Managing Hospitality and Guest Services Organizations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Analysis of the unique problems of managing organizations in hospitality and guest services industry.

**College**
Rosen College of Hospitality Management

**Department**
Department of Hospitality Services

**Terms of Offering**
Fall
HMG6251 - International Lodging Accommodations Analysis

Course Title

International Lodging Accommodations Analysis

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- Acceptance into the graduate program.

Course Description

Analysis of the global accommodation industry including traditional and non-traditional lodging properties.

College

Rosen College of Hospitality Management

Department

Department of Foodservice and Lodging Management

Terms of Offering

Occasional

HMG6267 - Case Studies in Restaurant Management

Course Title

Case Studies in Restaurant Management

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- Graduate standing.

Course Description

Students will apply the principles of management, analysis, and planning that they have learned in their prior coursework to issues in multi-unit restaurant operations.

College

Rosen College of Hospitality Management

Department

Department of Foodservice and Lodging Management

Terms of Offering

Occasional
HMG6291 - Hospitality Entrepreneurship: Concept Creation to Capitalization

Course Title
Hospitality Entrepreneurship: Concept Creation to Capitalization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- HMG 6477 or C.I.

Course Description
Focus on creating, developing, and designing a unified concept plan, business plan, and investment proposal for a new hospitality business enterprise.

College
Rosen College of Hospitality Management

Department
Department of Foodservice and Lodging Management

Terms of Offering
Occasional

HMG6296 - Hospitality/Tourism Strategic Issues

Course Title
Hospitality/Tourism Strategic Issues

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Enrollment limited to graduating Hospitality Management graduate students.

Course Description
Capstone experience with strategic decision-making principles in hospitality/tourism. Application of skills, knowledge and understanding of areas of concern for formulating and implementing operational strategies.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Every Semester
HMG6299 - Contemporary Issues in Hospitality and Tourism Leadership

**Course Title**
Contemporary Issues in Hospitality and Tourism Leadership

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Application of case study methodology to the examination of contemporary issues and leadership responses in hospitality and tourism organizations.

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management

**Terms of Offering**
Spring

HMG6347 - Contemporary Issues in the Resort Industry

**Course Title**
Contemporary Issues in the Resort Industry

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate level standing

**Course Description**
In-depth study of the tools and techniques available for project feasibility and investment.

**College**
Rosen College of Hospitality Management

**Department**
Department of Foodservice and Lodging Management

**Terms of Offering**
Occasional
HMG6446 - Hospitality/Tourism Information Technology

Course Title
Hospitality/Tourism Information Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate student status.

Course Description
Analysis and design of hospitality/tourism industry information systems. Data management, system implementation and current trends in hospitality/tourism technology are discussed.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Occasional

HMG6449 - Smart Travel and Tourism

Course Title
Smart Travel and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 2023, CAP4630 or STA 3032.

Course Description
This course surveys SMART technologies and applications in the travel and tourism industry, emphasizing the systems view of the interactions among humans, environment, and technology.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Spring
HMG6466 - Applied Revenue Management Techniques in Hospitality

**Course Title**
Applied Revenue Management Techniques in Hospitality

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Builds upon revenue management fundamentals in hospitality and tourism organizations to develop advanced revenue management techniques in optimization, customer segmentation, forecasting and pricing analytics.

**College**
Rosen College of Hospitality Management

**Department**
Department of Tourism, Events, and Attractions

**Terms of Offering**
Odd Spring

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HMG6476 - Feasibility Studies for the Hospitality/Tourism Enterprises

**Course Title**
Feasibility Studies for the Hospitality/Tourism Enterprises

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**

- Graduate standing.

**Course Description**
Exploration of the many and varied facets of the economic decision making process as it applies to hospitality projects. Components of a financial feasibility study are analyzed as an aid to the decision making process of an investment in the hospitality industry.

**College**
Rosen College of Hospitality Management

**Department**
Department of Hospitality Services

**Terms of Offering**
Occasional
HMG6477 - Financial Analysis of Hospitality Enterprises

Course Title
Financial Analysis of Hospitality Enterprises

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Specialized accounting and finance tools of analysis as related to the hospitality industry. Application of budgeting and pricing models, break-even analysis and internal control.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Occasional

HMG6481 - Hospitality Intelligence and Analytics

Course Title
Hospitality Intelligence and Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete 1 of the following
  - Admitted to a program offered by Rosen College of Hospitality Management
  - Permission of Graduate Dean in Group Not Found.

Course Description
Students will learn to identify, gather and analyze data with analytic tools and transform it into meaningful information to make better hospitality business decisions.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Spring
HMG6507 - Event Trends, Technology and the Macroenvironment
Course Title
Event Trends, Technology and the Macroenvironment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the M.S. in Event Leadership.

Course Description
Analysis of how macroenvironmental forces affect the event industry with special attention to technology, sustainability and social responsibility.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Every Semester

HMG6528 - Convention and Conference Sales and Services
Course Title
Convention and Conference Sales and Services

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
A process-oriented approach to selling to the convention/conference market and servicing their events. Analyzes the differences between and among venues and markets.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Occasional
HMG6529 - Contemporary Issues in Resort Sales Management

Course Title
Contemporary Issues in Resort Sales Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate level standing.

Course Description
Application and analysis of competitive sales management strategies via critical thinking models, decision-making simulations, and field operation procedures commonly used to manage the sales process. Occasional.

College
Rosen College of Hospitality Management

Department
Department of Foodservice and Lodging Management

Terms of Offering
Occasional

HMG6533 - Hospitality/Tourism Industry Brand Management

Course Title
Hospitality/Tourism Industry Brand Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
This elective course will introduce graduate students to critical topics, both theoretical and applied, that demonstrate why brands are important to consumers of hospitality and tourism services and, consequently, for the successful management of hospitality and tourism corporations.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Occasional
HMG6556 - Digital Marketing and Big Data Management for Hospitality and Tourism

Course Title
Digital Marketing and Big Data Management for Hospitality and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- HMG 6446 or Graduate Director Permission.

Course Description
Overview of the utilization and application of digital marketing and big data management in the hospitality industry.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Fall

HMG6563 - Marketing of Events

Course Title
Marketing of Events

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - HMG6002 - Advanced Event Design (3)

Course Description
Advanced marketing principles, practices and strategies related to the positioning, branding, promotion, and marketing of events.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Every Semester
HMG6565 - Social Media in Hospitality and Tourism

Course Title
Social Media in Hospitality and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- HMG 6446 or Graduate Director Permission.

Course Description
Analysis of hospitality/tourism industry social media marketing and management strategies.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Spring

HMG6566 - Principles of Destination Marketing and Management

Course Title
Principles of Destination Marketing and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- HMG 6596.

Course Description
Examines strategies for creating integrated destination marketing and management systems; concepts and strategies for destination competitiveness and sustainability; trends/challenges influencing destination marketing and management.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Occasional
HMG6568 - Destination Planning for Events

Course Title
Destination Planning for Events

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - HMG6563 - Marketing of Events (3)

Course Description
Principles, issues, and strategies related to destination policy-making, planning, and management to develop, attract, and retain events at destinations.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Every Semester

HMG6584 - Event Analytics

Course Title
Event Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - HMG6010 - Relationship Management in Events (3)

Course Description
Identify, collect, describe, and analyze data using data analytics techniques to make informed decisions in the specific context of event management.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Every Semester
HMG6585 - Data Analysis in Hospitality and Tourism Research

Course Title
Data Analysis in Hospitality and Tourism Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing in Hospitality Management or C.I. Examination of quantitative methods applied in hospitality and tourism research, including identification of data analysis strategies and interpretation of finds. Emphasis on univariate data analyses.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Spring
Fall

HMG6586 - Research Methods in Hospitality and Tourism

Course Title
Research Methods in Hospitality and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Hospitality Management or C.I.

Course Description
A survey of primary research methods used by decision makers in the various sectors of the hospitality and tourism industry. Formulation of research problems, statement of hypotheses, variables and level of measurements, research designs, data collection techniques, sampling, data processing, and information analysis.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Spring
HMG6596 - Strategic Marketing in Hospitality and Tourism

Course Title
Strategic Marketing in Hospitality and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
An examination of the role of marketing strategy within the overall strategic planning process of hospitality/tourism organizations. Topics such as marketing environments, competition analysis, consumer behavior, product/service mix, differentiation, segmentation, target marketing, positioning, relationship marketing, and strategic alliances are studied and analyzed.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Every Semester

HMG6604 - Legal Environment of Events

Course Title
Legal Environment of Events

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - HMG6584 - Event Analytics (3)

Course Description
Survey of the laws and regulations relating to events such as public liability and insurance, compliance, technology and intellectual property, labor and employment.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Every Semester
HMG6608 - Hospitality/Tourism Law and Ethics Seminar

Course Title
Hospitality/Tourism Law and Ethics Seminar

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
An interactive approach to the impact of changing social values, current legislation, and case law on management of hospitality and tourism enterprises. Professional Code of Ethics as applied to the hospitality industry are discussed.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Occasional

HMG6710 - International Tourism Management

Course Title
International Tourism Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
A review and critical analysis of the issues and techniques of international tourism management with specific attention to the economic, sociocultural, and environmental impacts.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Fall
HMG6738 - Tourism Industry Analysis

Course Title
Tourism Industry Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Quantitative impact analysis of tourism as an industry in the regional/national economy along the Tourism Satellite Accounts concept.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Occasional

HMG6756 - Mega-Events

Course Title
Mega-Events

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- HMG 6797.

Course Description
The organization and administration of mega-events. The tourism impacts of the events on the destinations that host them.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Occasional
HMG6757 - Advanced Theme Park and Attraction Management

**Course Title**
Advanced Theme Park and Attraction Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
The course examines and reviews the managerial and guest aspects of the theme park and attraction industry, including theming, operation, marketing, human resources, and research.

**College**
Rosen College of Hospitality Management

**Department**
Department of Tourism, Events, and Attractions

**Terms of Offering**
Fall

HMG6797 - Event Administration

**Course Title**
Event Administration

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Examination of event management, focusing on sports and entertainment. Covers promotion, budgeting, marketing, crowd control, production, legal issues, customer service, ticketing and concessions.

**College**
Rosen College of Hospitality Management

**Department**
Department of Tourism, Events, and Attractions

**Terms of Offering**
Occasional
HMG6810 - Food Supply Chain Management
Course Title
Food Supply Chain Management
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing.

Course Description
Food supply chain management and theory, examining strategic sourcing, pricing, negotiation, distribution, technology, stakeholder relationships, and quality control related to perishable foodservice products.

College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management
Terms of Offering
Occasional

HMG6811 - Beverage Supply Chain Management
Course Title
Beverage Supply Chain Management
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing.

Course Description
The examination of the alcoholic beverage supply chain in the USA, including the three-tier system, license and control models, logistics, legal and compliance issues.

College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management
Terms of Offering
Occasional
HMG6908 - Independent Study
Course Title
Independent Study
Credits Hours
1 - 99
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management

HMG6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management

HMG6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management
HMG6938 - ST: Food Supply Chain Management  
**Course Title**  
ST: Food Supply Chain Management  
**Credits Hours**  
1 - 99  
**Lab/Studio/Field Work Hours**  
0  
**Course Description**  
Introduction to food supply chain management and theory, examining strategic sourcing, pricing, negotiation, distribution, technology, stakeholder relationships, and quality control related to perishable foodservice products.  
**College**  
Rosen College of Hospitality Management  
**Department**  
Department of Foodservice and Lodging Management

HMG6946 - Internship  
**Course Title**  
Internship  
**Credits Hours**  
1 - 99  
**College**  
Rosen College of Hospitality Management  
**Department**  
Department of Foodservice and Lodging Management

HMG6958 - Study Abroad  
**Course Title**  
Study Abroad  
**Credits Hours**  
1 - 99  
**College**  
Rosen College of Hospitality Management  
**Department**  
Department of Foodservice and Lodging Management
HMG6971 - Treatise (Thesis OF Research Report)
Course Title
Treatise (Thesis OF Research Report)
Credits Hours
1 - 99
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management

HMG6973 - Thesis-Specialist
Course Title
Thesis-Specialist
Credits Hours
1 - 99
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management

HMG7258 - Strategies and Tactics: Lodging
Course Title
Strategies and Tactics: Lodging
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the Hospitality Education track to the PhD in Education.
Course Description
Extensive review of the theoretical and empirical literature related to current strategies and operations of lodging enterprises throughout the world.
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management
Terms of Offering
Occasional
HMG7295 - Theories in Hospitality and Tourism

Course Title
Theories in Hospitality and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Doctoral standing. Theory construction in hosp, tourism and service; identification of relevant interdisciplinary paradigms in theory development; evaluation of theory and research models in social science research.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Fall

HMG7546 - Strategies and Tactics: Guest Service Management

Course Title
Strategies and Tactics: Guest Service Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Hospitality Education track to the PhD in Education.

Course Description
Comprehensive review of the theory, methods, and research findings related to the management of guest service organizations, with special emphasis on hospitality and tourism enterprises.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Occasional
HMG7587 - Foundations in Hospitality and Tourism Research

Course Title
Foundations in Hospitality and Tourism Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Ph.D. Education Hospitality Education track, C.I.

Course Description
Facilitates the introduction of hospitality and tourism research across a broad expanse of industry sectors including but not limited to attractions, events, leisure, foodservice and lodging.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Odd Fall

HMG7588 - Research Seminar in Hospitality and Tourism

Course Title
Research Seminar in Hospitality and Tourism

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Ph.D. Education Hospitality Education track, C.I.

Course Description
This course includes the presentation of, exposure to and professional critique of current research projects by students.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Even Fall

2022-2023 Graduate Catalog
HMG7589 - Advanced Research Methods in Hospitality and Tourism

Course Title
Advanced Research Methods in Hospitality and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDF 7403, EDF 7463, C.I.

Course Description
Facilitates creating, developing, and solving research problems through the application of appropriate research methods to contemporary issues in the hospitality and tourism industry.

College
Rosen College of Hospitality Management

Department
Department of Hospitality Services

Terms of Offering
Odd Fall

HMG7715 - Strategies and Tactics: Travel and Tourism

Course Title
Strategies and Tactics: Travel and Tourism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Hospitality Education track to the PhD in Education.

Course Description
An in-depth investigation of the various components of travel and tourism focusing on the role of policy in their operation and development.

College
Rosen College of Hospitality Management

Department
Department of Tourism, Events, and Attractions

Terms of Offering
Occasional
HMG7876 - Strategies and Tactics: Foodservice

Course Title
Strategies and Tactics: Foodservice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Hospitality Education track to the PhD in Education.

Course Description
Extensive review of the theoretical and empirical literature related to current strategies and operations of food service enterprises throughout the world.

College
Rosen College of Hospitality Management

Department
Department of Foodservice and Lodging Management

Terms of Offering
Occasional

HMG7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
Rosen College of Hospitality Management

Department
Department of Foodservice and Lodging Management

HMG7939 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
Rosen College of Hospitality Management

Department
Department of Foodservice and Lodging Management

Terms of Offering
Fall
HMG7980 - Dissertation
Course Title
Dissertation
Credits Hours
1 - 99
College
Rosen College of Hospitality Management
Department
Department of Foodservice and Lodging Management

HSA - Health Services Administration

HSA5177 - Foundations of Health Care Finance
Course Title
Foundations of Health Care Finance
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to graduate program in HSA or C.I.
Course Description
Preparatory course for graduate students who are not prepared to take the required health care finance course.
College
College of Community Innovation and Education
Department
School of Global Health Management and Informatics
Terms of Offering
Occasional
HSA5198 - Health Care Decision Sciences and Knowledge Management

Course Title
Health Care Decision Sciences and Knowledge Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing. Emphasis on development of a general systematic approach to solving problems under uncertainty. The role of informatics and application of information technology in improving managerial decision making process will be presented.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring

HSA5436 - Foundations of Health Care Economics

Course Title
Foundations of Health Care Economics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to HSA graduate program or C.I.

Course Description
Preparatory course for graduate students who are not prepared to take the required health care economics course.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall
HSAS5504 - Health Care Risk Management II

Course Title
Health Care Risk Management II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
HSA 5509. The Health Care Risk Management course is comprised of a total of 12 modules addressing key areas of the field. Health Care Risk Management I covers Modules 1-6 and Health Care Risk Management II covers Modules 7-12. Students must complete both courses in sequential order in order to apply for Risk Management licensure.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Every Semester

HSAS5509 - Health Care Risk Management I

Course Title
Health Care Risk Management I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.S. in Health Services Administration or C.I.

Course Description
Examines background, history and philosophy of health care risk management. The Health Care Risk Management course is comprised of a total of 12 modules addressing key areas of the field. Health Care Risk Management I covers Modules 1-6 and Health Care Risk Management II covers Modules 7-12. Students must complete both courses in sequential order in order to apply for Risk Management licensure.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Every Semester
HSA5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

HSA5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

HSA6108 - Health Care Organization and Management II

Course Title
Health Care Organization and Management II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- HSA 6119, HSC 6636 and PHC 6160.

Course Description
Emphasis on planning, development, marketing approaches, and problem solving using computer methods.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring
Fall
HSA6112 - International Health Systems

Course Title
International Health Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status.

Course Description
Survey of health care systems in developed and developing countries.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Occasional

HSA6119 - Health Care Organization and Management

Course Title
Health Care Organization and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Services Administration master's program.

Course Description
Planning, development, and marketing methods.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring
HSA6128 - Health Care Services Management

Course Title
Health Care Services Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Health Services Administration graduate program or C.I.

Course Description
Broad perspective on conceptualization and development of marketing and customer service in health care organizations focusing on links between theory and practical applications. State-of-the-art methods from best customer service organizations will be reviewed along with impact of social media and mobile technologies on marketing.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring

HSA6155 - Health Economics and Policy

Course Title
Health Economics and Policy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- HSA 5436 or passing grade on Economic Assessment Exam or C.I.

Course Description
Examines how the interests and interactions of patients, providers, insurers, the government, and others impact the allocation and distribution of health care.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring

2022-2023 Graduate Catalog
HSA6156 - Health Care Economics and Policy

**Course Title**
Health Care Economics and Policy

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Sciences M.S., Executive Health Services Administration track.

**Course Description**
Study of the economic foundations of the health care market and policy.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Fall

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HSA6175 - Advanced Trends in Health Care Finance and Management

**Course Title**
Advanced Trends in Health Care Finance and Management

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
1

**Course Description**
Admission to the Health Care Informatics master's degree or HIA certificate. Focus on areas related to overall strategy of the health care organization including decision making practices; infrastructure investment; business partnerships; management staff competencies; and financial report analysis.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Summer
HSA6178 - Financial Management for Health Care Managers

Course Title

Financial Management for Health Care Managers

Credits Hours

4

Lab/Studio/Field Work Hours

0

Prerequisites

- Admission to Health Sciences M.S., Executive Health Services Administration track; HSA 6179.

Course Description

Application and integration of advanced accounting and financial principles to develop solutions to specific problems encountered in today's health care organizations.

College

College of Community Innovation and Education

Department

School of Global Health Management and Informatics

Terms of Offering

Summer

HSA6179 - Financial Accounting for Health Care Managers

Course Title

Financial Accounting for Health Care Managers

Credits Hours

4

Lab/Studio/Field Work Hours

0

Prerequisites

- Admission to Health Sciences M.S., Executive Health Services Administration track.

Course Description

Examines accounting and financial management concepts, along with managerial protocols and regulatory constraints affecting health care organizations.

College

College of Community Innovation and Education

Department

School of Global Health Management and Informatics

Terms of Offering

Spring
HSA6188 - Health Care Capstone and Strategic Management

**Course Title**
Health Care Capstone and Strategic Management

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Sciences M.S., Executive Health Services Administration track.

**Course Description**
Concepts and course work through the lens of strategic management.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Odd Summer

HSA6189 - Health Care Procedural Coding and Reimbursement

**Course Title**
Health Care Procedural Coding and Reimbursement

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
1

**Course Description**
Admission to Health Care Informatics master's degree or HIA certificate. Introduction and analysis of reimbursement systems. Focus on Current Procedural Terminology (CPT) code selection and audit tools; reimbursement methodologies; and revenue cycle management.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring
HSA6195 - Management and Health Information Systems

**Course Title**
Management and Health Information Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Services Administration graduate program or C.I.

**Course Description**
This course is designed to introduce students to health care information systems and current issues related to effective management of these systems and health data. Specifically, students will gain insight into clinical information systems, their implementation, and the overall importance of aligning these systems with organizational goals.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring

HSA6197C - Health Care Informatics for Health Care Leaders

**Course Title**
Health Care Informatics for Health Care Leaders

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to Health Sciences M.S., Executive Health Services Administration track.

**Course Description**
Alignment of health information technology advances with the organizational strategy, including improving quality, safety and efficiency.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Fall
HSA6342 - Health Care Human Resources

Course Title
Health Care Human Resources

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Health Services Administration graduate program or C.I.

Course Description
Study of health care organizations, including modern management, human performances, and leadership.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall

HSA6345 - Leadership for Health Care Executives

Course Title
Leadership for Health Care Executives

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences M.S., Executive Health Services Administration track.

Course Description
Addresses current leadership theory focusing on leadership styles, motivation, change management, innovation, and creativity as they relate to management of health services organizations.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall
HSA6346 - Health Care Organizational Behavior and Human Resource Management

Course Title
Health Care Organizational Behavior and Human Resource Management

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences M.S., Executive Health Services Administration track.

Course Description
Application of human resources and organizational theory in the health care setting for health care managers.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Odd Spring

HSA6385 - Health Care Quality Management

Course Title
Health Care Quality Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Health Services Administration graduate program or C.I.

Course Description
Mechanisms of enhancing quality of service and care.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Summer
HSA6505 - Health Care Quality and Risk Management

Course Title
Health Care Quality and Risk Management

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences M.S., Executive Health Services Administration track.

Course Description
Current quality-based management practices within health care organizations and effective risk management strategies for health care managers.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Summer

HSA6512 - Health Care Leadership

Course Title
Health Care Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or C.I.

Course Description
Practical applications of leadership theory in health services organizations.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Occasional
HSA6520 - Epidemiology and Health Planning

Course Title
Epidemiology and Health Planning

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences M.S., Executive Health Services Administration track.

Course Description
Descriptive and applied methods of managerial epidemiology, including methods for data retrieval and research application.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Odd Spring

HSA6536 - Health and Medical Terminology for Health Administrators

Course Title
Health and Medical Terminology for Health Administrators

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Services Administration graduate program or C.I.

Course Description
Designed to introduce students to the language of medicine and its application for health administrators using the Caduceus Medical Terminology software system.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring
HSA6555 - Health Care Ethics and Law

**Course Title**
Health Care Ethics and Law

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Sciences M.S., Executive Health Services Administration track.

**Course Description**
Overview of legal and ethical issues facing health care managers and providers in a variety of health care settings.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Odd Spring

HSA6752 - Health Care Analytics

**Course Title**
Health Care Analytics

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to Health Care Informatics master's degree or HIA certificate.

**Course Description**
Computer based course focusing on analyzing health care data including using data for decision making, process improvements, efficient health care delivery and preparing reports for other managers.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring
HSA6759 - Health Care Outcomes Management

Course Title
Health Care Outcomes Management

Credits Hours
4

Lab/Studio/Field Work Hours
1

Course Description
Admission to Health Care Informatics master's degree or HIA certificate. Measure and methods of outcomes assessment and evaluation focusing on regulatory policies; use of data to investigate fraud; organizational compliance programs and health information system compliance.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall

HSA6766 - Health Care Statistics and Research

Course Title
Health Care Statistics and Research

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences M.S., Executive Health Services Administration track.

Course Description
Research method techniques and statistical techniques for problem-solving and decision-making including theoretical, quantitative, and quantitative skills to understand, conduct, and evaluate health care research.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall
HSA6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

HSA6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
0 - 99

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

HSA6925 - Capstone in HSA

**Course Title**
Capstone in HSA

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- HSA 5198, HSA 6108, HSA 6119, HSA 6128, HSA 6342, HSA 6385, HSC 6911, PHC 6164.

**Course Description**
Case analysis approach to solving current health services administration problems and issues. Prepares students for comprehensive examination experience.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring
Fall
HSA6930 - Health Care Management, Professional Skills Seminar

Course Title
Health Care Management, Professional Skills Seminar

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Admission to the HSA program or C.I.

Course Description
This seminar serves as a bridge between MSHSA course work and the world of practice, with a focus on developing career planning and professional skills.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring

HSA6938 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

HSA6949 - Cooperative Education in Health Services Administration

Course Title
Cooperative Education in Health Services Administration

Credits Hours
0 - 99

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics
HSA7116 - Theories in Healthcare Management

**Course Title**
Theories in Healthcare Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs PhD program or C.l.

**Course Description**
Overview of healthcare management theories/applications including resource dependence, populations ecology, institutional structure and innovation, network, transaction costs, decision making, power and stakeholder management theories.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring

HSA7125 - Globalization and Health

**Course Title**
Globalization and Health

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to Public Affairs Ph.D. program or C.I. This course examines effects of globalization on health. A large focus is public health and social determinants of health, including poverty, inequality, environment and culture.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring
HSA7930 - Special Issues in Health Services Administration
Course Title
Special Issues in Health Services Administration
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Ph.D. program or C.I.
Course Description
Selected problems in health services administration. May be repeated for credit only when course content is different.
College
College of Community Innovation and Education
Department
School of Global Health Management and Informatics
Terms of Offering
Occasional

HSA7936 - Advanced Seminar in Health Economics
Course Title
Advanced Seminar in Health Economics
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Public Affairs Ph.D. program or C.I. and Microeconomics or PAF 7315
Course Description
This advanced seminar in health economics will introduce advanced principles and methods used in economic analysis of health services.
College
College of Community Innovation and Education
Department
School of Global Health Management and Informatics
Terms of Offering
Odd Fall
HSA7938 - Advanced Seminar in Health Services Research

Course Title
Advanced Seminar in Health Services Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. program or C.I.

Course Description
This is an advanced seminar in health services research. Analytical design and methods used in health services research will be applied.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Odd Spring

HSA7939 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

HSC - Health Science
HSC5638 - Health and Society

**Course Title**
Health and Society

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Exploration of social factors, policies, programs and systems that impact health, health behaviors and illness.

**College**
College of Health Professions and Sciences

**Department**
Department of Health Sciences

**Terms of Offering**
Occasional

HSC5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Health Professions and Sciences

**Department**
Department of Health Sciences

HSC5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Health Professions and Sciences

**Department**
Department of Health Sciences
HSC6508 - Quantitative Methods in Epidemiology

Course Title
Quantitative Methods in Epidemiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MS Health Sciences track or C.I.

Course Description
Advanced study of epidemiology focusing on analytical quantitative methods addressing bias, confounding and error in the design and interpretation of population-based health research.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Occasional

HSC6570 - Clinical Nutrition

Course Title
Clinical Nutrition

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences MS or C.I.

Course Description
Advanced study of the biochemical, physiological and anatomical changes associated with diseases/conditions/surgeries that require nutrition support/medical nutrition therapy.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Fall
HSC6597 - Human and Applied Metabolism

**Course Title**
Human and Applied Metabolism

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Sciences M.S. Clinical and Lifestyle Sciences track or C.I.

**Course Description**
The contribution of carbohydrate, fat and protein to energy metabolism at rest and during physical stress will be examined.

**College**
College of Health Professions and Sciences

**Department**
Department of Health Sciences

**Terms of Offering**
Fall

HSC6607 - Lifestyle Medicine

**Course Title**
Lifestyle Medicine

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Sciences MS or C.I.

**Course Description**
Examination and application of evidence-based practices focusing on modifiable behaviors associated with prevention and treatment of common chronic diseases and conditions.

**College**
College of Health Professions and Sciences

**Department**
Department of Health Sciences

**Terms of Offering**
Spring
HSC6616 - Clinical Exercise Physiology

Course Title
Clinical Exercise Physiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences M.S. Clinical and Lifestyle Sciences track or C.I.

Course Description
This course is designed to give the student an understanding of the graded exercise test as a functional and diagnostic modality in normal and diseased people.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Spring

HSC6626 - Healthcare Delivery for Hispanic Populations

Course Title
Healthcare Delivery for Hispanic Populations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the College of Nursing Graduate Certificate program and completion of NGR 5131 - Exploring Transcultural and Culturally Congruent Care for the Hispanic Population; or C.I. for students not admitted to the CON Graduate Certificate program.

Course Description
Study of the dynamics of healthcare encounters, language, and cultural mediation to facilitate practitioner interactions among Hispanic clients with limited English proficiency.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Spring
HSC6636 - Issues and Trends in the Health Professions

Course Title
Issues and Trends in the Health Professions

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Exploration of current status, issues, problems, and future trends in the practice and education of health professions.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Every Semester

HSC6656 - Healthcare Ethics

Course Title
Healthcare Ethics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examine and analyze central concepts and values in healthcare ethics in order to provide a foundation for sound ethical decision-making.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics
HSC6659 - Issues in Geriatric Health Care

Course Title
Issues in Geriatric Health Care

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Health Sciences MS or C.I.

Course Description
Emphasizes an evidence-based, interprofessional approach to examining and working through issues associated with aging and the impact of collaborative, interprofessional care for our aging population.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Occasional

HSC6737 - Introduction to Clinical Trials

Course Title
Introduction to Clinical Trials

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Introduction to the design, management, execution and evaluation of successful clinical trials.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Spring
HSC6742 - Introduction to Clinical Research

Course Title
Introduction to Clinical Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to a program offered by College of Health Professions and Sciences

Course Description
Introduction to the scientific principles, concepts and language for conducting clinical research.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Spring

HSC6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
Department of Health Sciences
HSC6911 - Scientific Inquiry in the Health Profession

Course Title
Scientific Inquiry in the Health Profession

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing

Course Description
Research design and statistical evaluation in health professions.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Fall

HSC6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
Department of Health Sciences

HSC6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Health Professions and Sciences

Department
Department of Health Sciences
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**HUM - Humanities**
HUM5396 - Place and Space

Course Title
Place and Space

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Study of theoretical and applied issues of place and space.

College
College of Arts and Humanities

Department
Department of Philosophy

Terms of Offering
Occasional

HUM5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of Philosophy

HUM5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of Philosophy

HUN - Human Nutrition

2022-2023 Graduate Catalog
HUN5247 - Principles of Human Nutrition

Course Title
Principles of Human Nutrition

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences M.S. Clinical and Lifestyle Sciences track or C.I.

Course Description
Course promotes in-depth understanding of the role of macronutrients in human nutrition and health enabling graduates to integrate knowledge into other aspects of their work.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Occasional

HUN5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Nursing

Department
Department of Nursing

HUN6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Nursing

Department
Department of Nursing
HUN6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Nursing

Department
Department of Nursing

HUN6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Nursing

Department
Department of Nursing

IDC - Interdisciplinary Computing

IDC5602 - Cybersecurity: A Multidisciplinary Approach

Course Title
Cybersecurity: A Multidisciplinary Approach

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Interdisciplinary MandS fundamentals as applied to cybersecurity including operating system installation and administration for hardware, network architectures, configurations, behavioral aspects, organizational continuity planning, security management.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Fall
IDC6600 - Emerging Cyber Issues

Course Title
Emerging Cyber Issues

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Interdisciplinary discussion of emerging issues with expert speakers from industry. Preparation of topic and required resources to complete a multi-disciplinary Modeling and Simulation capstone project.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Summer

IDC6601 - Behavioral Aspects of Cybersecurity

Course Title
Behavioral Aspects of Cybersecurity

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- IDS 5602 or C.I.

Course Description
Interdisciplinary human, social, and behavioral issues related to cybersecurity. Management techniques, motives for cyber crimes, risk and threat analysis, ethics, and legal issues.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Summer
IDC6602 - Usable Cybersecurity and Privacy

**Course Title**
Usable Cybersecurity and Privacy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Introduces usability problems in security and privacy, and surveys state-of-the-art techniques and evaluation methodologies to design usable security and privacy systems.

**College**
College of Graduate Studies

**Department**
School of Modeling, Simulation, and Training

**Terms of Offering**
Spring

IDC6700 - Interdisciplinary Approach to Data Visualization

**Course Title**
Interdisciplinary Approach to Data Visualization

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
ESI 5219, STA 5206, or DIG 5876 , or C.I. A hands-on, interdisciplinary perspective on basic principles and fundamentals of visualizing statistical information. Topics include: effective visualizations, perception, representation, and general principles.

**College**
College of Graduate Studies

**Department**
School of Modeling, Simulation, and Training

**Terms of Offering**
Spring
IDC 6941 - Capstone in Modeling and Simulation of Behavioral Cybersecurity

Course Title
Capstone in Modeling and Simulation of Behavioral Cybersecurity

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- IDC 6601 and CNT 5410L

Course Description
Interdisciplinary teams of students apply modeling and simulation, cybersecurity, and psychology techniques to the analysis and prevention of emerging cybersecurity threats.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Fall

IDS - Interdisciplinary Studies

IDS 5127 - Foundation of Bio-Imaging Science

Course Title
Foundation of Bio-Imaging Science

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Fundamental theory, design, and practice of modern bio-imaging techniques used for basic biomedical research applications.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences
IDS5142 - Modeling and Simulation for Instructional Design

**Course Title**
Modeling and Simulation for Instructional Design

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Interdisciplinary aspects of MandS applications for instructional design. Emphasis on domains such as aviation, space, military, healthcare, education, hospitality, entertainment, and cybersecurity.

**College**
College of Graduate Studies

**Department**
School of Modeling, Simulation, and Training

**Terms of Offering**
Summer

IDS5741 - Modeling Neuronal Systems

**Course Title**
Modeling Neuronal Systems

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Brain-inspired artificial intelligence. Study in cognitive computational neuroscience, deep learning, and how the fields are ripe for convergence.

**College**
College of Graduate Studies

**Department**
School of Modeling, Simulation, and Training

**Terms of Offering**
Occasional
IDS6126 - Interdisciplinarity

Course Title
Interdisciplinarity

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course examines the history and challenges of interdisciplinary teaching and scholarship. We start by posing the question, "What is a discipline?" Then we will explore various interdisciplinary approaches and scholarship. Our final goal is for each student to present an interdisciplinary research proposal that will guide their work on their Interdisciplinary Studies MA or MS thesis.

College
College of Graduate Studies

Department
College of Graduate Studies Dean's Office

Terms of Offering
Spring
Fall

IDS6145 - Simulation Techniques

Course Title
Simulation Techniques

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- DIG 5876 or ESI 5219 or STA 5205 or C.I.

Course Description
Foundations, examples, hands-on tools to implement solutions to various problems using three different categories of simulation: discrete event simulation, continuous simulation, and agent-based simulation.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Spring
IDS6146 - Modeling and Simulation Systems

Course Title
Modeling and Simulation Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
An overview of issues, techniques and tools that impact the design, development, verification, and validation of simulation systems.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Summer

IDS6147 - Perspectives on Modeling and Simulation

Course Title
Perspectives on Modeling and Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Perspectives on the theory and practice of modeling and simulation with emphasis on specific topics of current interest.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Fall
IDS6148 - Human Systems Integration for Modeling and Simulation

Course Title
Human Systems Integration for Modeling and Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Covers general process of the human systems integration approach for modeling and simulation systems. Addresses standards, analysis tools and techniques for developing systems-level solutions.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Summer

IDS6149 - Modeling and Simulation for Test and Evaluation

Course Title
Modeling and Simulation for Test and Evaluation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and C.I.

Course Description
Modeling and simulation for test planning, execution, and evaluation will be described, characterized, and illustrated with real-world examples and case studies.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Fall
IDS6209 - Introduction to Electrochemical Energy Conversion and Storage

Course Title
Introduction to Electrochemical Energy Conversion and Storage

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PSM or MS in Nanotechnology or C.I.

Course Description
Topics in nanotechnology, materials science and electrochemistry concerning renewable energy generation and storage. Electrochemical systems and their applications in renewable energy generation and storage.

College
College of Graduate Studies

Department
NanoScience Technology Center

Terms of Offering
Fall

IDS6250 - Introduction to Nanoscience and Nanotechnology

Course Title
Introduction to Nanoscience and Nanotechnology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Professional Science Master's in Nanotechnology or C.I.

Course Description
A general overview of nanomaterials and nanodevices, including their synthesis, new properties and applications.

College
College of Graduate Studies

Department
NanoScience Technology Center

Terms of Offering
Fall
IDS6251 - Computation, Simulation and Modeling in Nanotechnology

Course Title
Computation, Simulation and Modeling in Nanotechnology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Professional Science Master's in Nanotechnology and background in chemistry and computer science, or C.I.

Course Description
Modeling methods and computational approaches applicable to nanotechnology problems.

College
College of Graduate Studies

Department
NanoScience Technology Center

Terms of Offering
Spring

IDS6252 - Biomedical Nanotechnology

Course Title
Biomedical Nanotechnology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Professional Science Master's in Nanotechnology and IDS 6250, UG General and Organic Chemistry, or C.I.

Course Description
Synthesis and properties of nanomaterials related to biomedical applications, nanotechnology for in vitro and in vivo diagnostics, and therapeutics.

College
College of Graduate Studies

Department
NanoScience Technology Center

Terms of Offering
Spring
IDS6253 - Bioanalytical Technology

**Course Title**
Bioanalytical Technology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Professional Science Master's in Nanotechnology and IDS 6250, or C.I.

**Course Description**
Analytical technologies and products for biomolecular detection and analysis, nanotechnology-based medical diagnostics.

**College**
College of Graduate Studies

**Department**
NanoScience Technology Center

**Terms of Offering**
Fall

IDS6254 - Nanofabrication and Characterization

**Course Title**
Nanofabrication and Characterization

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Admission to the Professional Science Master's in Nanotechnology and IDS 6250, or C.I. Techniques for fabrication and characterization of nanoscale materials, nanoelectronics and devices.

**College**
College of Graduate Studies

**Department**
NanoScience Technology Center

**Terms of Offering**
Spring
IDS6255 - Nanotechnology in Energy and Sustainability

Course Title
Nanotechnology in Energy and Sustainability

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Professional Science Master's in Nanotechnology or C.I.

Course Description
Energy generation and storage, sustainability of materials and device fabrication and deployment, application of nanotechnology in improving the device efficiency in energy generation and storage.

College
College of Graduate Studies

Department
NanoScience Technology Center

Terms of Offering
Fall

IDS6256 - Principles of Nanostructure Quantum Well, Wires, and Dots

Course Title
Principles of Nanostructure Quantum Well, Wires, and Dots

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PSM or MS in Nanotechnology and Intro Nanosci Nanotech, or C.I.

Course Description
Introduction to low dimensional semiconductor devices based on quantum wells, dots and wires; approximate and numerical device modeling.

College
College of Graduate Studies

Department
NanoScience Technology Center

Terms of Offering
Spring
IDS6257 - Principles and Techniques of Nanobiology

**Course Title**
Principles and Techniques of Nanobiology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to the Nanotechnology PSM or MS program, or C.I. This course aims to integrate multi-disciplinary approaches covering physics, biology, and nanoscience to understand how living system works at the nanoscale.

**College**
College of Graduate Studies

**Department**
NanoScience Technology Center

**Terms of Offering**
Spring

IDS6258 - Advanced Materials and Nanotechnology for Rechargeable Batteries

**Course Title**
Advanced Materials and Nanotechnology for Rechargeable Batteries

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the PSM in Nanotechnology and IDS 6250, or C.I.

**Course Description**
Build a bridge between nanomaterials and electrochemical energy storage performance and demonstrate renewable energy storage on the nanoscale.

**College**
College of Graduate Studies

**Department**
NanoScience Technology Center

**Terms of Offering**
Spring
IDS6259 - Advanced Energy-Efficient Nanoelectronic Devices

Course Title
Advanced Energy-Efficient Nanoelectronic Devices

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PSM or MS in Nanotechnology or C.I.

Course Description
Discusses low power nanoelectronic devices that can meet the need of future electronics by using novel physical mechanisms of current conduction.

College
College of Graduate Studies

Department
NanoScience Technology Center

IDS6260 - Electrical and Optical Properties of Nanoscale Materials and Devices

Course Title
Electrical and Optical Properties of Nanoscale Materials and Devices

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- IDS 6250 or C.I.

Course Description
Multiple topics on electrical and optical properties of nanoscale materials and devices, including size-dependent change in material properties, structural understanding by atomic-to-nanoscale characterizations, fabrication of nanoscale devices and their electrical properties, luminescent properties and applications.

College
College of Graduate Studies

Department
NanoScience Technology Center

Terms of Offering
Spring
IDS6261 - Nanotechnology for Sustainable Agriculture

Course Title
Nanotechnology for Sustainable Agriculture

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PSM or MS in Nanotechnology or C.I.

Course Description
Prepares a new generation of STEM students who are equipped with necessary knowledge to adapt sustainable agricultural practices.

College
College of Graduate Studies

Department
NanoScience Technology Center

Terms of Offering
Fall

IDS6262 - Research Design for Modeling and Simulation

Course Title
Research Design for Modeling and Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- IDS 6XXX Simulation Techniques.

Course Description
Theoretical and practical aspects of interdisciplinary research methodologies as they relate to human-centered Modeling and Simulation.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Fall
IDS6264 - Biointerfaces Enabled by Micro/NanoFabrication

**Course Title**

Biointerfaces Enabled by Micro/NanoFabrication

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission to the PSM or MS in Nanotechnology or C.I.

**Course Description**

Introduces students to the interfaces and devices in the biotechnology and biomedical arenas that are enabled by Micro/NanoFabrication.

**College**

College of Graduate Studies

**Department**

NanoScience Technology Center

**Terms of Offering**

Spring

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IDS6265 - Luminescent Materials and Devices

**Course Title**

Luminescent Materials and Devices

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- IDS 6250 or upon instructor approval.

**Course Description**

Fundamental and applied topics of luminescent materials and devices: Luminescent Processes; Phosphors; Scintillators; Organic Emitters; Compound Semiconductors; Quantum dots; Photoluminescence; Cathodoluminescence; Electroluminescence; Various Applications.

**College**

College of Graduate Studies

**Department**

NanoScience Technology Center

**Terms of Offering**

Fall
IDS6267 - Understanding Humans for Modeling and Simulation

Course Title
Understanding Humans for Modeling and Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Human cognition, the human perceptual system, ergonomics, and how humans and computing systems can connect through the process of user-centered design and analysis.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Spring

IDS6308 - Ways of Knowing

Course Title
Ways of Knowing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Theoretical models of knowledge as exemplified by various disciplines and interdisciplinary activity. Focus on epistemological issues raised in past and present works.

College
College of Graduate Studies

Department
College of Graduate Studies Dean's Office

Terms of Offering
Even Spring
IDS6351 - Critical Thinking and Writing

Course Title
Critical Thinking and Writing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- IDS 6308 and IDS 6669.

Course Description
Focus on refining critical understanding of interdisciplinary research and organization and presentation of interdisciplinary ideas, building on first two core courses.

College
College of Graduate Studies

Department
College of Graduate Studies Dean's Office

Terms of Offering
Fall

IDS6503 - International Trends in Instructional Systems

Course Title
International Trends in Instructional Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EME 6613.

Course Description
International and multicultural issues and how they affect the global impact of technology in education, training, and quality management.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Summer
Occasional
IDS6504 - Adult Learning

Course Title
Adult Learning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
An examination of theory and research on adult learning with emphasis on practical applications, instruction, and technology use in educational and workplace settings.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Fall

IDS6513 - Preparing Tomorrow's Faculty

Course Title
Preparing Tomorrow's Faculty

Credits Hours
0

Lab/Studio/Field Work Hours
0

Prerequisites
- Active graduate student standing

Course Description
Preparing Future Faculty introduces the foundations of teaching in higher education, student learning, course design, teaching pedagogies, assessment and feedback, classroom management, and career development.

College
College of Graduate Studies

Department
College of Graduate Studies Dean's Office

Terms of Offering
Every Semester
IDS6516 - Leadership Development for Mathematics and Science Teachers

**Course Title**
Leadership Development for Mathematics and Science Teachers

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Development of mathematics and science teachers' abilities to assume teacher leadership roles in their schools.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Even Spring

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IDS6606 - Approaches to Network Analysis and Applications

**Course Title**
Approaches to Network Analysis and Applications

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
This course is co-organized between social and computer scientists. It covers basic network concepts, best practices in collecting and analyzing network data and interdisciplinary/multidisciplinary applications.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Fall
IDS6657 - Professional Collaboration in Language and Literacy

**Course Title**
Professional Collaboration in Language and Literacy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Interdisciplinary approach to exploring issues in language and literacy for struggling children and adolescents and development of collaboration competencies for professionals from different disciplines.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
Summer

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IDS6669 - Interdisciplinary Approaches to Research

**Course Title**
Interdisciplinary Approaches to Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- IDS 6308 or C.I.

**Course Description**
Explores methods/assumptions/challenges experienced in interdisciplinary research; includes practice integrating discipline-based research methods with reflexive/dialogic methods; helps prepare students for capstone project or thesis.

**College**
College of Graduate Studies

**Department**
College of Graduate Studies Dean's Office

**Terms of Offering**
Spring
IDS6694 - Experimental Design and Analysis in Biomedical Sciences

**Course Title**
Experimental Design and Analysis in Biomedical Sciences

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in biomedical sciences or C.I.

**Course Description**
Problem based learning graduate course focused on how to effectively design experiments and analyze data for hypothesis-driven research in biomedical sciences.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Spring

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IDS6740 - Nonlinear Dynamics in the Cognitive and Behavioral Sciences

**Course Title**
Nonlinear Dynamics in the Cognitive and Behavioral Sciences

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Theoretical and practical aspects of research applying nonlinear dynamical systems methodologies as they relate to human-centered Modeling and Simulation.

**College**
College of Graduate Studies

**Department**
School of Modeling, Simulation, and Training

**Terms of Offering**
Spring
IDS6908 - Directed Independent Studies

Course Title
Directed Independent Studies

Credits Hours
3

Prerequisites
- Instructor Consent Required

Terms of Offering
Occasional

IDS6910 - Research in Mathematics and Science Education

Course Title
Research in Mathematics and Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Support provided for graduate students in mathematics and science education as they plan and/or implement research projects.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall
IDS6916 - Simulation Research Methods and Practicum

Course Title
Simulation Research Methods and Practicum

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- DIG 5875C and DIG 5876 or their equivalents.

Course Description
Interdisciplinary teams of students conduct fundamental and applied research on contemporary issues in modeling, simulation, and training.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Occasional

IDS6933 - Seminar in Teaching Mathematics and Science

Course Title
Seminar in Teaching Mathematics and Science

Credits Hours
3 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and valid Florida Teaching Certificate or C.I.

Course Description
This course is designed so that graduate students may study specific areas related to curriculum, instruction, and assessment in mathematics and science education. May be repeated for credit.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Every Semester
IDS6937 - Teaching Mathematics and Science Using Reform-Based Practices

**Course Title**
Teaching Mathematics and Science Using Reform-Based Practices

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing and valid Florida Teaching Certificate or C.I.

**Course Description**
Focuses on the work of Dewey and Piaget as it applies to mathematics and science teaching. Emphasizes integrating math and science teaching.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Fall

IDS6938ST1 - Hardware Prototyping for Modeling and Simulation

**Course Title**
Hardware Prototyping for Modeling and Simulation

**Credits Hours**
3

**Course Description**
Introduction to 3D design and printing, microcontroller programming, and circuit board construction. Additionally, IoT and MQTT protocols to manage data, and IP protection topics.

IDS6938ST2 - Stereoscopy for Art and Science Using 3D Applications

**Course Title**
Stereoscopy for Art and Science Using 3D Applications

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Hands-on use of large 3D applications, such as MAYA and NUKE, to explore how stereoscopic 3D (S3D) can further enhance engineering-related problems and scientific query. Additionally, the emerging field of stereoscopic art is addressed.
ID6938ST3 - ST: Interdisciplinary Approaches to Research

**Course Title**
ST: Interdisciplinary Approaches to Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Explores methods/assumptions/challenges experienced in interdisciplinary research. Includes practice integrating discipline-based research methods with reflexive/dialogic methods; helps prepare students for capstone project or thesis.

ID6938ST4 - ST: Usable Security & Privacy

**Course Title**
ST: Usable Security & Privacy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Introduces usability problems in security and privacy methods, tools, and software and overviews prominent examples of both failures and successes in usable security and privacy.

ID6938ST5 - ST: Nonlinear Dynamics in the Cognitive and Behavioral Sciences

**Course Title**
ST: Nonlinear Dynamics in the Cognitive and Behavioral Sciences

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Theoretical and practical aspects of research applying nonlinear dynamical systems methodologies as they relate to human-centered Modeling and Simulation.
IDS6939 - Reforming Curriculum in Mathematics and Science Education

Course Title
Reforming Curriculum in Mathematics and Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and valid Florida Teaching Certificate or C.I. Emphasizes the reform movement including technology, history of curriculum, curriculum theory, and standards documents.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall

IDS6950 - Modeling and Simulation Capstone Report Planning

Course Title
Modeling and Simulation Capstone Report Planning

Credits Hours
1

Lab/Studio/Field Work Hours
1

Prerequisites
- Graduate standing.

Course Description
Identify topic and required resources to complete multi-disciplinary Modeling and Simulation capstone project. Develop annotated topical outline for Modeling and Simulation capstone report.

College
College of Graduate Studies

Department
School of Modeling, Simulation, and Training

Terms of Offering
Summer
IDS6953 - Urban and Regional Planning Capstone I

Course Title
Urban and Regional Planning Capstone I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of all required Urban and Regional Planning program core courses and concentration electives or consent of Program Director.

Course Description
This Capstone I course synthesizes previous planning coursework through the development of a service learning project proposal.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Even Fall

IDS6954 - Urban and Regional Planning Capstone II

Course Title
Urban and Regional Planning Capstone II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Completion of IDS 6953 - Urban and Regional Planning Capstone I. This Capstone II course implements the service learning project proposal where students collect and analyze data and make planning recommendations.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Odd Spring
IDS6971 - Thesis Research

**Course Title**

Thesis Research

**Credits Hours**

3

**Prerequisites**

- Department Consent Required

**College**

**Terms of Offering**

Occasional

IDS7500 - Seminar in Educational Research

**Course Title**

Seminar in Educational Research

**Credits Hours**

1 - 99

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission into doctoral program in Education or C.I.

**Course Description**

An examination of education related research initiatives. May be repeated for credit.

**College**

College of Community Innovation and Education

**Department**

School of Teacher Education

**Terms of Offering**

Every Semester
IDS7501 - Issues and Research in Education

Course Title
Issues and Research in Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
¬ Admission to PhD in Education or C.I.

Course Description
An examination of major issues impacting education and related practical and methodological issues in research.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Odd Fall

IDS7502 - Case Studies in Research Design

Course Title
Case Studies in Research Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
¬ Admission into the PhD in Education.

Course Description
A critical analysis of educational research design.

College
College of Community Innovation and Education

Department
Learning Sciences & Educational Research

Terms of Offering
Summer
IDS7657 - Professional Collaboration Around Language Issues

**Course Title**
Professional Collaboration Around Language Issues

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Education Ph.D. program or C.I.

**Course Description**
Interdisciplinary approach to exploring issues in language and literacy for struggling children and adolescents and development of collaboration competencies in professionals from different disciplines.

**College**
College of Community Innovation and Education

**Department**
College of Community Innovation and Education Dean's Office

**Terms of Offering**
Odd Fall

IDS7690 - Frontiers in Biomedical Sciences

**Course Title**
Frontiers in Biomedical Sciences

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Biomedical Sciences Ph.D. program.

**Course Description**
Cross-disciplinary biomolecular research seminar, collaboration between chemistry, biology, and molecular biology and microbiology. May be used in the degree program a maximum of 6 times.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Spring
Fall
IDS7692L - Experiments in Biomedical Sciences

**Course Title**
Experiments in Biomedical Sciences

**Credits Hours**
1 - 3

**Lab/Studio/Field Work Hours**
3-Jan

**Prerequisites**
- Admission to Biomedical Sciences Ph.D. program.

**Course Description**
Laboratory rotations in one to three research laboratories throughout the first year of the Biomedical Science doctoral program. Graded S/U. May be used in the degree program a maximum of 4 times.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Spring
Fall

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IDS7938 - Research Cluster Seminar

**Course Title**
Research Cluster Seminar

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission into the PhD program in Education or C.I.

**Course Description**
An examination of research issues focusing on interdisciplinary inquiry in education. May be used in the degree program a maximum of 2 times.

**College**
College of Community Innovation and Education

**Department**
Learning Sciences & Educational Research

**Terms of Offering**
Summer
Spring
IDS7939 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Teacher Education

INP - Industrial & Applied Psychology

INP5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

INP5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology
INP6005 - Overview of Research in Industrial and Organizational Psychology

Course Title
Overview of Research in Industrial and Organizational Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to masters or doctoral program in Industrial/Organizational Psychology, or CI.

Course Description
Designed to familiarize graduate students with the core research topics of interest to contemporary I/O psychologists.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

INP6058 - Job Analysis and Performance Appraisal

Course Title
Job Analysis and Performance Appraisal

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Industrial Organizational Psychology M.S. or CI.

Course Description
Theory and practice in collection, analysis, and use of job analysis data; survey of theories, research and practice in the areas of industrial/organizational performance appraisal.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
INP6072 - Survey Research Methods and Program Evaluation in Indust. and Org. Psychology

Course Title
Survey Research Methods and Program Evaluation in Indust. and Org. Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PSY 6216C and admission to master's program in Industrial and Organizational Psychology or Ph.D. in Psychology or C.I.

Course Description
Applied issues in the evaluation of programs/interventions and survey design, sampling, and data analysis in organizations.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

INP6080 - Ethical, Legal, and Professional Issues in Industrial and Organizational Psychology

Course Title
Ethical, Legal, and Professional Issues in Industrial and Organizational Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to master's program in Industrial and Organizational Psychology, Psychology Ph.D., or C.I.

Course Description
A review of the applied behavioral problems recurrent in the professional practice of Industrial and Organizational Psychology.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
INP6091 - Industrial and Organizational Psychology Consulting Practice

Course Title
Industrial and Organizational Psychology Consulting Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission into the M.S. Industrial/Organizational Psychology program. Develop consulting skills in I/O psychology by applying theories and methods to improve individual, group, and organizational effectiveness.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

INP6215 - Assessment Centers and Leadership

Course Title
Assessment Centers and Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate admission and C.I.

Course Description
Survey of assessment center technology and application with emphasis on leadership theory and practice.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
INP6317 - Work Motivation and Job Attitudes

Course Title
Work Motivation and Job Attitudes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Industrial Organizational Psychology M.S. or Ph.D., or Modeling and Simulation M.S. or Ph.D., or Applied Learning and Instruction M.A., or C.I.

Course Description
Review of theories, research and application of psychological principles to organizational settings, including human motivation and job attitudes.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

INP6318 - Recruitment, Placement and Selection

Course Title
Recruitment, Placement and Selection

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PSY 6308C and admission to Industrial and Organizational Psychology M.S., or C.I.

Course Description
Issues related to recruiting, placing, and selecting employees and an examination of currently used tests in industry.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
INP6605 - Training and Team Performance

**Course Title**
Training and Team Performance

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Industrial Organizational Psychology M.S., Psychology Ph.D., or C.I.

**Course Description**
Survey and theory of training and small groups including team effectiveness and team performance within applied contexts.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Occasional

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INP6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Psychology

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INP6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Psychology
INP6933 - Seminar in Industrial and Organizational Psychology

Course Title
Seminar in Industrial and Organizational Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Industrial and Organizational Psychology Master’s, Psychology Ph.D., or C.I.

Course Description
Selected topics in industrial and organizational psychology. May be used in the I/O M.S. degree program one time, and may be used in I/O Ph.D. a maximum of 6 times. May be used in the Ph.D. degree program a maximum of 6 times. May be used in the degree program a maximum of 6 times.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

INP6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Psychology
INP6945C - Industrial Psychology Practicum

**Course Title**
Industrial Psychology Practicum

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
6

**Course Description**
Admission to Industrial Organizational Psychology M.S. or C.I. Supervised placement in an applied setting.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Occasional

INP7071 - Research Methods in Industrial and Organizational Psychology

**Course Title**
Research Methods in Industrial and Organizational Psychology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the doctoral Industrial and Organizational Psychology program and PSY 6216C.

**Course Description**
A review of research methodology in organizational settings, focusing on hypothesis testing, quasi-experimental designed, non-experimental designs, and sampling procedures.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Occasional
INP7081 - Professional Issues in Industrial and Organizational Psychology

**Course Title**

Professional Issues in Industrial and Organizational Psychology

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Graduate standing in the doctoral program in Industrial Organizational Psychology or C.I.

**Course Description**

Ethical principles, standards, and laws guiding professional behaviors and psychological practice.

**College**

College of Sciences

**Department**

Department of Psychology

INP7089 - Human Factors Professional Issues

**Course Title**

Human Factors Professional Issues

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission to the Human Factors PhD program.

**Course Description**

Ethical principles of psychologists, code of conduct, grant/proposal writing, publication of research, academic and applied career paths, licensing requirements, and job search/preparation.

**College**

College of Sciences

**Department**

Department of Psychology

**Terms of Offering**

Even Spring
INP7214 - Industrial Psychology I

Course Title
Industrial Psychology I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the doctoral Industrial and Organizational Psychology program or C.I.

Course Description
Review of the theoretical and practical issues and the research literature related to criterion development and personnel selection.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Odd Spring

INP7251 - Industrial Psychology II

Course Title
Industrial Psychology II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the doctoral Industrial and Organizational Psychology program or C.I.

Course Description
Review of the theoretical and practical issues and the research literature related to retaining, theory and program design/evaluation and performance appraisal/feedback.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
INP7310 - Organizational Psychology I

Course Title
Organizational Psychology I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the doctoral Industrial and Organizational Psychology program. Review of the theoretical and practical issues and research literature related to work motivation theory, attitude theory, and decision theory.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

INP7311 - Organizational Psychology II

Course Title
Organizational Psychology II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the doctoral Industrial and Organizational Psychology program or C.I.

Course Description
Review of the theoretical and practical issues and research literature related to small group theory and process and organization theory.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
INP7919 - Directed Doctoral Study in Industrial and Organization Psychology

Course Title
Directed Doctoral Study in Industrial and Organization Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the doctoral Industrial and Organizational Psychology program.

Course Description
Directed study in areas of organization development theory, career development theory consumer behavior, individual assessment, or other relevant topics in Industrial and Organizational psychology. May be repeated for credit.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

INR - International Relations

INR5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
School of Politics, Security, and International Affairs

INR5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
School of Politics, Security, and International Affairs
INR6007 - Seminar in International Politics

Course Title
Seminar in International Politics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to a graduate degree-seeking program or C.I.

Course Description
Introduces the student to the advances in international relations theory and research through a broad sampling of approaches and methods.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR6039 - International Political Economy

Course Title
International Political Economy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Graduate standing or post bac status.

Course Description
A survey of major themes, concepts, theories, and methods of international political economy, which also entails policy discussion and applications.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
INR6062 - Peace Studies  
**Course Title**  
Peace Studies  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Admission to degree-seeking program or C.I.  

**Course Description**  
Examines how humans manage conflict, fostering justice and creative development. Surveys both international and domestic conflicts, outlining theories of peace and utilizing various case studies.

**College**  
College of Sciences  

**Department**  
School of Politics, Security, and International Affairs  

**Terms of Offering**  
Occasional

INR6065 - Seminar on War  
**Course Title**  
Seminar on War  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Admission to degree-seeking program or C.I.  

**Course Description**  
Examination of theories and empirical evidence locating the cause of war at the systemic, state, and individual levels of analysis.

**College**  
College of Sciences  

**Department**  
School of Politics, Security, and International Affairs  

**Terms of Offering**  
Occasional
INR6067 - Human Rights and Security
Course Title
Human Rights and Security

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to degree-seeking graduate program or C.I.

Course Description
Analyze international human rights and human security, including issues of human development, gender and environmental security.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR6068 - Politics of Civil Wars
Course Title
Politics of Civil Wars

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to degree-seeking program or C.I. Exploration of the causes, the dynamics of violence, the international aspects, and the resolution of civil wars.

College
College of Sciences

Department
School of Politics, Security, and International Affairs
INR6108 - Seminar in American Foreign Policy

Course Title
Seminar in American Foreign Policy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to a graduate degree-seeking program or C.I.

Course Description
Domestic and international factors influencing the development of selected foreign policy issues.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR6136 - Seminar in American Security Policy

Course Title
Seminar in American Security Policy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate degree seeking program or C.I.

Course Description
Examination of domestic and international factors influencing the development of selected American security policy issues.

College
College of Sciences

Department
School of Politics, Security, and International Affairs
INR6137 - Terrorism and Politics

**Course Title**
Terrorism and Politics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Examines terrorism, including its strategic logics, contemporary methodologies, political roots, and the problems of counter-terrorism.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional

INR6228 - International Politics of the Caspian Sea Region

**Course Title**
International Politics of the Caspian Sea Region

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Degree-seeking graduate standing or C.I.

**Course Description**
A comprehensive analysis of the political issues of the Caspian region.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional
INR6257 - International Relations of Africa

Course Title
International Relations of Africa

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Investigates international relations in the African context, with an explicit focus on implications for international security.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR6275 - International Politics of the Middle East

Course Title
International Politics of the Middle East

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Analysis of the international relations of the Middle East both among Middle Eastern states, as well as relations with other states, especially the great powers.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Even Fall
INR6339 - Strategic Warning Analysis

Course Title
Strategic Warning Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Explores the question of strategic warning within the context of national security with focus upon principles of analysis using examples.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR6346 - Politics of International Terrorism

Course Title
Politics of International Terrorism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to degree-seeking program or C.I.

Course Description
Analysis of causes of and political responses to international terrorism. Emphasis on political science approaches to analysis of international terrorism.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
INR6352 - Global Environmental Politics

Course Title
Global Environmental Politics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to Political Science MA or C.I.

Course Description
Unique environmental struggles and issues on the international and global levels.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR6356 - Environmental Security

Course Title
Environmental Security

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to degree-seeking program or C.I.

Course Description
Examination of the relationship between environmental degradation and both national and international security, introducing students to the technical and political debates on global environmental change.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
INR6365 - Seminar on Intelligence

Course Title
Seminar on Intelligence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to degree-seeking program or C.I.

Course Description
Examines the organization and functions of the U.S. intelligence community, its interaction with national security policymakers, and the challenges in defining its future role.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR6366 - The Intelligence Community

Course Title
The Intelligence Community

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to a graduate program, or C.I.

Course Description
The intelligence community structure in its relationship to foreign policy decision making, consideration of control and reliability questions, and issues of cooperation and coordination.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

2022-2023 Graduate Catalog
INR6507 - International Organization

Course Title
International Organization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
A survey of the theories, structures, issues, and agents of international organization, focusing on the effects of regional and global governance on state behavior.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR6726 - Political Behavior in International Conflict

Course Title
Political Behavior in International Conflict

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Analysis of the ways in which cognitive and emotional theories of human behavior have been used to explain conflict between nation-state and other non-state actors.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
INR6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
School of Politics, Security, and International Affairs

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INR6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
School of Politics, Security, and International Affairs

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INR6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
School of Politics, Security, and International Affairs
INR6938 - ST: Politics of Online Security

Course Title
ST: Politics of Online Security

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to a program offered by School of Politics, Security, and International Affairs

Course Description
Explores political science research around online threats to individuals and the policies (imposed by social media and government institutions) designed to mitigate them.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

INR7139 - Issues in Domestic Security

Course Title
Issues in Domestic Security

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Security Studies Ph.D. or C.I.

Course Description
Examination of national issues such as domestic terrorism, with a particular emphasis on challenges arising at the state level.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Even Fall
INR7332 - Scientific Study of Security

Course Title
Scientific Study of Security

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Security Studies Ph.D. or C.I.

Course Description
Principles of research design and evaluation of studies on domestic and international security; preparation of an empirical research paper.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Fall

INR7337 - Issues in International Security

Course Title
Issues in International Security

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Security Studies Ph.D. or C.I.

Course Description
Overview of international issues such as terrorism, genocide, nuclear proliferation, war, the spread of infectious diseases, fragile and failing states, transnational organized crime and gender.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Even Spring
INR7687 - Theoretical Approaches to Security Studies

Course Title
Theoretical Approaches to Security Studies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Security Studies Ph.D. or C.I.

Course Description
Survey of realist, liberal, constructivist, critical and other theories of international security.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Even Fall

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ISC - Interdisciplinary Sciences

ISC5404 - Fundamentals of Discipline Based Education Research in STEM Disciplines

Course Title
Fundamentals of Discipline Based Education Research in STEM Disciplines

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing, or C.I.

Course Description
Fundamental topics and methodologies in the field of discipline based education research, focusing specifically on STEM disciplines.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Odd Fall
Even Fall
ISC6146 - Environmental Education for Educators

**Course Title**
Environmental Education for Educators

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Graduate standing and a valid Florida Teaching Certificate or C.I.

**Course Description**
Emphasizes the importance of environmental education in the school curriculum. Includes facilitator training in national environmental education programs.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer

ISC6416 - History of Physical Science and Cultural Connections

**Course Title**
History of Physical Science and Cultural Connections

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing, C.I.

**Course Description**
This course is designed for graduate students in science who wish to know something about the "who, how, why, when and where " of physics.

**College**
College of Optics and Photonics

**Department**
College of Optics and Photonics

**Terms of Offering**
Spring

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ISM - Information Systems Management

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2022-2023 Graduate Catalog
ISM5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Business Administration

**Department**
Management Information Systems Department

ISM5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Business Administration

**Department**
Management Information Systems Department

ISM6327 - Foundations of Cybersecurity and Privacy

**Course Title**
Foundations of Cybersecurity and Privacy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the graduate college.

**Course Description**
This course will introduce foundational terminology related to information technology (IT), information systems (IS), and information security (InfoSec). Students will become familiar with IT risk and security management, data privacy, and technologies for assessing network security.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Occasional
ISM6328 - Cyber Risk Assessment

**Course Title**
Cyber Risk Assessment

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- ISM 6327 or equivalent as determined by instructor.

**Course Description**
Identification of risks associated with the functioning of modern, technology-enabled organizations and systems, technical and nontechnical. Alignment of cyber risk management frameworks with business goals.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Spring

ISM6375 - Cyber Management and Leadership

**Course Title**
Cyber Management and Leadership

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- ISM 6327 or equivalent as determined by instructor; and ISM 6328 Cyber Risk Assessment.

**Course Description**
Development, implementation, maintenance, and leading of modern organizational cyber strategies, structures, and programs in alignment with organizational goals; effective responses to adverse cyber events.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Fall
ISM6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Management Information Systems Department

ISM6938ST1 - ST: Cyber Management and Leadership

Course Title
ST: Cyber Management and Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
3

Course Description
Development, implementation, maintenance, and leading of modern organizational cyber strategies, structures, and programs in alignment with organizational goals; effective responses to adverse cyber events.

ISM6938ST2 - ST: Cyber Risk Management

Course Title
ST: Cyber Risk Management

Credits Hours
3

Lab/Studio/Field Work Hours
3

Course Description
Identification of risks associated with the functioning of modern, technology-enabled organizations and systems, technical and nontechnical. Alignment of cyber risk management frameworks with business goals.

JOU - Journalism

JOU5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media
JOUS937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Nicholson School of Communication and Media

LAE - Language Arts & English Education

LAE5295 - Writing Workshop

Course Title
Writing Workshop

Credits Hours
1 - 3

Lab/Studio/Field Work Hours
0

Prerequisites
• C.I.

Course Description
Students will engage in exploration and practice of effective writing strategies. (May be repeated up to 3 semester hours.) May be repeated for credit.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer
LAE5319 - Methods of Elementary School Language Arts

Course Title
Methods of Elementary School Language Arts

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Principles, procedures, organization and current practices in reading, writing, listening, and talking.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
- Summer
- Fall

LAE5337 - Literacy Strategies for Middle and Secondary Teaching

Course Title
Literacy Strategies for Middle and Secondary Teaching

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDG 6415 or C.I.

Course Description
Assists teachers and graduate students in understanding the adolescent learner. Examines theory, strategies, research, resources and implementation options for effective middle and secondary literacy programs.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
- Spring
- Fall
LAE5338 - Teaching Writing in Middle and High School

Course Title
Teaching Writing in Middle and High School

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDG 6415 or C.I.

Course Description
Techniques and methods in teaching dialects, semantics, and the various grammars within the context of writing.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall

LAE5346 - Methods of Teaching English Language Arts

Course Title
Methods of Teaching English Language Arts

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDG 6415 and TSL 5085 or CI or admission to Initial Teacher Professional Preparation certificate.

Course Description
Designed for alternative certification and Masters of Arts students to explore the strands, methods and materials related to school curriculum in teaching English.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall
LAE5369 - Literacy Strategies in a Digital Age for Middle and High School

Course Title
Literacy Strategies in a Digital Age for Middle and High School

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate program or C.I.

Course Description
Designed to assist teachers in understanding and presenting information using digital literacies, technological innovations, language arts skills and multicultural models of instruction for secondary education.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer
Spring

LAE5415 - Children's Literature in Elementary Education

Course Title
Children's Literature in Elementary Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Survey of children's literature: criteria for selection according to literary elements and child development needs. Methods for presenting to children; integrating literature with elementary curricula.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Summer
LAE5465 - Literature for Adolescents

Course Title
Literature for Adolescents

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Senior standing or C.I.

Course Description
Selecting and evaluating books for adolescents with emphasis on the use of literature in the development of young people.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring

LAE5495 - Assessing Writing

Course Title
Assessing Writing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Students will explore a variety of strategies for assessing students' writing including holistic scoring, primary trait scoring, and portfolio assessment.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
LAE5496 - Disciplinary Literacy in the Content Areas

**Course Title**
Disciplinary Literacy in the Content Areas

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing. Designed to assist in understanding the adolescent reader and writer, this course will examine theory, strategies, resources, and implementation options of disciplinary literacy specifically in the content areas (Mathematics, Science, Social Studies, and other content areas).

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer
Spring

LAE5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

LAE5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
LAE6296 - Advanced Writing Workshop

Course Title
Advanced Writing Workshop

Credits Hours
1 - 3

Lab/Studio/Field Work Hours
0

Prerequisites
- LAE 5295 or C.I.

Course Description
Designed for teachers who have completed a previous writing workshop course. Includes history, theory, research, and strategies for teaching writing. (Course may be repeated up to 3 semester hours. ) Course May be repeated for credit.

College
College of Community Innovation and Education

Department
School of Teacher Education

LAE6366 - Advanced Studies in Adolescent Literature

Course Title
Advanced Studies in Adolescent Literature

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- LAE 4464 or LAE 5465.

Course Description
Analysis of major works in genre, examination of criticism, instructional strategies, and research in teaching adolescent literature.

College
College of Community Innovation and Education

Department
School of Teacher Education
LAE6417 - Investigation in Children's Literature

Course Title
Investigation in Children's Literature

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Learning through the utilization of children's literature, literature analysis and evaluation, storytelling, visual and reference materials.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring

LAE6616 - Trends in Language Arts Education

Course Title
Trends in Language Arts Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Basic Teacher Certificate or C.I.

Course Description
Historical development and trends; English usage systems; materials; instructional strategies.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall
LAE6637 - Research in Teaching English

**Course Title**
Research in Teaching English

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Examination and interpretation of major research in English education. Design of models for research in language instruction in secondary schools.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring

LAE6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

LAE6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
LAE6936 - Seminar in Language Arts Education

**Course Title**
Seminar in Language Arts Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Provides classroom teachers with opportunities to conduct in-depth explorations of timely topics related to teaching language and literacy.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer

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LAE6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
**LAE6971 - Thesis**

**Course Title**
Thesis

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Permission of Department,

**Course Description**
Thesis

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester

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**LAH - Latin American History**

**LAH5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of History
LAH5920 - Colloquium in Latin American History

Course Title
Colloquium in Latin American History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examines the major themes and historiography of recent works on Latin American history. May be used in the degree program a maximum of 2 times only when course content is different.

College
College of Arts and Humanities

Department
Department of History

Terms of Offering
Occasional

LAH5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of History

LAH6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of History
LAH6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of History

LEI - Leisure

LEI5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

LEI5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education

LEI6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
LEI6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

LEI6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education

LIN - Linguistics

LIN5137 - Linguistics

Course Title
Linguistics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
Modern linguistic theories and studies focusing on language acquisition and development, contemporary American English, semantics, and para-linguistics.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional
LIN5675 - English Grammar and Usage

Course Title
English Grammar and Usage

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
An overview of modern grammar, including structural, transformational and rhetorical grammar, along with an examination of controversial usage.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

LIN5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of English

LIN5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of English
LIN6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of English

LIN6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of English

LIN6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
Department of English

LIT - Literature

LIT5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of English
LIT5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
Department of English

LIT6039 - Studies in Contemporary Poetry
Course Title
Studies in Contemporary Poetry
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing in MFA Creative Writing program or C.I.
Course Description
English language poetry from 1945 to the present. Emphasis on American poets, but others such as English or Australian will be included. May be used in the degree program a maximum of 2 times.
College
College of Arts and Humanities
Department
Department of English
Terms of Offering
Occasional
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits Hours</th>
<th>Lab/Studio/Field Work Hours</th>
<th>Prerequisites</th>
<th>College</th>
<th>Department</th>
<th>Terms of Offering</th>
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</thead>
<tbody>
<tr>
<td>LIT6076</td>
<td>Studies in Contemporary Nonfiction</td>
<td>3</td>
<td>0</td>
<td>Admission to the Creative Writing MFA Program or C.I. based on submission of manuscript. Comprehensive study of nonfiction, including memoir, personal essay, literary journalism, and/or nature writing, with special emphasis on craft. May be used in the degree program a maximum of 2 times.</td>
<td>College of Arts and Humanities</td>
<td>Department of English</td>
<td>Occasional</td>
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<tr>
<td>LIT6097</td>
<td>Studies in Contemporary Fiction</td>
<td>3</td>
<td>0</td>
<td>Graduate standing in MFA in Creative Writing program or C.I.</td>
<td>College of Arts and Humanities</td>
<td>Department of English</td>
<td>Occasional</td>
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</tbody>
</table>
LIT6216 - Issues in Literary Study  
**Course Title**  
Issues in Literary Study  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate standing in English or C.I.  
**Course Description**  
Specific issues and controversies in literary study. May be used in the degree program a maximum of 4 times only when course content is different.  
**College**  
College of Arts and Humanities  
**Department**  
Department of English  
**Terms of Offering**  
Occasional

LIT6276 - Teaching College Literature  
**Course Title**  
Teaching College Literature  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate standing in English or C.I.  
**Course Description**  
Pedagogical theory and practical techniques for teaching literature in college and university settings.  
**College**  
College of Arts and Humanities  
**Department**  
Department of English  
**Terms of Offering**  
Occasional
LIT6435 - Rhetoric of Science
Course Title
Rhetoric of Science
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing in English or C.I.
Course Description
Rhetorical analysis of traditional scientific texts and critically examine the discourse of technology.
College
College of Arts and Humanities
Department
Department of English
Terms of Offering
Occasional

LIT6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of English

LIT6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of English
LIT6936 - Studies in Literary, Cultural, and Textual Theory

Course Title
Studies in Literary, Cultural, and Textual Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and C.I.

Course Description
Specific topics in the study of literature that foreground cultural and theoretical issues. May be used in the degree program a maximum of 4 times only when course content is different.

College
College of Arts and Humanities

Department
Department of English

Terms of Offering
Occasional

LIT6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of English

MAA - Mathematics Analysis
MAA5210 - Topics in Advanced Calculus

Course Title
Topics in Advanced Calculus

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAS 3105, MAP 2302, or equivalent or C.I.

Course Description
Real numbers, epsilon-delta language, limits, continuity, integration, differentiation, Taylor's theorem, series, uniform convergence, inverse and implicit function theorems.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Fall

MAA5228 - Analysis I

Course Title
Analysis I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAS 3106 or C.I.

Course Description
Real numbers, limits, differentiation, Riemann integrals, Riemann-Stieltjes integrals, calculus in R^n; metric and normed spaces, contraction mapping theorem, inverse and implicit functions.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Fall
MAA5237 - Mathematical Analysis
Course Title
Mathematical Analysis
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- MAA 4226, or MAA 5210, or C.I.
Course Description
Metric spaces, sequences, limits, and continuous functions, multi-variable function differentiation and Riemann integrals, uniform convergence, series of numbers and functions.
College
College of Sciences
Department
Department of Mathematics
Terms of Offering
Fall

MAA5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Mathematics

MAA5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Mathematics
MAA6229 - Analysis II

**Course Title**
Analysis II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAA 5228 or C.I.

**Course Description**
Topological Spaces, Banach Spaces, Hilbert Spaces, Bounded Linear Operators, Distribution and Fourier Transform, Measure Theory and Function Spaces.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Spring

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MAA6238 - Measure and Probability I

**Course Title**
Measure and Probability I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAA 6229 or C.I.

**Course Description**
The law of large numbers, central limit theorems, random walks, Poisson processes, stopping times, martingales.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional
MAA6245 - Measure and Probability II

Course Title
Measure and Probability II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
MAA 6238, or C.I. Martingales, Markov Processes, stopping times, Brownian motion, Weiner measure.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MAA6306 - Real Analysis

Course Title
Real Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAA 5210.

Course Description
Sets, function spaces, Lebesque measure, Lebesque-Stieltjes measure, measurable functions, convergence notions, general measure and integration, Radon-Nikodym theorem.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional
MAA6404 - Complex Analysis

**Course Title**
Complex Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAA 6405, MAA 4402, MAA 4226, or C.I.

**Course Description**
Review of complex variable theory; advanced topics chosen from conformal mapping and its applications, boundary behavior, numerical techniques; singular integrals.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional

MAA6405 - Complex Variables

**Course Title**
Complex Variables

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAA 5228 or C.I.

**Course Description**
Complex plane, analytic functions, harmonic functions, Cauchy’s theorem and integral formula, maximum modulus principle, Laurent series, singularities, the residue theorem.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Spring
MAA6416 - Topology  
**Course Title**  
Topology  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- MAA 4226, MTG 4302.  

**Course Description**  
Topological spaces and continuous functions, connectedness and compactness, separation axioms, metrization theorems, Baire spaces and dimension theory, the fundamental group and homotopy paths.  

**College**  
College of Sciences  

**Department**  
Department of Mathematics  

**Terms of Offering**  
Even Spring  

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MAA6506 - Functional Analysis  
**Course Title**  
Functional Analysis  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- MAA 4226 or C.I.  

**Course Description**  
Normed vector spaces, linear operators, Baire Category theorem, Banach fixed point theorem, Hahn-Banach theorem and applications, open mapping and closed graph theorem with applications, Hilbert space, Gateaux and Frechet.  

**College**  
College of Sciences  

**Department**  
Department of Mathematics  

**Terms of Offering**  
Even Spring
MAA6508 - Hilbert Spaces with Applications

Course Title
Hilbert Spaces with Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 2302, MAS 3106, or C.I.

Course Description
Normed and inner product spaces; Hilbert spaces; orthonormal systems; linear operators and spectral decomposition; applications to differential and integral equations.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MAA6531 - Analysis of Manifolds

Course Title
Analysis of Manifolds

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Matrix or Linear Algebra, MAA 4226 or MAA 5210, or C.I. Derivatives as linear transformations, inverse function theorem, manifolds and integration of real-valued functions on manifolds, wedge products, differential forms, vector analysis as a specific case.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional
MAA6909 - Research Report
Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MAA6918 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MAA6938 - Special Topics
Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Mathematics
MAA7239 - Asymptotic Methods in Mathematical Statistics

Course Title
Asymptotic Methods in Mathematical Statistics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 6111 or C.I.

Course Description
Large sample theory, martingale sequences, probability measures on metric spaces, absolute continuity and singularity, Hellinger distance, functions of statistics, asymptotic theory of estimation and applications.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MAA7919 - Doctoral Research

Course Title
Doctoral Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MAD - Mathematics Discrete
MAD5205 - Graph Theory I
Course Title
Graph Theory I
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- MAD 4203, graduate standing or C.I.
Course Description
Connectivity, Hamilton cycles, spanning trees, network flows, matchings, vertex and edge colorings planar graphs, extremal problems, Ramsey theory, spectral graph theory.
College
College of Sciences
Department
Department of Mathematics
Terms of Offering
Odd Spring

MAD5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Mathematics

MAD5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Mathematics

2022-2023 Graduate Catalog
MAD6309 - Graph Theory II

**Course Title**
Graph Theory II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
MAD 5205 or C.I. Perfect graphs, structure of 3-connected graphs, matchings, nowhere zero flows, list coloring, extremal problems, Tutte polynomial, Hadwiger conjecture, Erdos-Hajnal conjecture, Vising's conjecture.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional

MAD6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Mathematics

MAD6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Mathematics
MAD6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Mathematics

MAD7939 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Mathematics

MAE - Mathematics Education

MAE5327 - Teaching Middle School Mathematics

Course Title
Teaching Middle School Mathematics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDG 6415 and TSL 5085 or admission to Initial Teacher Professional Preparation certificate.

Course Description
Students will develop skills in planning and delivering mathematics instruction in grades 5-9. The use of technology, cooperative learning, ESOL, and manipulatives is considered.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional
MAE5336 - Current Methods in Secondary School Mathematics

Course Title
Current Methods in Secondary School Mathematics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EDG 6415, TSL 5085, or admission to MED program or Initial Teacher Professional Preparation certificate.

Course Description
Required special methods course for mathematics 6-12 certification. Assessment, curriculum, technology, practical classroom ideas and activities.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional

MAE5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
MAE5935 - Post-Secondary Mathematics

**Course Title**
Post-Secondary Mathematics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or senior standing or C.I.

**Course Description**
The course will focus on issues which are faced by teachers of collegiate mathematics. Topics will be selected from teaching issues, program issues, and other issues.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Even Fall

MAE5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
MAE6318 - Current Methods in Elementary School Mathematics

**Course Title**
Current Methods in Elementary School Mathematics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**

- EDE 6933 or C.I.

**Course Description**
Strategies of instruction of computation and concepts of number, geometry, and measurement; and algebra. Standards for teaching mathematics.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring
Fall

MAE6337 - Teaching Algebra in the Secondary School

**Course Title**
Teaching Algebra in the Secondary School

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**

- MAE 3330 or C.I.

**Course Description**
Addresses specific techniques for developing algebra skills for pre-algebra through precalculus algebra needs. Logical deductions, problem solving, computer applications, and innovative methods are explored.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Even Summer
MAE6338 - Teaching Geometry in the Secondary School
Course Title
Teaching Geometry in the Secondary School

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAE 3330 or C.I.

Course Description
This course addresses specific techniques for developing geometry skills beginning in the general mathematics classes of grade 6 through the high school geometry course.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Odd Summer

MAE6517 - Diagnosis/Remediation of Difficulties in Mathematics for the Classroom Teacher
Course Title
Diagnosis/Remediation of Difficulties in Mathematics for the Classroom Teacher

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Basic Teacher Certificate or C.I.

Course Description
The study of techniques for diagnosis and remediation of difficulties in mathematics.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Odd Summer
MAE6641 - Problem Solving and Critical Thinking Skills

Course Title

Problem Solving and Critical Thinking Skills

Credits Hours

3

Lab/Studio/Field Work Hours

1

Prerequisites

- Regular Certificate or C.I.

Course Description

Development of procedures and practices necessary to implement critical thinking skills and problem solving techniques in the schools.

College

College of Community Innovation and Education

Department

School of Teacher Education

Terms of Offering

Spring

MAE6656 - Using Technology in the Instruction of K-12 Mathematics

Course Title

Using Technology in the Instruction of K-12 Mathematics

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- C.I.

Course Description

The application of computer technology to mathematics instruction including calculators, CAI, CMI, application software, simulators, and video disc technology.

College

College of Community Innovation and Education

Department

School of Teacher Education

Terms of Offering

Even Fall
MAE6899 - Seminar in Teaching Mathematics

Course Title
Seminar in Teaching Mathematics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Six semester hours of graduate credit in mathematics education.

Course Description
Development of historical and current issues, forces, and individuals and their impact on the teaching of mathematics K-12. Consideration of advanced instructional techniques. May be repeated for credit.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall

MAE6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

MAE6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
MAE6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Teacher Education

MAE6949 - Cooperative Education in Mathematics Education
Course Title
Cooperative Education in Mathematics Education
Credits Hours
0 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

MAE7367 - Instructional Coaching in K-8 Mathematics
Course Title
Instructional Coaching in K-8 Mathematics
Credits Hours
3
Lab/Studio/Field Work Hours
3
Prerequisites
- MAE 7817: Content Knowledge for Teaching K-8 Mathematics I
Course Description
This course addresses improving instructional quality in mathematics by collecting data that influences instruction and implementing strategies for coaching to improve student outcomes.
College
College of Community Innovation and Education
Department
School of Teacher Education
Terms of Offering
Fall

2022-2023 Graduate Catalog
MAE7640 - History of Mathematics Education

Course Title
History of Mathematics Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing.

Course Description
Study of issues and forces that have shaped mathematics education including policies, classroom practices, curriculum development, instructional materials, technology and assessment of learning.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Even Spring

MAE7795 - Seminar on Research in Mathematics Education

Course Title
Seminar on Research in Mathematics Education

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Doctoral standing.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Even Summer
MAE7804 - Content Knowledge for Teaching K-8 Mathematics II

Course Title
Content Knowledge for Teaching K-8 Mathematics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAE 7817: Content Knowledge for Teaching K-8 Mathematics I.

Course Description
This course addresses pedagogical content knowledge for supporting K-8 mathematics teachers. Topics include integers; proportional relationships; equations, expressions, and inequalities; geometry and measurement; and statistics.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall

MAE7805 - Policies, Practices, and Structures in K-8 Mathematics Education

Course Title
Policies, Practices, and Structures in K-8 Mathematics Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral Standing.

Course Description
This course explores existing inequitable policies, practices, and structures in K-8 mathematics education and strategies to develop equitable, just, and inclusive K-8 mathematics programs.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall

2022-2023 Graduate Catalog
MAE7817 - Content Knowledge for Teaching K-8 Mathematics I

Course Title
Content Knowledge for Teaching K-8 Mathematics I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
This course addresses pedagogical content knowledge for supporting K-8 mathematics teachers. Topics include whole number concepts and operations, and rational number concepts and operations.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall

MAE7819 - Professional Leadership in K-8 Mathematics Education

Course Title
Professional Leadership in K-8 Mathematics Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral Standing.

Course Description
This course culminates professional leadership experiences in the doctoral program and leverages knowledge of content, methods, practices & policies in K-8 mathematics education.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional
MAE7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Teacher Education

MAE7930 - Seminar in K-8 Mathematics Education
Course Title
Seminar in K-8 Mathematics Education
Credits Hours
1 - 2
Lab/Studio/Field Work Hours
0
Prerequisites
- Acceptance into K-8 Mathematics Specialization of Curriculum and Instruction Ed.D.
Course Description
This course addresses requirements of the K-8 Mathematics Education Specialization within the Curriculum and Instruction Ed.D. and supports synthesis of the learning in the program.
College
College of Community Innovation and Education
Department
School of Teacher Education
Terms of Offering
Spring
MAE7945 - Internship in Mathematics Education

Course Title
Internship in Mathematics Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Math Ed track of the Ph.D. in Education.

Course Description
The focus of this course is on student's participation in teaching and service related to mathematics education. May be used in the degree program a maximum of 2 times.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Every Semester

MAN - Management

MAN5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Management

MAN5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Management
MAN6066 - Ethical Leadership

**Course Title**
Ethical Leadership

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in the College of Business Administration or C.I.

**Course Description**
Building on a foundation of basic theories of ethical decision making from organizational and behavioral perspectives. The course examines challenges involved in maintaining exemplary professional ethics.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Occasional

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MAN6146 - Professional Leadership I

**Course Title**
Professional Leadership I

**Credits Hours**
1.5

**Lab/Studio/Field Work Hours**
0

**Course Description**
The Professional Leadership course is comprised of two complementary 1.5-credit modules. Part I includes topics, cases, reading assignments, and exercises that are designed to develop cognitive and interpersonal skills.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Fall
MAN6147 - Professional Leadership II

Course Title
Professional Leadership II

Credits Hours
1.5

Lab/Studio/Field Work Hours
0

Course Description
The Professional Leadership course is comprised of two complementary 1.5-credit modules. Part II includes topics, cases, reading assignments, and exercises that are designed to develop cognitive and interpersonal skills related to strategic leadership, leading change, and leading during a crisis.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Spring

MAN6245 - Organizational Behavior and Development

Course Title
Organizational Behavior and Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CBA master's program of study foundation core or C.I.

Course Description
The analysis of human behavior in organizations in terms of the individual, small group, intergroup relationships, and the total organization.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Fall
MAN6285 - Change Management

Course Title
Change Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Course designed to familiarize students with change management processes and interventions.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Even Fall

MAN6296 - Executive Leadership

Course Title
Executive Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Executive MBA program.

Course Description
A review of the theory, research, and practice of leadership in organizations. Special attention to contemporary leadership issues, including transactional and transformational leadership.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Odd Spring
MAN6305 - Human Resources Management

Course Title
Human Resources Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Course is designed as an overview of human resources practices, techniques and strategies.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional

MAN6311 - Advanced Topics in Human Resources Management

Course Title
Advanced Topics in Human Resources Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAN 6305 or C.I.

Course Description
An in-depth analysis of current human resource issues related to the attraction, management, and retention of human capital.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional
MAN6325 - Applied Research Tools

Course Title
Applied Research Tools

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Development of applied qualitative and quantitative research skills for collecting, analyzing and reporting data to organizations.

College
College of Business Administration

Department
Department of Management

MAN6385 - Strategic Human Resources Management

Course Title
Strategic Human Resources Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAN 6305 or C.I.

Course Description
Examination of the strategic orientation of human resources management and the development of the human resources architecture aligned with the organization's strategy and task environment.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional
MAN6395 - Leadership Development and Coaching

Course Title
Leadership Development and Coaching

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Course is designed to prepare students to understand the nature and role of leadership development with an emphasis on coaching.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional

MAN6448 - Conflict Resolution and Negotiation

Course Title
Conflict Resolution and Negotiation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Theory and processes of negotiation in a variety of settings, with relevance to the broad spectrum of negotiation faced by managers.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional
MAN6581 - Project Management  
**Course Title**  
Project Management  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Admission to the Integrated Business track in the Masters of Science in Management.  

**Course Description**  
Introduces key project management skills and strategies with a focus on methods needed to initiate and manage projects efficiently and effectively.

**College**  
College of Business Administration  

**Department**  
Department of Management  

**Terms of Offering**  
Spring  

MAN6721 - Applied Strategy and Business Policy  
**Course Title**  
Applied Strategy and Business Policy  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- MBA Professional Core I and taken in last semester of program.  

**Course Description**  
This capstone course integrates the various functional disciplines in business administration. It focuses on the theories and frameworks in the field of strategic management.

**College**  
College of Business Administration  

**Department**  
Department of Management  

**Terms of Offering**  
Spring
MAN6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Management

MAN6915 - Applied Field Project

Course Title
Applied Field Project

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
0

Prerequisites
- All other courses in the selected track in the program.

Course Description
Capstone course; applies concepts, theories and methods learned earlier in program to organizational problems in business settings.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional

MAN6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Management
MAN6938 - Management Research Forum

Course Title
Management Research Forum

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to doctoral program.

Course Description
Research and pedagogical issues in management, including research presentations by faculty, doctoral students, and invited scholars.

College
College of Business Administration

Department
Department of Management

MAN7207 - Organization Theory

Course Title
Organization Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral status.

Course Description
Study of impact of environment, technology, size and innovation on organization structure, functions and development.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional
MAN7275 - Organizational Behavior

**Course Title**
Organizational Behavior

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Doctoral standing or C.I.

**Course Description**
In-depth review of the classic and modern organizational behavior research literature, which deals with management of individual and group behavior in organizations.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Occasional


MAN7776 - Business-level Strategic Management

**Course Title**
Business-level Strategic Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to doctoral program and C.I.

**Course Description**
In-depth review of the classic and modern business-level strategy research literature, which deals with topics such as competitive strategy, industry analysis and the strategy process.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Occasional
MAN7900 - Directed Readings in Management

Course Title
Directed Readings in Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to doctoral program and C.I.

Course Description
Directed readings in the area of Management concentration, as determined by the student's doctoral study advisory committee. May be repeated for credit.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional

MAN7916 - Seminar in Management Research

Course Title
Seminar in Management Research

Credits Hours
1 - 99

Prerequisites
- Admission to PhD program or C.I.

Course Description
Examines empirical and theoretical research in selected management topics. Specific topics may not be repeated for credit. Maximum of 15 hours toward degree. May be repeated for credit only when course content is different.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional
MAN7919 - Research

**Course Title**
Research

**Credits Hours**
1 - 99

**College**
College of Business Administration

**Department**
Department of Management

MAN7922 - Management Research Forum

**Course Title**
Management Research Forum

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to doctoral program.

**Course Description**
Research and pedagogical issues in management, including research presentations by faculty, doctoral students, and invited scholars.

**College**
College of Business Administration

**Department**
Department of Management

**Terms of Offering**
Spring
Fall

MAN7939 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Business Administration

**Department**
Department of Management
MAN7940 - Using Sports Data to Advance Theory and Practice in Academe and Industry

Course Title
Using Sports Data to Advance Theory and Practice in Academe and Industry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to doctoral programs.

Course Description
Outlines opportunities and challenges present for scholars and industry consultants using sports related data in their research.

College
College of Business Administration

Department
Department of Management

Terms of Offering
Occasional

MAP - Mathematics Applied

MAP5117 - Mathematical Modeling

Course Title
Mathematical Modeling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 4321, MAP 4303, graduate standing or senior standing, or C.I.

Course Description
Introduction to modeling in industrial and scientific applications; techniques for studying statistical and deterministic models.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Even Fall
MAP5336 - Ordinary Differential Equations and Applications

Course Title
Ordinary Differential Equations and Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAA 5228 or C.I.

Course Description
Existence and uniqueness of solutions of differential equations, systems of ordinary differential equations, autonomous systems, phase plane analysis, stability, bifurcations.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Spring

MAP5426 - Special Functions

Course Title
Special Functions

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 2302, and graduate status or senior standing or C.I.

Course Description
Series and integral representations, generating functions, recurrence relations and orthogonality properties of the special functions. Emphasis on Bessel, Legendre and hypergeometric functions.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional
MAP5435 - Advanced Mathematics for Engineers

Course Title
Advanced Mathematics for Engineers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 2302, and graduate status or senior standing or C.I.

Course Description
Linear Algebra and matrix methods, ordinary differential equations, Fourier series, partial differential equations, numerical methods for differential equations, and applications to engineering.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MAP5606 - Differential Equations for Financial Mathematics

Course Title
Differential Equations for Financial Mathematics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 4341 or C.I.

Course Description
Initial value problem, terminal value problem, existence and uniqueness, Gronwall's inequality, linear system theory, parabolic PDE, elliptic PDE, basic regularity theory, maximum principle, stability.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Fall
**MAP5612 - Computational Methods for Financial Mathematics I**

**Course Title**

Computational Methods for Financial Mathematics I

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission to the Financial Mathematics Track in the M.S. in Mathematical Sciences, or C.I.

**Course Description**

Numerical modeling, Numerical solutions, stability issues for Ordinary and Partial Differential Equations within the setting of financial mathematics.

**College**

College of Sciences

**Department**

Department of Mathematics

**Terms of Offering**

Fall

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**MAP5641 - Financial Mathematics I**

**Course Title**

Financial Mathematics I

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- MAP 5612 or C.I.

**Course Description**

Single-period market, arbitrage, risk-neutral probability measure, market completeness, mean-variance portfolio analysis, multi-period market, binomial tree, contingent claim pricing.

**College**

College of Sciences

**Department**

Department of Mathematics

**Terms of Offering**

Fall
MAP5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MAP5931 - Proseminar for Financial Mathematics

Course Title
Proseminar for Financial Mathematics

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites

- Admission to the Financial Mathematics Track in the M.S. in Mathematical Sciences, or C.I.

Course Description
Seminar to develop basic career skills in Financial Mathematics.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Odd Fall
MAP5933 - Seminar in Financial Mathematics

Course Title
Seminar in Financial Mathematics

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 5931

Course Description
Seminar to develop advanced career skills in Financial Mathematics.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Odd Fall

MAP5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Mathematics
MAP6111 - Mathematical Statistics

Course Title
Mathematical Statistics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAA 6238 - Measure and Probability I or C.I.

Course Description
Strong laws of large numbers, consistency and asymptotic normality, complete and sufficient statistics, maximum likelihood and least squares, optimal estimators, hypothesis testing.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Spring

MAP6118 - Introduction to Nonlinear Dynamics

Course Title
Introduction to Nonlinear Dynamics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 5336, PHY 2048C or equivalent, or C.I.

Course Description
Nonlinear differential equations; bifurcation theory; Hamiltonian dynamics; integrable systems and breakdown of integrability; chaos in conservative and dissipative systems.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional
MAP6168 - Mathematical Modeling II

**Course Title**
Mathematical Modeling II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAP 5117, graduate standing, or C.I.

**Course Description**
Solutions of complex industrial mathematics problems in navigation/guidance, object tracking, pattern recognition, and fluid dynamics.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional

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MAP6195 - Mathematical Foundations for Massive Data Modeling and Analysis

**Course Title**
Mathematical Foundations for Massive Data Modeling and Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAA 5228 and MAS 5145 or C.I.

**Course Description**
Mathematical model and analysis of massive data, numerical algorithms, optimization, nonlinear and sparse models.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Even Spring
Even Fall

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2022-2023 Graduate Catalog
MAP6197 - Mathematical Introduction to Deep Learning

**Course Title**
Mathematical Introduction to Deep Learning

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAT 5712 Scientific Computing, or C.I.

**Course Description**
Covers feed-forward and convolutional neural networks, loss functions, gradient descent optimization and selected topics from the current research literatures.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional

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MAP6207 - Optimization Theory

**Course Title**
Optimization Theory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAA 4226 or C.I.

**Course Description**
Lagrangian function and duality, Kuhn-Tucker theorem, quadratic programming and Wolfe's theorem, Griffith and Stewar's method, search methods for unconstrained optimization.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional
MAP6218 - Stochastic Calculus

Course Title
Stochastic Calculus

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
MAA 6245, or C.I. Stochastic integration, Stochastic Differential Equations.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MAP6356 - Partial Differential Equations

Course Title
Partial Differential Equations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 4341 or MAP 5435 or equivalent.

Course Description
First and second order linear equations; classification; analytical methods including Green's functions and integral representations; introduction to nonlinear equations; applications.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Even Fall
MAP6385 - Applied Numerical Mathematics

Course Title
Applied Numerical Mathematics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAT5712 Scientific Computing, or C.I.

Course Description
Topics in solutions of linear systems, numerical linear algebra, numerical solutions of partial differential equations, linear programming and optimization.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Spring

MAP6387 - Numerical Linear Algebra

Course Title
Numerical Linear Algebra

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAT 5712 Scientific Computing, MAP 6385 Applied Numerical Mathematics, or C.I

Corequisites
- The students should be very comfortable with applying the theorems from Calculus, Linear Algebra concepts and using MATLAB or Fortan as a programming language.

Course Description
Prepares students to understand fundamentals of numerical linear algebra and its algorithms, optimization and statistics, and machine learning algorithms with applications.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional
MAP6407 - Integral Equations and the Calculus of Variations
Course Title
Integral Equations and the Calculus of Variations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 3203 and MAS 3105, or graduate standing, or C.I.

Course Description

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Fall

MAP6408 - Perturbations and Asymptotic Methods
Course Title
Perturbations and Asymptotic Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 3203, MAS 3105, and MAA 4402, or graduate standing, or C.I.

Course Description

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Spring
MAP6416 - Applied and Computational Harmonic Analysis
Course Title
Applied and Computational Harmonic Analysis
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
MAA 6229 or C.I. Fourier Series, Fourier transform, Littlewood-Paley theory, Heisenberg uncertainty principle, wavelets, frame theory, Karhunen-Loève transform, comprehensive sensing, matrix completion, phase retrieval, signal processing.
College
College of Sciences
Department
Department of Mathematics
Terms of Offering
Occasional

MAP6419 - Advanced Transform Methods
Course Title
Advanced Transform Methods
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- MAP 6424 or C.I.
Course Description
Fourier analysis and sliding-window Fourier transform, sampling theory and its applications in signal analysis and optics, Radon transforms, the technique of back projection.
College
College of Sciences
Department
Department of Mathematics
Terms of Offering
Occasional
MAP6420 - Generalized Functions

Course Title
Generalized Functions

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAA 6506 or C.I.

Course Description
Spaces of test functions and their duals, calculus of distributions, convolution and tempered distributions, Fourier transforms of distributions, and applications to PDEs.

College
College of Sciences

Department
Department of Mathematics

MAP6421 - Integral Equations

Course Title
Integral Equations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAA 6405 or C.I.

Course Description
Successive approximations, Volterra equations, Fredholm theory, Hilbert-Schmidt theory, Newmann series, singular integral equations, the Riemann-Hilbert problem.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional
**MAP6424 - Transform Methods**

**Course Title**
Transform Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAA 6405 or C.I.

**Course Description**
Laplace, Fourier, Hankel, and other integral transforms, inversion theorems; the Z transform; applications to physical problems.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional

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**MAP6438 - Mathematical Fluid-Flow Theory I**

**Course Title**
Mathematical Fluid-Flow Theory I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAP 2302, MAP 4303, MAA 4402, PHY 3220 or equivalent, or C.I.

**Course Description**
Mathematical theory of incompressible fluid flows along with analytical methods in solving the equations of fluid dynamics in various situations.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
MAP6445 - Approximation Techniques

Course Title
Approximation Techniques

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- MAA 4227, MAA 5210 or C.I.

Course Description
Normed linear spaces; Weierstrass approximation theorem; Tchebycheff approximation by polynomials; trigonometric approximation; orthogonal expansions and least squares approximations.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MAP6465 - Wavelets and Their Applications

Course Title
Wavelets and Their Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- MAP 4341, MAA 6508, or C.I.

Course Description
Continuous wavelet transforms, discrete wavelet transforms, frames, Zak transform, multi-resolution analysis, orthonormal bases of compactly supported wavelets, spline wavelets.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Even Fall
Even Spring
MAP469 - Bayesian Analysis and Approximation Theory

Course Title
Bayesian Analysis and Approximation Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
One of the following combinations: (1) Either MAA 5210 or MAA 5228 and MAS 5145; (2) AST 4762C or AST 5765; or (3) C.I. Bayes' theorem, Fourier and wavelet transforms, Function approximation in multidimensional spaces. Kernels, Splines. Bayesian data analysis, Monte Carlo and Markov Chain Monte Carlo methods.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MAP6616 - Computational Methods for Financial Mathematics II

Course Title
Computational Methods for Financial Mathematics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 5612 or C.I.

Course Description
Monte-Carlo methods, Numerical aspects of stochastic differential equations.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Spring
MAP6642 - Financial Mathematics II  
**Course Title**  
Financial Mathematics II  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- MAP 5641 or C.I.  

**Course Description**  
Theoretical discussion of Stochastic processes, Brownian motion, Ito's integral, Ito's formula, martingales, Girsanov's transformation, stochastic differential equations, option pricing.  

**College**  
College of Sciences  

**Department**  
Department of Mathematics  

**Terms of Offering**  
Spring  

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MAP6646 - Risk Management for Financial Mathematics  
**Course Title**  
Risk Management for Financial Mathematics  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- MAP 5641 or C.I.  

**Course Description**  
Credit risk, counter party credit risk, securitizations, market risk, operational risk, asset liability management, Basel III regulations.  

**College**  
College of Sciences  

**Department**  
Department of Mathematics  

**Terms of Offering**  
Fall
MAP6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MAP6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MAP6938 - ST: Theory and Applications of q-series

Course Title
ST: Theory and Applications of q-series

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Mathematics graduate student, or C.I.

Course Description
The theory of basic hypergeometric functions and their applications to discrete mathematics

College
College of Sciences

Department
Department of Mathematics
**MAP7119 - Advanced Nonlinear Dynamics**

**Course Title**
Advanced Nonlinear Dynamics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAP 6118 or C.I.

**Course Description**
Solitons, inverse scattering transform, breakdown or integrability, analytic structure of dynamical systems, fractal aspects of turbulence.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional

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**MAP7359 - Advanced Topics in Partial Differential Equations**

**Course Title**
Advanced Topics in Partial Differential Equations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAP 6356, MAA 6506, or C.I.

**Course Description**
The course prepares students advanced PDE techniques needed for their future research.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional
MAP7386 - Numerical Solutions of PDE
Course Title
Numerical Solutions of PDE

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 6356, MAP 6385 or C.I.

Course Description
Numerical solution of linear and nonlinear partial differential equations of parabolic, elliptic and hyperbolic type. Solution of PDE using finite difference and spectral methods.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MAP7439 - Mathematical Fluid-Flow Theory II
Course Title
Mathematical Fluid-Flow Theory II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAP 6438 or C.I.

Course Description
Mathematical theory of compressible potential flow, nonlinear acoustics, exact solutions to equations of viscous fluid flow, viscous fluid flows at low or high Reynolds numbers.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Odd Fall
MAP7919 - Research

Course Title:
Research

Credits Hours:
1 - 99

College:
College of Sciences

Department:
Department of Mathematics

MAR - Marketing

MAR5917 - Directed Research

Course Title:
Directed Research

Credits Hours:
1 - 99

College:
College of Business Administration

Department:
Department of Marketing

MAR5937 - Special Topics

Course Title:
Special Topics

Credits Hours:
3

College:
College of Business Administration

Department:
Department of Marketing
MAR6409 - Lead Management

Course Title
Lead Management

Credits Hours
3

Lab/Studio/Field Work Hours
1

Course Description
Lead management is responsible for generating high quality sales leads and nurturing them into customers. The goal of the class is to help students become familiar with lead management activities, technologies, and strategies for accomplishing this objective.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Spring

MAR6416 - Sales and Marketing Strategies

Course Title
Sales and Marketing Strategies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Integrated Business track of the Masters of Science in Management.

Course Description
Marketing strategy including analytical and conceptual tools. Introduction to digital marketing and the sales process. Conceptualization of integrated marketing and sales plans.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Fall
MAR6466 - Strategic Supply Chain and Operations Management

**Course Title**
Strategic Supply Chain and Operations Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Master's program of study foundation core or C.I.

**Course Description**
Planning and management of all activities involved in designing and managing the processes, assets, and flows of material and information required to meet customers' demands.

**College**
College of Business Administration

**Department**
Department of Marketing

**Terms of Offering**
Spring

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MAR6476 - Sales Force Management

**Course Title**
Sales Force Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Course Description**
Overview of the sales management process with an emphasis on sales program formulation and management. The overall goal of Strategic Sales Force Management is to examine the elements of an effective sales force as a key component of the organization's total marketing strategy with an emphasis on a highly effective use of the value proposition.

**College**
College of Business Administration

**Department**
Department of Marketing

**Terms of Offering**
Fall
MAR6477 - Sales Analytics

Course Title
Sales Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
1

Course Description
This class is intended to simulate the real-world selling environment. It will introduce students to the technological tools in data management and analysis as applied to the sales process. The course will accomplish two key objectives: 1. An ‘analytics’ perspective on the selling and buying processes: things that don't get measured don't get changed! 2. Analysis of sales management challenges and analytics applications using the case method of instruction.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Fall

MAR6646 - Marketing Analytics for Strategic Decision Making

Course Title
Marketing Analytics for Strategic Decision Making

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Consent of College of Business Graduate Studies.

Course Description
Study of a variety of data-driven models and techniques used to understand customers, improve results, and facilitate strategic decision making.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional
MAR6722 - Digital Marketing Management

Course Title
Digital Marketing Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CBA master’s program of study foundation core.

Course Description
Understand how digital marketing differs from conventional marketing. Develop an ability to formulate digital marketing applications and build viable digital marketing strategies.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional

MAR6729 - Marketing of High Technology Products

Course Title
Marketing of High Technology Products

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CBA master’s program of study foundation core.

Course Description
Understand high technology marketing issues. Acquire concepts and tools to develop high technology business models. Develop insights into branding, new product development, forecasting and CRM.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional
MAR6816 - Strategic Marketing Management

Course Title
Strategic Marketing Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MBA Professional Core I.

Course Description
Marketing competitive strategy formulation with respect to product, pricing, promotion and distribution. Course aims at developing strategic thinking, functional marketing expertise and analytical skills.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Spring
Fall

MAR6849 - Services Marketing

Course Title
Services Marketing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Marketing in services industries is the focus of study with particular emphasis on unique aspects of services marketing, the service marketing mix, and the implementation of service strategies.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional
MAR6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Marketing

MAR6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Marketing

MAR6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Marketing
MAR7575 - Seminar in Consumer Behavior

Course Title
Seminar in Consumer Behavior

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 7423 and admission to the PhD program.

Course Description
Provide doctoral students with a broad exposure to the literature of consumer behavior theories and methods.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional

MAR7626 - Multivariate Analysis for Business Research

Course Title
Multivariate Analysis for Business Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 7423 or equivalent, C.I.

Course Description
Provides PhD students an in-depth treatment of multivariate analysis applications to marketing and business research problems.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional
MAR7638 - Seminar in Marketing Theory, Scaling, and Measurement

Course Title
Seminar in Marketing Theory, Scaling, and Measurement

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
♦ ECO 7423 and admission to the PhD program.

Course Description
Provide doctoral students with a foundation in marketing theory, scaling, and measurement.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional

MAR7666 - Seminar in Marketing Models I

Course Title
Seminar in Marketing Models I

Credits Hours
1.5

Lab/Studio/Field Work Hours
0

Prerequisites
♦ ECO 7423 (or equivalent) and admission to the Ph.D. program or C.I.

Course Description
Overview of marketing literature with emphasis on marketing models topics.

College
College of Business Administration

Department
Department of Marketing
MAR7667 - Seminar in Marketing Models II

Course Title
Seminar in Marketing Models II

Credits Hours
1.5

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 7423 (or equivalent) and MAR 7666 and admission to Ph.D. program or C.I.

Course Description
Overview of marketing literature with emphasis on marketing models, beyond those covered MAR 7666.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional

MAR7807 - Seminar in Marketing Strategy I

Course Title
Seminar in Marketing Strategy I

Credits Hours
1.5

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 7423 (or equivalent) and admission to the Ph.D. program or C.I.

Course Description
Overview of marketing literature with emphasis on marketing strategy topics.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional
MAR7808 - Seminar in Marketing Strategy II

Course Title
Seminar in Marketing Strategy II

Credits Hours
1.5

Lab/Studio/Field Work Hours
0

Prerequisites
- ECO 7423 (or equivalent) and admission to Ph.D. program and MAR 7807, or C.I.

Course Description
Overview of marketing literature with emphasis on marketing strategy topics, beyond those covered in MAR 7807.

College
College of Business Administration

Department
Department of Marketing

Terms of Offering
Occasional

MAR7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Marketing

MAR7939 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Marketing

MAS - Mathematics Algebraic Structures

2022-2023 Graduate Catalog
MAS5145 - Advanced Linear Algebra and Matrix Theory

Course Title
Advanced Linear Algebra and Matrix Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAS 3106 or C.I.

Course Description
Linear spaces, subspaces, linear transformations, matrices, eigenvalues and eigenvectors, Jordan forms, positive definite matrices, bilinear and quadratic forms, functions of matrices.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Even Fall

MAS5311 - Algebra I

Course Title
Algebra I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAS 4301 or graduate standing or C.I.

Course Description
Sets and categories, groups and groupoids, group actions, the class equation, Sylow theorems, Jordan-Holder Theorem, Rings, Modules, Complexes, Factorization, and Irreducibility.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional
MAS5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MAS5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Mathematics

MAS6116 - Introduction to Random Matrix Theory

Course Title
Introduction to Random Matrix Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAA 5210 Topics in Advanced Calculus and MAS 5145 Advanced Linear Algebra and Matrix Theory, or C.I.

Course Description
Introduction to random matrices, Wigner matrices and the Wigner semicircle law, Gaussian ensembles, orthogonal polynomials, eigenvalue distributions.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional
MAS6312 - Algebra II
Course Title
Algebra II
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- MAS 5311 or C.I.
Course Description
Modules over a principle ideal domain, Fields, Galois theory, Functors, Tensor product, Hom, Ext, Tor, Projective and Injective modules, Complexes, Derived Categories and Derived Functors.
College
College of Sciences
Department
Department of Mathematics
Terms of Offering
Even Fall

MAS6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Mathematics

MAS6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Mathematics
MAS6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Mathematics

MAS7919 - Doctoral Research
Course Title
Doctoral Research
Credits Hours
1 - 99
Course Description
May be repeated for credit.
College
College of Sciences
Department
Department of Mathematics
Terms of Offering
Occasional

MAS7980 - Doctoral Dissertation
Course Title
Doctoral Dissertation
Credits Hours
1 - 99
Course Description
May be repeated for credit.
College
College of Sciences
Department
Department of Mathematics

MAT - Mathematics
MAT5712 - Scientific Computing

Course Title
Scientific Computing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in mathematics or C. I.

Course Description
Introduction to numerical algorithms and programming, covering computer arithmetic, solution of nonlinear equations, approximation of functions, numerical integration, and numerical solution of ODEs.

College
College of Sciences

Department
Department of Mathematics

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MCB - Microbiology

MCB5117C - Microbial Genomics

Course Title
Microbial Genomics

Credits Hours
4

Lab/Studio/Field Work Hours
1

Prerequisites
- MCB 3020C.

Course Description
This course introduces common concepts and tools in microbial genomics, which spans the fields of biology, bioinformatics, and phylogenetics. The course will provide hands-on experience applying computational tools. In addition, we will cover the basics of genomics, evolutionary theory, phylogenetics, bacterial recombination, metagenomics, bacterial genome-wide association studies, and data visualization.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall
MCB5205 - Infectious Processes

Course Title
Infectious Processes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MCB 3020C or C.I.

Course Description
Discussion of current theories of the infectious process and the response of host cells and tissue to infection.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall

MCB5208 - Cellular Microbiology: Host-Pathogen Interactions

Course Title
Cellular Microbiology: Host-Pathogen Interactions

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing, PCB 3522.

Course Description
Examination of the molecular details of host-pathogen interactions. Key areas of cell biology will be considered in relation to microbial pathogenesis.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Spring
MCB5209 - Microbial Stress Response

**Course Title**
Microbial Stress Response

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Examination of the molecular genetic mechanisms, bacterial and fungal pathogens used to adapt to changes in their environment.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Fall

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MCB5225 - Molecular Biology of Disease

**Course Title**
Molecular Biology of Disease

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
An in-depth study of the molecular biological mechanism of diseases in experimental animal models and human populations.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Occasional
MCB5415 - Cellular Metabolism

**Course Title**

Cellular Metabolism

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Graduate standing or C.I.

**Course Description**

Basic concepts of the mechanisms that define the functioning and regulation of prokaryotic and eukaryotic cell metabolism.

**College**

College of Medicine

**Department**

College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**

Fall

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MCB5505 - Molecular Virology

**Course Title**

Molecular Virology

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Graduate standing or C.I.

**Course Description**

An in-depth overview of the fundamental aspects and current concerns in modern virology including HIV, tumor viruses, Prion disease, virus-host interaction, genome replication and pathogenesis.

**College**

College of Medicine

**Department**

College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**

Occasional
**MCB5654 - Applied Microbiology**

**Course Title**
Applied Microbiology

**Credits Hours**
3

**Prerequisites**
- Background or undergraduate coursework in microbiology and/or biotechnology.

**Course Description**
Microbial biochemistry of industrial processes including economics, screening, scale-up, quality control, and applied genetics.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Occasional

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**MCB5722C - Methods in Biotechnology**

**Course Title**
Methods in Biotechnology

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
4

**Prerequisites**
- Graduate standing.

**Course Description**
A laboratory course that will train graduate students in fluorescence and luminescence-based assays used in biopharmaceutical industry for target validation.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Occasional

**Current Fee Per Student**
$70.00
MCB5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Medicine
Department
College of Medicine Burnett School of Biomedical Sciences

MCB5932 - Current Topics in Molecular Biology
Course Title
Current Topics in Molecular Biology
Credits Hours
1 - 99
Lab/Studio/Field Work Hours
Jan-99
Prerequisites
- Graduate standing or C.I.
Course Description
Selected current research topics from the primary literature reflecting recent advances in molecular biology. May be repeated for credit.
College
College of Medicine
Department
College of Medicine Burnett School of Biomedical Sciences
Terms of Offering
Occasional

MCB5937 - Special Topics
Course Title
Special Topics
Credits Hours
1 - 99
College
College of Medicine
Department
College of Medicine Burnett School of Biomedical Sciences
MCB6026 - Molecular Biology and Microbiology Capstone

Course Title
Molecular Biology and Microbiology Capstone

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Molecular Biology and Microbiology M.S. program (non thesis track).

Course Description
An in-depth current literature research report on a relevant subject will be developed by student and evaluated by faculty committee.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional

MCB6226 - Molecular Diagnostics

Course Title
Molecular Diagnostics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
PCB 3522, PCB 4524 and MCB 5225 or C.I. A course in basic laboratory skills used in molecular genetic or clinical diagnostic laboratories for detecting genetic diseases.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional
MCB6252 - Human Body 3 (HB3): Health and Disease

Course Title
Human Body 3 (HB3): Health and Disease

Credits Hours
5

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to a program offered by College of Medicine Burnett School of Biomedical Sciences

Course Description
Health and disease is a ten-week medical school module that provides students with grounding in three major subject areas: microbiology, immunology, and pharmacology.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Spring

MCB6273 - Advanced Topics in Infectious Processes

Course Title
Advanced Topics in Infectious Processes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Data presentations from the primary literature and from the student's original research will focus on the molecular mechanisms of host-pathogen interactions.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Even Spring
Odd Spring
MCB6314 - Industrial Perspectives Seminar

**Course Title**
Industrial Perspectives Seminar

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Biotechnology MS students.

**Course Description**
Learning concepts of basic research and drug development in the pharmaceutical industry and technical presentation. May be used in the degree program a maximum of 2 times.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Summer
Fall

MCB6417C - Microbial Metabolism

**Course Title**
Microbial Metabolism

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I. and Graduate Standing

**Course Description**
Relationship between microbial metabolism and principal cellular activities, emphasizing transport, respiration, differentiation, and synthesis.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Occasional
**MCB6723 - Practice of Biomolecular Science**

**Course Title**
Practice of Biomolecular Science

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing. Provides MS and PhD students with an introduction to the practice of Biomolecular Science.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Occasional

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**MCB6909 - Research Report**

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

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**MCB6918 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences
**MCB6938 - Seminar**

**Course Title**
Seminar

**Credits Hours**
1

**Prerequisites**
- Graduate Status; Department Consent Required

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

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**MDC - Medicine Clinical Clerkship**

**MDC7002 - Transition to Core Clerkships**

**Course Title**
Transition to Core Clerkships

**Credits Hours**
16

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M2 year.

**Course Description**
This 12-week rotation is intended to give M3 students an in-depth transition to the core clerkships, building clinical knowledge and skills that will be directly applicable in the clinical settings of each clerkship.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Summer
MDC7180 - Core Clerkship in Obstetrics and Gynecology

**Course Title**
Core Clerkship in Obstetrics and Gynecology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M-2 term.

**Course Description**
During this 6-week required clerkship, you will be introduced to the obstetric and gynecologic care of women in the outpatient and inpatient settings.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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MDC7200 - Core Clerkship in Internal and Family Medicine

**Course Title**
Core Clerkship in Internal and Family Medicine

**Credits Hours**
16

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M-2 term.

**Course Description**
Students will learn care of the adult patient in both inpatient and outpatient settings, with emphasis on diagnosis and treatment in common medical disorders.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDC7400 - Core Clerkship in Pediatrics

Course Title
Core Clerkship in Pediatrics

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M-2 term.

Course Description
This course is a 6 week, required clerkship introducing the student to the general inpatient and outpatient clinical care of children.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDC7600 - Core Clerkship in Surgery and Surgical Selectives

Course Title
Core Clerkship in Surgery and Surgical Selectives

Credits Hours
12

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year.

Corequisites
- Must also be concurrently enrolled in an M3 elective course.

Course Description
The surgical clerkship will expose student to the diagnosis, workup, treatment, & follow up care of a broad spectrum of both common and uncommon surgical diseases.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDC7710 - Core Clerkship in Emergency Medicine

Course Title
Core Clerkship in Emergency Medicine

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 clerkships.

Course Description
Four week core clerkship introduces the student to initial evaluation and workup as well as diagnostic ordering and treatment of patients presenting to the emergency department.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDC7800 - Core Clerkship in Neurology

Course Title
Core Clerkship in Neurology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M-2 Term.

Course Description
The neurology clerkship combines clinical neuroscience with neurologic history and examination to enable students to formulate differential diagnosis and treatment plans for common neurologic disorders.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDC7830 - Core Clerkship in Psychiatry

Course Title
Core Clerkship in Psychiatry

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M-2 Term.

Course Description
Students will participate in patient assessment and treatment, with an emphasis on the most common psychiatric disorders and recognition of cases needing specialty psychiatric referral.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDC8003 - Intersession I

Course Title
Intersession I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year.

Course Description
Mid-year rotation will strengthen knowledge in Longitudinal Curriculum Themes and integration of basic clinical sciences, and will assess clinical skills through an OSCE.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDC8004 - Intersession II

Course Title
Intersession II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Must have completed the following:
  - Experience Not Found

Course Description
M3 capstone experience.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional

MDE - Medical Electives

MDE6171 - Core Clinical Rotation - Pediatric Genetics

Course Title
Core Clinical Rotation - Pediatric Genetics

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Matriculation into the M.S. Genetic Counseling Program.

Course Description
This course is for students to have clinical experience in Pediatric Genetic Counseling.

College
College of Medicine

Department
Clinical Sciences

Terms of Offering
Every Semester
MDE6172 - Core Clinical Rotation - Adult Oncology Genetics

**Course Title**
Core Clinical Rotation - Adult Oncology Genetics

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Course Description**
Matriculation into the M.S. Genetic Counseling Program. This course is for students to have clinical experience in Pre-natal Genetic Counseling.

**College**
College of Medicine

**Department**
Clinical Sciences

**Terms of Offering**
Every Semester

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MDE7120 - Family Medicine Outpatient Elective

**Course Title**
Family Medicine Outpatient Elective

**Credits Hours**
3 or 6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M2 year.

**Course Description**
This elective will provide a comprehensive experience in outpatient family medicine.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Occasional
MDE7230 - Special Topics in Internal Medicine  
**Course Title**  
Special Topics in Internal Medicine  

**Credits Hours**  
6  

**Lab/Studio/Field Work Hours**  
10  

**Prerequisites**  
- MDC 7200.  

**Course Description**  
Clinical 4 week elective for M3 students who want additional experience in Inpatient Internal Medicine.  

**College**  
College of Medicine  

**Department**  
College of Medicine MD Program  

**Terms of Offering**  
Occasional  

MDE7257 - Dermatology Elective  
**Course Title**  
Dermatology Elective  

**Credits Hours**  
6  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Completion of the M2 year.  

**Corequisites**  
- Must be concurrently enrolled in MDC 7600.  

**Course Description**  
M3 elective in busy dermatology practice, with exposure to many common dermatologic conditions and treatments.  

**College**  
College of Medicine  

**Department**  
College of Medicine MD Program  

**Terms of Offering**  
Occasional
MDE7340 - Care of the Critically Ill Patient: Theory and Practice

Course Title:
Care of the Critically Ill Patient: Theory and Practice

Credits Hours:
6

Lab/Studio/Field Work Hours:
0

Prerequisites:
- Completion of the M2 year.

Corequisites:
- Must be concurrently enrolled in MDC 7600.

Course Description:
Students will learn from ICU patients about the management of critical illness including aggressive life-extending therapy and setting goals of care.

College:
College of Medicine

Department:
College of Medicine MD Program

Terms of Offering:
Occasional

MDE7371 - Internal Medicine - Outpatient Elective

Course Title:
Internal Medicine - Outpatient Elective

Credits Hours:
3 or 6

Lab/Studio/Field Work Hours:
0

Prerequisites:
- Completion of M2 year.

Course Description:
This elective will provide a comprehensive experience in outpatient internal medicine.

College:
College of Medicine

Department:
College of Medicine MD Program

Terms of Offering:
Every Semester
MDE7690 - Orthopedic Spine Surgery Elective

**Course Title**
Orthopedic Spine Surgery Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M2 year.

**Corequisites**
- MDC 7600.

**Course Description**
M3 students will get a brief sense of the outpatient (and possibly inpatient) practice of orthopedics and spine surgery.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Spring
Fall

MDE7703 - Anesthesiology Elective

**Course Title**
Anesthesiology Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M2 year.

**Corequisites**
- Must be concurrently enrolled in MDC 7600.

**Course Description**
The basics of anesthesiology, clinical and technical skills and professional attitudes will be taught so that students may gain exposure and proficiency to transition into an anesthesiology residency program.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Spring
Fall
MDE7716 - Emergency Medicine Elective

Course Title
Emergency Medicine Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year.

Corequisites
- Must be concurrently enrolled in MDC 7600.

Course Description
This M3 elective rotation will give students interested in pursuing a career in Emergency Medicine an excellent exposure to the breadth of this specialty's clinical practice.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring

MDE8040 - Medical Spanish Elective

Course Title
Medical Spanish Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- At least two years of high school Spanish or equivalent language exposure.

Course Description
Designed for medical students with at least basic Spanish knowledge to improve their understanding of medical Spanish.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8048 - Narrative Medicine

Course Title
Narrative Medicine

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
This elective introduces fourth year medical students to the nationally recognized field of Narrative Medicine and teaches them to apply concepts of attention, representation and affiliation to patient and self care.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8058 - Arts in Medicine Elective

Course Title
Arts in Medicine Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Course Description
Medical students are provided with tangible creative-arts related strategies, activities, tools, and experiences to support the doctor/patient-care relationship.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDE8064 - Ward Ethics Elective
Course Title
Ward Ethics Elective
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Completion of M3 year, C.I.
Course Description
Provide medical students with a learning platform to identify, reflect, discuss, and prepare for everyday ward ethical challenges in their clerkship and residencies.
College
College of Medicine
Department
College of Medicine MD Program
Terms of Offering
Spring
Fall

MDE8072 - International Elective
Course Title
International Elective
Credits Hours
1 - 99
Lab/Studio/Field Work Hours
Jan-99
Prerequisites
- Successful completion of M3 core clerkships.
Course Description
Students interested in completing an elective outside the U.S. should contact the Office of Student Affairs. Additional information may be available from Director of International Health Programs. Student must arrange approval process early in the third year.
College
College of Medicine
Department
College of Medicine MD Program
Terms of Offering
Every Semester
MDE8081 - Telemedicine Elective

Course Title
Telemedicine Elective

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 year.

Course Description
This is an introductory course to familiarize students with key concepts, competencies, and applications of Telemedicine.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional

MDE8082 - Teleurgent Care Elective

Course Title
Teleurgent Care Elective

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
5-Feb

Prerequisites
- Completion of the M2 year.

Course Description
This is an introductory course to introduce students with key concepts, competencies, and application of Teleurgent Care.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDE8092 - MedEd Instructional Materials Development: Moving Beyond the PowerPoint

Course Title
MedEd Instructional Materials Development: Moving Beyond the PowerPoint

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year.

Course Description
This course introduces students to basic principles of instructional design and pedagogy.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional

MDE8093 - Clinical Anatomy Teaching Elective

Course Title
Clinical Anatomy Teaching Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
M4 medical students can participate as teaching assistants in the human anatomy laboratory component of the UCF COM HB-2 module.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8094 - Simulation in Medical Education Elective

**Course Title**
Simulation in Medical Education Elective

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M3 year.

**Course Description**
After reviewing current trends, literature and methodologies in medical simulation, learners will design and deliver one complete scenario to their peers in a simulated clinical setting.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Occasional

MDE8095 - Integrative Reproductive Medicine E-text Development

**Course Title**
Integrative Reproductive Medicine E-text Development

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3 Core Clerkships.

**Course Description**
Students will design a series of short interactive e-modules for preclinical students on a subject in reproductive medicine. Elective includes training in educational technology.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
**MDE8097 - WikiProject Medicine: A Medical Informatics Elective for Enhancing the Quality of Patient Education**

**Course Title**
WikiProject Medicine: A Medical Informatics Elective for Enhancing the Quality of Patient Education

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3 clerkships.

**Course Description**
This course enables students to improve and enrich the quality of reliable information read by patients on Wikipedia by becoming a WikiProject Medicine Editor.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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**MDE8099 - Evidence Based Medical Education: Shaping the Education of Future Physicians**

**Course Title**
Evidence Based Medical Education: Shaping the Education of Future Physicians

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M2 year.

**Course Description**
Participants examine learning experience through the lens of evidence-based practice, and established models of human learning and instructional design.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Fall

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2022-2023 Graduate Catalog
MDE8100 - Primary Care, Community, & Preventative Medicine Elective

Course Title
Primary Care, Community, & Preventative Medicine Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Course Description
Students will participate in outpatient care of adult patients with focus on acute and chronic disease and preventative medicine.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8105 - Culinary Medicine Elective

Course Title
Culinary Medicine Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Course Description
Completion of the M3 year. Culinary Medicine is a unique approach to nutrition education that integrates medical nutrition therapy principles with culinary medicine techniques. The goal is to teach patients what to eat and how to deliciously prepare meals in their own home kitchens.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8110 - Elective in Reproductive Endocrinology and Infertility

Course Title
Elective in Reproductive Endocrinology and Infertility

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Experience evaluating new and returning patients in REI clinic: participation in preoperative, operative and inpatient postoperative care, advanced gynecologic ultrasonography, and IVG services.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8127 - Lifestyle Modification Skills in Practice

Course Title
Lifestyle Modification Skills in Practice

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year.

Course Description
This elective will provide hands on practice with patients taking detailed lifestyle assessments and coaching patients to achieve beneficial lifestyle changes and also by helping run group visits.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
MDE8147 - Geriatric Elective

**Course Title**
Geriatric Elective

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M3 year.

**Course Description**
Students will select one of two experiences based on their goals. The menu of options will include either a geriatric primary care clinic, including home visits within an upscale retirement complex, or an academic geriatric/pharmacological experience.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Spring
Fall
Odd Summer

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MDE8150 - Hospice and Palliative Care Rotation

**Course Title**
Hospice and Palliative Care Rotation

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M3 year.

**Course Description**
This two or four week rotation will provide students with extensive exposure to palliative and end of life care.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8152 - Palliative and Pain Management Principles

**Course Title**
Palliative and Pain Management Principles

**Credits Hours**
3 - 6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MDC 7200.

**Course Description**
This non-clinical elective covers the key principles of palliative care and pain management.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Fall

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MDE8160 - Obstetrics and Gynecology Ambulatory Elective

**Course Title**
Obstetrics and Gynecology Ambulatory Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M3 year.

**Course Description**
The Ob/Gyn Ambulatory elective is available to 4th year medical students to acquire a comprehensive experience in obstetrics and gynecology. The experience will be both outpatient and inpatient and include participation in all aspects of care for women. The student will participate in obstetric and gynecologic consultations, attending outpatient clinics, assisting in the operating room with obstetric and gynecologic cases, and participating in pre-op and post-op care.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8162 - Gynecologic Oncology Elective
Course Title
Gynecologic Oncology Elective
Credits Hours
6
Lab/Studio/Field Work Hours
0
Prerequisites
- Completion of the M3 year.
Course Description
The student works with two experienced educators on a busy service. There is a large volume of tumor/cancer cases (robotic, laparoscopic, open, perineal).
College
College of Medicine
Department
College of Medicine MD Program
Terms of Offering
Spring
Fall

MDE8165 - Elective in Gynecology
Course Title
Elective in Gynecology
Credits Hours
6
Lab/Studio/Field Work Hours
0
Prerequisites
- Completion of the M3 year.
Course Description
The Gynecology elective is available to 4th year medical students to acquire a comprehensive experience with commonly treated gynecologic issues for women. The experience will include performing inpatient and emergency gynecologic consultations, attending outpatient clinics, assisting in the operating room with gynecologic cases and participating in following gynecologic patients with breast disorders in the breast clinic.
College
College of Medicine
Department
College of Medicine MD Program
Terms of Offering
Every Semester
MDE8182 - Advanced Prenatal Diagnosis Clinic

Course Title
Advanced Prenatal Diagnosis Clinic

Credits Hours
6

Lab/Studio/Field Work Hours
6

Prerequisites
- Completion of the M3 year.

Course Description
This 4 week elective will offer medical students insight into the specialty of Maternal-Fetal Medicine and Genetics Counseling.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional

MDE8205 - Elective in Ambulatory Internal Medicine

Course Title
Elective in Ambulatory Internal Medicine

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
This 2 or 4 week experience will provide advanced clinical training in the care of patients age 16 and older in an ambulatory clinic setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Fall
MDE8209 - Nanomedicine Elective

**Course Title**
Nanomedicine Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3 year.

**Course Description**
Introduces students to nanomedicine as a branch of medicine that applies the knowledge and tools of nanotechnology to the disease screening, diagnosis, treatment, and prevention.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Fall

MDE8210 - Advanced Physiology of the Critically Ill Patient

**Course Title**
Advanced Physiology of the Critically Ill Patient

**Credits Hours**
3 - 6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M2 year.

**Course Description**
This online course offers advanced integration of advanced physiology and ICU cases in online meetings with physiologists and intensivists to do case evaluation and working through mechanism of disease analyses.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Summer
MDE8220 - Clinical Cardiology Elective

**Course Title**
Clinical Cardiology Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of the M3 year. Clinical rotation in cardiology with emphasis on gaining basic knowledge in diagnosis and management of common cardiovascular conditions.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Spring
Fall

MDE8222 - Ambulatory Elective in Cardiology

**Course Title**
Ambulatory Elective in Cardiology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
The four week 4th year elective experience will provide advanced clinical training in the outpatient care of adult cardiology patients in the outpatient setting.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8223 - Cardiology-Inpatient/Outpatient
Course Title
Cardiology-Inpatient/Outpatient

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
The student will develop an understanding of the pathophysiology and cardiovascular disease and learn an approach to the evaluation and treatment of patients with cardiovascular disease.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8225 - Congenital Cardiology
Course Title
Congenital Cardiology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
In-depth exposure to pediatric cardiology including patients with congenital heart disease in the inpatient, outpatient, CVICU, and operative room settings.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

2022-2023 Graduate Catalog
MDE8226 - Clinical Cardiac Electrophysiology Elective

Course Title
Clinical Cardiac Electrophysiology Elective

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
The student will gain an in-depth understanding of advanced medical and surgical management of cardiac rhythm disorders.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional

MDE8227 - Advanced ECG Self-Study Elective

Course Title
Advanced ECG Self-Study Elective

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Completion of the M3 year. Students will engage in a 2 week intense ECG self-study review with weekly meeting sessions.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8245 - Pulmonary Elective  
**Course Title**  
Pulmonary Elective  
**Credits Hours**  
6  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Successful completion of M3 core clerkships.  

**Course Description**  
Inpatient and outpatient management of pulmonary diseases and sleep disorders.  

**College**  
College of Medicine  

**Department**  
College of Medicine MD Program  

**Terms of Offering**  
Every Semester  

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MDE8250 - Dermatology Elective  
**Course Title**  
Dermatology Elective  
**Credits Hours**  
6  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Successful completion of M3 core clerkships.  

**Course Description**  
The student will be exposed to almost all aspects of diagnosis and treatment within dermatology (pediatrics to geriatric), surgical dermatology (routine, Moh's, laser), cosmetic dermatology (lasers, fillers, cosmetic surgery, hair transplantation, aesthetic services and dermatopathology).  

**College**  
College of Medicine  

**Department**  
College of Medicine MD Program  

**Terms of Offering**  
Every Semester
MDE8254 - Advanced Dermatology Elective

Course Title
Advanced Dermatology Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships and satisfactory completion of Dermatology elective.

Course Description
This elective will expose the student to almost all aspects of diagnosis and treatment within general dermatology and provide additional opportunities in research and office management.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8256 - Trichology

Course Title
Trichology

Credits Hours
3 - 6

Prerequisites
- Completion of the M3 year.

Course Description
In-office rotation. Clinical diagnosis and clinical/surgical treatment of various hair disorders.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDE8270 - Gastroenterology Inpatient/Outpatient

Course Title
Gastroenterology Inpatient/Outpatient

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
The student will develop an understanding of the pathophysiology of gastrointestinal disease and learn an approach to the evaluation and treatment of patients with gastrointestinal disease.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8273 - Digestive and Liver Health - The GI Challenge

Course Title
Digestive and Liver Health - The GI Challenge

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
An outpatient focused experience with tenured GIs in both the clinic and endo-surgery environment.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
**MDE8280 - Hematology/Oncology Inpatient/Outpatient**

**Course Title**
Hematology/Oncology Inpatient/Outpatient

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
This course provides an in-depth exposure to the diagnosis and treatment of hematologic disease and malignancy in the hospital and outpatient setting.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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**MDE8281 - Ambulatory Elective in Hematology/Oncology**

**Course Title**
Ambulatory Elective in Hematology/Oncology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
This four week experience will provide advanced clinical training in the outpatient care of adult hematology/oncology patients in the outpatient setting.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8285 - Diagnostic Hematology

Course Title
Diagnostic Hematology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
The student will be working closely with the hematopathologist, immunopathologist, clinical hematologists, senior residents and supervisors of the hematology section; he/she will both observe and participate in the usual studies performed in these areas.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8301 - Allergy & Immunology Elective

Course Title
Allergy & Immunology Elective

Credits Hours
3 or 6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
An introductory, structured clinical experience designed to provide experience diagnosing, treating and caring for patients with allergies and immunologic disorders.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Even Fall
Even Spring
Odd Spring
Odd Fall
MDE8310 - Ambulatory Elective in Rheumatology

Course Title
Ambulatory Elective in Rheumatology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 clerkships.

Course Description
This four week experience will provide advanced clinical training in the outpatient care of adult rheumatology patients in the outpatient setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8320 - Infectious Diseases-Inpatient/Outpatient

Course Title
Infectious Diseases-Inpatient/Outpatient

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
This course provides an in-depth exposure to the diagnosis and treatment of infectious diseases in the hospital and outpatient setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8341 - Internal Medicine/Critical Care Medicine Elective

Course Title
Internal Medicine/Critical Care Medicine Elective

Credits Hours
3 - 6

Prerequisites
- Completion of the M3 year.

Course Description
Rotation includes teaching of mechanical ventilation, ACLS, dialysis, bedside ultrasounds, vasopressors, antibiotics, and other subjects relevant to practice of critical care medicine.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional

MDE8342 - Surgical Critical Care

Course Title
Surgical Critical Care

Credits Hours
6

Lab/Studio/Field Work Hours
10

Prerequisites
- Completion of the M3 year.

Course Description
Expose students to acute and daily management of surgical critical care patients.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDE8345 - Wound Care

Course Title
Wound Care

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 clerkships.

Course Description
Provides an in-depth exposure to the patient with open wounds, precursor and follow-up of healed wounds.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8350 - Nephrology Inpatient/Outpatient

Course Title
Nephrology Inpatient/Outpatient

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
This course provides an in-depth exposure to the diagnosis and treatment of renal disease in the hospital and outpatient setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8351 - Ambulatory Elective in Nephrology

 Course Title
 Ambulatory Elective in Nephrology

 Credits Hours
 6

 Lab/Studio/Field Work Hours
 0

 Prerequisites
 • Successful completion of M3 clerkships.

 Course Description
 This four week experience will provide advanced clinical training in the outpatient care of adult nephrology patients in the outpatient setting.

 College
 College of Medicine

 Department
 College of Medicine MD Program

 Terms of Offering
 Every Semester

 MDE8362 - Clinical Pharmacology Elective

 Course Title
 Clinical Pharmacology Elective

 Credits Hours
 3 - 6

 Prerequisites
 • Completion of the M3 year.

 Course Description
 This course will offer exposure to inpatient pediatric and women's health pharmacology with a focus on basic pharmacology concepts and opportunities for self-directed learning.

 College
 College of Medicine

 Department
 College of Medicine MD Program

 Terms of Offering
 Occasional
MDE8364 - Insights into the Medication Use Process

Course Title
Insights into the Medication Use Process

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year.

Course Description
Explore the medication use process (prescribing, transcribing/documenting, dispensing, administering, and monitoring) using a variety of virtual learning platforms.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Fall

MDE8370 - Essentials of Musculoskeletal Care Elective

Course Title
Essentials of Musculoskeletal Care Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 year.

Course Description
The elective will provide students opportunity to learn initial evaluation, work-up and conservative treatment of various musculoskeletal complaints.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
MDE8404 - Ambulatory Pediatrics Elective

Course Title
Ambulatory Pediatrics Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
This elective is designed to acquaint the student with the management of acute pediatric illness in an outpatient setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8409 - General Outpatient Pediatrics Clinic

Course Title
General Outpatient Pediatrics Clinic

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 year.

Course Description
This rotation will give the student a broad exposure to general pediatrics focusing on outpatient primary care.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDE8410 - Adolescent Medicine Elective

Course Title
Adolescent Medicine Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
This elective is designed to acquaint the student with the fundamentals of adolescent medicine by providing outpatient, community based exposure to the care of adolescents.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8412 - Pediatric Telehealth Elective

Course Title
Pediatric Telehealth Elective

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 year.

Course Description
This elective will provide a broad learning experience in telehealth.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDE8415 - Developmental/Behavioral Pediatric Medicine

**Course Title**
Developmental/Behavioral Pediatric Medicine

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
This program emphasizes the use of multiple disciplines and community resources that specialize in developmental issues.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

MDE8420 - Pediatric Cardiology

**Course Title**
Pediatric Cardiology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
This clinical rotation will introduce the student to the outpatient pediatric cardiology practice with the goals of developing basic cardiology skills such as data collection and clinical examination. EKG interpretation, basic echocardiography, basic catheterization will be introduced.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8425 - Pediatric Pulmonary Elective

Course Title
Pediatric Pulmonary Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
This clinical course will be based on basic respiratory physiology and will include a variety of clinical pulmonary experiences and diseases.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8430 - Pediatric Endocrinology Elective

Course Title
Pediatric Endocrinology Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 clerkships.

Course Description
Provide in-depth exposure and experience in the diagnosis and treatment of endocrine disorders with a focus on the multidisciplinary care of the diabetic child; also, growth disorders, disorders of puberty and obesity, and its complications.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8433 - Pediatric Gastroenterology Elective

Course Title
Pediatric Gastroenterology Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Students will be exposed to a wide spectrum of pediatric gastrointestinal and liver diseases.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8440 - Pediatrics Hematology/Oncology

Course Title
Pediatrics Hematology/Oncology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Pediatrics hematology and oncology including bone marrow transplant.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8445 - Pediatric Nephrology Elective

Course Title
Pediatric Nephrology Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
This rotation is designed to familiarize the student with the wide range of pediatric kidney diseases encountered in the ICU, inpatient service and outpatient departments.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8454 - Pediatric Infectious Diseases

Course Title
Pediatric Infectious Diseases

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Introduction to the clinical aspects of the diagnosis and treatment of infectious diseases in children.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8465 - Pediatric Critical Care and ICU Elective

**Course Title**
Pediatric Critical Care and ICU Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
This course is designed to give students the experience of caring for critically ill patients ranging from infancy through adolescence in the ICU/SCU setting.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

MDE8466 - Acting Internship in General Outpatient Pediatrics with Nursery

**Course Title**
Acting Internship in General Outpatient Pediatrics with Nursery

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3 year.

**Course Description**
Daily rounding in Level I nursery and outpatient general pediatrics.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Occasional
MDE8480 - Special Topics in Pediatric Ophthalmology

**Course Title**
Special Topics in Pediatric Ophthalmology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Completion of the M2 Year.

**Course Description**
This course provides advanced clinical training in pediatric ophthalmology.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Occasional

MDE8485 - Pediatrics Orthopaedics Elective

**Course Title**
Pediatrics Orthopaedics Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
This rotation will expose the student to a wide variety of pediatrics orthopaedic problems affecting the growing musculoskeletal system.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8490 - Pediatric Surgery Selective and Elective

Course Title
Pediatric Surgery Selective and Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Participates in outpatient, inpatient and intra-operative treatment of children.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8491 - Pediatric Neurosurgery

Course Title
Pediatric Neurosurgery

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
An introduction to Pediatric Neurosurgery.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8500 - Pediatric Dermatology

Course Title
Pediatric Dermatology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Overview of pediatric dermatology including common skin dermatoses, birthmarks, genodermatoses in both outpatient and inpatient setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8505 - Pediatrics Emergency Medicine

Course Title
Pediatrics Emergency Medicine

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 Core Clerkships.

Course Description
This elective will provide students with experience assessing and caring for children in a Pediatrics Emergency Department that provides emergent and urgent care to patients aged 0-17 years old, including pregnant adolescent patients in their first trimester. Students will be exposed to a wide variety of illnesses and injuries, including critical illnesses, and primary care diagnoses. Supervision will be provided by attending physicians in Pediatrics, Emergency Medicine or Pediatrics Emergency Medicine. Students will perform an initial rapid assessment followed by a thorough history and physical examination, and then generate a differential diagnoses and preliminary management plan. All management decisions will be discussed with a senior resident or attending physician.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8511 - Pediatric Anesthesia Elective

**Course Title**
Pediatric Anesthesia Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M3 year.

**Course Description**
This two- or four-week elective rotation, open to fourth year medical students, will provide a broad learning experience in pediatric anesthesiology.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

MDE8512 - Pediatric/Adolescent Gynecology Elective

**Course Title**
Pediatric/Adolescent Gynecology Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of the M3 year. The pediatric and adolescent gynecology elective is designed to expose medical students to the full spectrum of gynecologic services for the pediatric and adolescent population while remaining within a developmentally appropriate, supportive environment. Students will also participate in the surgical management of endometriosis and ovarian cysts.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8520 - Advanced Clinical Anatomy

Course Title
Advanced Clinical Anatomy

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Student will plan and implement a program to study and demonstrate the anatomy, current literature and surgical approaches related to a contract agreed upon by student and elective supervisor at the start of the elective.

College
College of Medicine

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Terms of Offering
Every Semester

MDE8530 - Pathology and Laboratory Medicine

Course Title
Pathology and Laboratory Medicine

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Provides introduction to all areas of pathology practice with emphasis on anatomic pathology disciplines.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8532 - Clinical Pathology Methods and Interpretation

**Course Title**
Clinical Pathology Methods and Interpretation

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
The course is designed to acquaint the student with all aspects of a large hospital clinical laboratory. The student will learn the capabilities of the laboratory by rotating through hematology, immunology, chemistry and microbiology.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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MDE8534 - Surgical Pathology

**Course Title**
Surgical Pathology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
The course is designed to provide the student with the opportunity for surgical specimen preparation and interpretation. Emphasis is placed on normal gross and histologic findings, gross and microscopic pathology and clinicopathologic correlation of the patient's disease process.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8535 - Autopsy Pathology

Course Title
Autopsy Pathology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Provide the student with the opportunity for in-depth study and performance of complete autopsies.

College
College of Medicine

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Terms of Offering
Every Semester

MDE8550 - Clinical Ophthalmology Elective

Course Title
Clinical Ophthalmology Elective

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
An eye clinic based experience where students will master ophthalmoscopy, ophthalmic examination skills, and participate in general and specialty eye surgery and clinics.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8555 - Special Topics in Ophthalmology

**Course Title**
Special Topics in Ophthalmology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M2 year.

**Course Description**
This course will provide advanced clinical training for students with an interest in ophthalmology.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Occasional

MDE8582 - Physical Medicine and Rehabilitation Elective - Physiatry

**Course Title**
Physical Medicine and Rehabilitation Elective - Physiatry

**Credits Hours**
3 - 6

**Lab/Studio/Field Work Hours**
12-Sep

**Prerequisites**
- Completion of the M3 year.

**Course Description**
Provide medical students a broad exposure to the field of physical medicine and rehabilitation.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Spring
MDE8591 - Pediatric Maxillofacial and Craniofacial Surgery Elective

Course Title
Pediatric Maxillofacial and Craniofacial Surgery Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
This course is designed to provide trainees with expanded clinical training in the areas of cleft, craniofacial and pediatric oral and maxillofacial surgery.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8592 - Pediatric Otolaryngology Elective

Course Title
Pediatric Otolaryngology Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
This rotation will allow students interested in pediatric primary care to spend time with our busy service learning about medical and surgical care of common pediatric head and neck, upper airway, and otologic conditions of children. This will take place in the inpatient/outpatient/operating room settings.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall
MDE8603 - Elective in Orthopaedic Patient Care and Surgical Techniques

Course Title
Elective in Orthopaedic Patient Care and Surgical Techniques

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
M4 students will be exposed to the daily interactions with patients needing musculoskeletal care, medical evaluations, review of history, care options and surgical techniques. All patients are sports medicine related injuries. Students will get exposure to orthopedic sports medicine injuries and arthritic condition of the lower extremity.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall

MDE8605 - Vascular Surgery Elective

Course Title
Vascular Surgery Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 academic year.

Course Description
Student will actively participate in clinical care of vascular surgery patients including operating rooms. Student may present cases at conference.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8606 - Introduction to the Ambulatory Surgical Center

Course Title
Introduction to the Ambulatory Surgical Center

Credits Hours
3 - 6

Prerequisites
- Completion of the M3 year.

Course Description
This course will introduce the medical student to health care delivery in an ambulatory surgical setting.

College
College of Medicine

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College of Medicine MD Program

Terms of Offering
Spring
Fall

MDE8607 - Non-Clinical Advanced Surgery Elective

Course Title
Non-Clinical Advanced Surgery Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year.

Course Description
Remote surgery elective comprised of operative videos, independent study, and web-based meetings, encompassing the core competencies of surgery and elective material in a sub-specialty.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Summer
Spring
MDE8660 - Plastic Surgery Elective

Course Title
Plastic Surgery Elective

Credits Hours
6

Lab/Studio/Field Work Hours
6

Course Description
This rotation has been designed to expose the 4th year medical student to the diversity of plastic surgery, by having him/her work with several UCF College of Medicine plastic surgeons whose interests and practice patterns vary.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8663 - Aesthetic Plastic Surgery

Course Title
Aesthetic Plastic Surgery

Credits Hours
6

Lab/Studio/Field Work Hours
6

Course Description
Rotation providing a focused learning experience in aesthetic surgery; students with interest in facial reconstruction may elect to take call or become involved in complex facial trauma reconstruction at the regional trauma center.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits Hours</th>
<th>Lab/Studio/Field Work Hours</th>
<th>Prerequisites</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDE8675 - Urology Elective</td>
<td>6</td>
<td>0</td>
<td>Completion of M3.</td>
<td>Completion of M3. Elective in clinical urology with a focus on inpatient, outpatient and surgical aspects of urology.</td>
</tr>
<tr>
<td>MDE8676 - Colon and Rectal Surgery Elective</td>
<td>6</td>
<td>6</td>
<td>Completion of the M3 clerkships.</td>
<td>This rotation will include workup, diagnosis, and treatment/follow up of surgical diseases involving the colon, rectum, and anus in both inpatient and outpatient settings.</td>
</tr>
</tbody>
</table>

**College**

College of Medicine

**Department**

College of Medicine MD Program
**MDE8682 - Introduction to Trauma and Surgical Critical Care Elective**

**Course Title**
Introduction to Trauma and Surgical Critical Care Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of M3 year. This course will expose students to the multidisciplinary nature of modern trauma care while providing ample opportunity to learn and understand core principles of trauma, critical care, and emergency general surgery.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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**MDE8683 - Trauma and Orthopaedics Elective**

**Course Title**
Trauma and Orthopaedics Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
The course is designed to present to the student the basic aspects of orthopaedic care.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8691 - Intro to Ortho Surgery and Musculoskeletal Care

Course Title
Intro to Ortho Surgery and Musculoskeletal Care

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
0

Prerequisites
Completion of the M3 year.

Course Description
The student will be exposed to a wide variety of musculoskeletal issues both acute and chronic. They will improve their physical diagnosis skills, learn the use of appropriate imaging options, and be involved in formulating a treatment plan and go to surgery with preceptor.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional

MDE8702 - Anesthesia Elective at VA

Course Title
Anesthesia Elective at VA

Credits Hours
6

Lab/Studio/Field Work Hours
0

Course Description
Completion of M3. Medical students will learn the multi-faceted role anesthesiologists play in medicine as perioperative physicians and pain management specialists.

College
College of Medicine

Department
College of Medicine MD Program
MDE8710 - Emergency Medicine Elective

Course Title
Emergency Medicine Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 Core Clerkships.

Course Description
This course allows students with interest in EM to fully explore the reality of being an Emergency Physician within a busy Emergency Department. There will be opportunity to participate in the management of all ED patients from the critically ill to the minor complaints.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8763 - Diagnostic Radiology Clerkship

Course Title
Diagnostic Radiology Clerkship

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 Core Clerkships.

Course Description
In-depth exposure to diagnostic radiology.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8765 - Diagnostic and Interventional Radiology Elective

Course Title
Diagnostic and Interventional Radiology Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
A fourth-year elective for eligible medical students in diagnostic and interventional radiology.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8767 - Neuro-Radiology

Course Title
Neuro-Radiology

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Evaluation and interpretation of modalities used to image the central nervous system.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDE8769 - Pediatric Radiology Elective

**Course Title**
Pediatric Radiology Elective

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
Provides an in-depth exposure and experience in pediatric radiology.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

MDE8773 - Emergency Ultrasound Elective

**Course Title**
Emergency Ultrasound Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M3 academic year.

**Course Description**
This elective is intended to help integrate knowledge, skill and experience to perform and interpret ultrasound imaging at the patient's bedside.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8775 - Pediatric Ultrasound Elective
Course Title
Pediatric Ultrasound Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
This two- or four-week elective rotation, open to fourth-year medical students, will provide a broad learning experience in pediatric ultrasound.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDE8780 - Radiation Oncology Elective
Course Title
Radiation Oncology Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Course Description
Completion of M3 core clerkships. This clinical rotation will involve exploring the field of radiation oncology through basics of cancer medicine, diagnosis of strategy and treatment of cancer, and radiation physics.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
**MDE8790 - Special topics in Anesthesiology**

**Course Title**
Special topics in Anesthesiology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
This elective provides M3 and M4 medical students with advanced clinical training in anesthesiology.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Occasional

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**MDE8820 - Interventional Pain Management Elective**

**Course Title**
Interventional Pain Management Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3 year.

**Course Description**
Four-week elective rotation providing clinical experience in an outpatient setting in the field of interventional medicine.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Spring
Fall
MDE8823 - Outpatient Pain Management and Neurology Elective

Course Title
Outpatient Pain Management and Neurology Elective

Credits Hours
3 - 6

Prerequisites
- Completion of the M3 year.

Course Description
M4 students will learn non-opioid options for chronic pain management, as well as appropriately prescribing controlled medications when necessary.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional

MDE8831 - Outpatient Psychiatry Elective

Course Title
Outpatient Psychiatry Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year. Completion of the Core Clerkship in Psychiatry.

Course Description
Students will be given progressive clinical responsibilities in the assessment and treatment of psychiatric patients.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDE8835 - M4 Acting Internship Psychiatry VA Residential Care at Domiciliary

**Course Title**
M4 Acting Internship Psychiatry VA Residential Care at Domiciliary

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
Responsibility for clinical assessment and treatment planning for residential care patients with special emphasis on substance related disorders and PTSD at VA Medical Center Domiciliary.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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MDE8836 - Psychiatry Elective

**Course Title**
Psychiatry Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of M3 academic year and instructor consent. Responsibility for clinical assessment and treatment planning for residential care patients.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDE8844 - Post-Traumatic Stress Disorder Clinic

**Course Title**
Post-Traumatic Stress Disorder Clinic

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of the M3 academic year; Instructor consent; UCF COM students only. Participate in the assessment and treatment of patients with combat-related post-traumatic stress disorder. Experiences may include diagnostic assessments, assisting in conducting individual and group treatments and participating in ongoing research protocols.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

MDE8873 - Child and Adolescent Psychiatry - Outpatient Elective

**Course Title**
Child and Adolescent Psychiatry - Outpatient Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Completion of the M3 year.

**Course Description**
M4 students will be given progressive clinical responsibilities in the assessment and treatment of patients at Orange Psychiatric Associates.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Fall
MDE8890 - Academic Psychiatry Elective

Course Title
Academic Psychiatry Elective

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M3 year.

Course Description
In this elective, students will develop a scholarly project, do clinical and classroom teaching of junior medical students, and help deliver resident as teacher didactics to residents.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Spring
Fall

MDE8891 - Special Topics in Psychiatry

Course Title
Special Topics in Psychiatry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of the M2 year. Completion of MDC 7830 Core Clerkship in Psychiatry.

Course Description
This elective allows for advanced clinical training in Psychiatry in both inpatient and outpatient settings.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
MDE8892 - Special Topics in Neurology

**Course Title**
Special Topics in Neurology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
This rotation allows M3 and M4 student to gain advanced clinical experience in neurology.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Occasional

MDE8900 - Directed Study/Independent Study

**Course Title**
Directed Study/Independent Study

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Prerequisites**
- Prior approval required.

**Course Description**
Individual study by students under the direction of a faculty member and with the approval of the Assistant Dean of Medical Education and the Associate Dean of Students. Topics vary and will be selected on an individual basis. Credit hours and student level may vary.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
**MDE8910 - Medical Externship in Interdisciplinary Research**

**Course Title**
Medical Externship in Interdisciplinary Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M1 year.

**Course Description**
This flexible research externship will provide opportunities for M1-M4 medical students to refine research skills for special projects/patents as well as preparation for residency match.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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**MDI - Medical Internships**

**MDI7011 - Write and Publish a Research Article Elective**

**Course Title**
Write and Publish a Research Article Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M2 year.

**Course Description**
Students will have the opportunity to learn to write a research manuscript to a quality suitable for publication in peer-reviewed journals.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDI8120 - Acting Internship in Family Medicine

Course Title
Acting Internship in Family Medicine

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 clerkships.

Course Description
This four week experience will provide advanced clinical training in the care of patients of all ages in the hospital and clinic settings.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDI8160 - Acting Internship in Obstetrics and Gynecology

Course Title
Acting Internship in Obstetrics and Gynecology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Course Description
Completion of Core Clerkship in Obstetrics and Gynecology. Experience comparable to a month of obstetrics and gynecology internship, during which the student will function as an intern under the supervision of the senior resident/s and attending physician.

College
College of Medicine

Department
College of Medicine MD Program
MDI8164 - Acting Internship in Gynecologic Oncology

Course Title
Acting Internship in Gynecologic Oncology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Provides an in-depth exposure and experience in gynecologic oncology.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDI8247 - AI in Medicine Critical Care and Pulmonary Diseases

Course Title
AI in Medicine Critical Care and Pulmonary Diseases

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3.

Course Description
Immerses the student in the care of ICU patients by focusing on technology, multidisciplinary personnel, and physiologic, goal-oriented, humanistic practice in critical illness.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDI8300 - Acting Internship in Allergy/Asthma/Immunology

Course Title
Acting Internship in Allergy/Asthma/Immunology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Course Description
Completion of the M3 year. The student will see patients with allergy disorders in the outpatient setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDI8340 - Acting Internship in Internal Medicine Acute Care

Course Title
Acting Internship in Internal Medicine Acute Care

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
This four week experience will provide advanced clinical training in the care of acutely ill hospitalized adult medical patients.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDI8343 - Acting Internship in Surgery Critical Care

**Course Title**
Acting Internship in Surgery Critical Care

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3.

**Course Description**
Immerses the student in the care of SICU patients by focusing technology, multidisciplinary personnel, and physiologic, goal-oriented, humanistic practice in critical illness.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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MDI8344 - Acting Internship in Medicine Critical Care

**Course Title**
Acting Internship in Medicine Critical Care

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of M3. Immerses the student in the care of MICU patients by focusing technology, multidisciplinary personnel, and physiologic, goal-oriented, humanistic practice in critical illness.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDI8400 - Acting Internship in General Pediatrics Inpatient

**Course Title**
Acting Internship in General Pediatrics Inpatient

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
This elective is designed to acquaint the student with the management of acute pediatric illness in the hospital setting.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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MDI8461 - Acting Internship in Neonatal ICU

**Course Title**
Acting Internship in Neonatal ICU

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3.

**Course Description**
This acting internship is designed to expose the student to normal physiology and a wide variety of diseases that affect the term and preterm newborn.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDI8463 - Acting Internship in Pediatric Critical Care

**Course Title**
Acting Internship in Pediatric Critical Care

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3.

**Course Description**
Immerses the student in the care of PICU patients by focusing on technology, multidisciplinary personnel, and physiologic, goal-oriented, humanistic practice in critical illness.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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MDI8470 - Acting Internship in Pediatric Neurology/Epilepsy

**Course Title**
Acting Internship in Pediatric Neurology/Epilepsy

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of Core Clerkship in Neurology. C.I. Evaluate treatment of inpatient and outpatient Pediatric Neurology patients, with exposure to acutely ill patients in ICU to evaluations of Epilepsy/Seizures, Movement Disorders and Headache.

**College**
College of Medicine

**Department**
College of Medicine MD Program
MDI8490 - Acting Internship Pediatric Surgery

Course Title
Acting Internship Pediatric Surgery

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites

- Successful completion of M3 core clerkships.

Course Description
The fourth year medical student on Pediatric Surgery (AI) will build upon their surgical clerkship experience with exposure to the workup, diagnosis and treatment/follow-up of surgical diseases involving neonates, infants and children in both the inpatient and outpatient setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDI8555 - Acting Internship in Clinical Ophthalmology

Course Title
Acting Internship in Clinical Ophthalmology

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites

- Completion of M3 year.

Course Description
This rotation will provide greater exposure to diagnosis, management, and surgical treatment of clinical ophthalmology cases encompassing cornea, retina, glaucoma, and oculoplastic and reconstructive surgery.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Summer
MDI8570 - Acting Internship in Pediatric Orthopedic Surgery

**Course Title**
Acting Internship in Pediatric Orthopedic Surgery

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of M3 academic year. The student in AI Pediatric Orthopedic Surgery will be focused on the orthopedic surgical care of children. He/she will lead the orthopedic surgical service in the outpatient and inpatient setting.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

MDI8571 - Acting Internship in Adult Orthopaedic Surgery

**Course Title**
Acting Internship in Adult Orthopaedic Surgery

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M3 year

**Course Description**
This fourth year medical student rotation is structured to develop clinical skills in the six ACGME competencies as they apply to adult orthopaedic surgical care.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDI8600 - Acting Internship in General Surgery

Course Title
Acting Internship in General Surgery

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Completion of core clerkship in surgery. The fourth year medical student on the General Surgery Acting Internship will build upon the surgical core M3 rotation and further explore the workup, diagnosis and treatment/follow-up of surgical diseases in both the inpatient and outpatient setting.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDI8650 - Acting Internship in Neurosurgery

Course Title
Acting Internship in Neurosurgery

Credits Hours
6

Lab/Studio/Field Work Hours
0

Course Description
Completion of M3. C.I. This four-week experience will provide advanced clinical training to prepare the 4th-year medical student for the rigors of surgical internship (with neurosurgical focus).

College
College of Medicine

Department
College of Medicine MD Program
MDI8661 - Acting Internship in Oculo-Facial Plastic and Reconstructive Surgery

Course Title
Acting Internship in Oculo-Facial Plastic and Reconstructive Surgery

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of M3 year.

Course Description
This 4-week AI rotation will provide greater exposure to diagnosis, management and surgical correction of ophthalmic and reconstructive disorders.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDI8676 - Acting Internship Colon and Rectal Surgery

Course Title
Acting Internship Colon and Rectal Surgery

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
The fourth year medical student on the colon and rectal surgery acting internship will build upon the surgical core M3 rotation and further explore the workup, diagnosis and treatment/follow-up of surgical diseases involving the colon, rectum and anus in both the inpatient and out0patient settings.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester
MDI8710 - Acting Internship in Emergency Medicine

**Course Title**
Acting Internship in Emergency Medicine

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of M3 clerkships.

**Course Description**
This four-week rotation introduces the student to initial evaluation, workup, diagnostic ordering and treatment of patients presenting in the emergency department.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

MDI8802 - Acting Internship in Clinical Neurological Ophthalmology

**Course Title**
Acting Internship in Clinical Neurological Ophthalmology

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Course Description**
Completion of the M3 year. An eye clinic based experience where students will master ophthalmoscopy, ophthalmic examination skills, and participate in general and specialty eye surgery and clinics.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDI8840 - Acting Internship in Psychiatry

**Course Title**
Acting Internship in Psychiatry

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 clerkships.

**Course Description**
Increased level of responsibility for clinical assessment and treatment planning in walk-in/triage clinic at VA. Additional responsibility for teaching third year medical students.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

MDI8841 - Acting Internship in Consultation Liaison Psychiatry

**Course Title**
Acting Internship in Consultation Liaison Psychiatry

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of the M3 year.

**Course Description**
As acting interns, M4 students will be given progressive clinical responsibilities in the assessment and treatment of patients hospitalized on medical and surgical wards at the Lake Nona Orlando V.A. Medical Center that have concomitant psychiatric conditions.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDI8843 - Acting Internship in Inpatient Psychiatry

**Course Title**
Acting Internship in Inpatient Psychiatry

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Completion of the M3 year.

**Course Description**
As acting interns, M4 students will be given progressive clinical responsibilities in the assessment and treatment of patients hospitalized on the psychiatry ward.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Occasional

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MDR - Medical Research

MDR8250 - Dermatology Research Elective

**Course Title**
Dermatology Research Elective

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
The student will have opportunities to work on one of several ongoing clinical research projects. In addition, the student may develop their own project or join onto an ongoing project co-sponsored through another medical school, a patient support group or a medical society.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDR8550 - Ophthalmology Research Elective

Course Title
Ophthalmology Research Elective

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- Successful completion of M3 core clerkships.

Course Description
Students will gain exposure to clinical trials, translational research and patient care in an ophthalmology subspecialty (retina) community-based practice.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Every Semester

MDR8570 - Orthopaedic Research Elective

Course Title
Orthopaedic Research Elective

Credits Hours
6

Lab/Studio/Field Work Hours
3

Prerequisites
- Completion of the M2 year.

Course Description
This course will highlight some of the challenges, approaches, and current research in orthopaedic medicine.

College
College of Medicine

Department
College of Medicine MD Program

Terms of Offering
Occasional
**MDR8900 - Independent Study/Research at UCF**

**Course Title**
Independent Study/Research at UCF

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
Elective permits fourth year medical students to pursue, under the sponsorship of a UCF College of Medicine faculty member, areas of study/research that are not included among regular elective offerings.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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**MDX - Medical Externships**

**MDX8011 - Extramural Clerkship**

**Course Title**
Extramural Clerkship

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
Extramural elective offers students the opportunity to gain experience at an LCME accredited medical school and its affiliated facilities. Interested students should contact the Office of Student Affairs for information regarding extramural (visiting) elective.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester
MDX8900 - Independent Study/Research Elective Away

**Course Title**
Independent Study/Research Elective Away

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Successful completion of M3 core clerkships.

**Course Description**
Elective away permits fourth year medical students to pursue areas of study/research outside of UCF. Arrangements are made between the student, the away supervising faculty member and must be supervised by a UCF College of Medicine faculty member.

**College**
College of Medicine

**Department**
College of Medicine MD Program

**Terms of Offering**
Every Semester

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MHF - Mathematics History and Foundations

MHF5937 - ST: Introduction to Mathematical Logic

**Course Title**
ST: Introduction to Mathematical Logic

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Complete 1 of the following
  - status of math graduate program or
  - C.I.

**Course Description**
Propositional logic; first-order logic; models; semantic consequence; theories and definitions; Gentzen-type logic calculus; Hilbert-type logical calculus; completeness; compactness; Zermelo-Fraenkel axioms.

**College**
College of Sciences

**Department**
Department of Mathematics

**Terms of Offering**
Occasional

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MHS - Mental Health Services
MHS5005 - Introduction to the Counseling Profession

**Course Title**
Introduction to the Counseling Profession

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of Phase II of Education Professional Preparation or C.I.

**Course Description**
Overview of the philosophy, organization, administration, and roles of counselors in various work settings.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

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MHS5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

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MHS5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology
MHS6020 - Mental Health Care Systems
Course Title
Mental Health Care Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 5005 or C.I.

Course Description
Foundations of mental health counseling including organizational, administration, fiscal, and accountability structures.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring

MHS6070 - Diagnosis and Treatment in Counseling
Course Title
Diagnosis and Treatment in Counseling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 6400, MHR 6401.

Course Description
Examines diagnosis in the assessment and treatment of mental disorders and the use of the DSM IV. Disorders reviewed with emphasis on symptoms and implications for treatment.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall
MHS6220 - Individual Psychoeducational Testing I

Course Title
Individual Psychoeducational Testing I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
An overview of appraisal instruments for individual testing with emphasis on administration, scoring, and interpretation. Designed for practitioners interested in understanding individual assessment.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring

MHS6221 - Individual Psychoeducational Testing II

Course Title
Individual Psychoeducational Testing II

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- C.I.

Course Description
Analysis of test theory and practice in administration, scoring, and interpretation of tests assessing achievement, visual-motor and cognitive ability, adaptive behavior, and self-concept.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Occasional
MHS6245 - Assessment and Treatment in Addictions

Course Title
Assessment and Treatment in Addictions

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Application of assessment and treatment models in addictions, and the ethical application of services to support persons with addictions and chemical dependency and their families.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

MHS6400 - Theories of Counseling and Personality

Course Title
Theories of Counseling and Personality

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 5005 or MHS 6020, EDF 6481, or C.I.

Course Description
Major theories and approaches to counseling, correlating them with counterpart theories of personality and learning.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring
Fall
MHS6401 - Techniques of Counseling

Course Title
Techniques of Counseling

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- MHS 6400 or C.I.

Course Description
The nature of counseling and its relationships to theoretical concepts.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Every Semester

MHS6403 - Family Play Therapy

Course Title
Family Play Therapy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - MHS6421 - Foundations of Play Therapy Theories and Techniques for Individuals and Groups (3)

Course Description
This practical course provides an overview of using different mediums of play therapy, including expressive arts for families from a systemic approach.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall
MHS6407 - Counseling for Wellness

Course Title
Counseling for Wellness

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Introduction to wellness concepts and topics in counseling including spirituality, health, stress research, positive assessment and others.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Odd Fall

MHS6420 - Foundations of Multicultural Counseling

Course Title
Foundations of Multicultural Counseling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 5005 or C.I.

Course Description
Reviews knowledge and research pertaining to multicultural counseling and social justice issues, develops skills and personal awareness, and examines attributes that affect counseling diverse populations.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Occasional
MHS6421 - Foundations of Play Therapy Theories and Techniques for Individuals and Groups

Course Title
Foundations of Play Therapy Theories and Techniques for Individuals and Groups

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Addresses the theories and application of principles of play and expressive arts in the counseling process with children in individual and group settings.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Summer
Fall

MHS6422 - Advanced Theories and Techniques of Play Therapy

Course Title
Advanced Theories and Techniques of Play Therapy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 6421.

Course Description
This course provides an in-depth study of play therapy counseling theories, utilizing didactic and experiential mediums to enhance the students' development of play therapy skills.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall
MHS6424 - Filial Therapy

Course Title
Filial Therapy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 6421.

Course Description
This course teaches students how to include parents in the play therapy process through learning a specific model of filial in a 10-week group experience.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring

MHS6430 - Family Counseling I

Course Title
Family Counseling I

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- MHS 5005 or MHS 6020 or C.I.

Course Description
Presentation of specific family counseling theories. An evolution and current state of the art.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall
**MHS6431 - Family Counseling II**

**Course Title**
Family Counseling II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- MHS 6430, EDF 6481, or C.I.

**Course Description**
Presentation of techniques to work with entrenched, paradoxical, and fixed family systems that pose problems for the family and the counselor.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Fall

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**MHS6440 - Couples Counseling**

**Course Title**
Couples Counseling

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Overview of couple counseling theory and technique. In addition, the course covers special problems and stressors in the couple relationship.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Summer
MHS6450 - Addictions Counseling

Course Title
Addictions Counseling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examination within systematic, theoretical framework of the function that a substance, individual, and the environment play in use and abuse of illicit and licit substances.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall
Even Spring

MHS6465 - Counseling Victims and Perpetrators of Family Violence

Course Title
Counseling Victims and Perpetrators of Family Violence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Examination of counseling interventions used with victims and perpetrators of family violence.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Occasional
**MHS6466 - Foundations of Trauma and Crisis Counseling**

**Course Title**
Foundations of Trauma and Crisis Counseling

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MHS 5005 or C.I.

**Course Description**
An overview of the effects of crisis, disasters, and trauma on diverse individuals across the lifespan, focusing on trauma-specific counseling interventions and trauma-informed counseling strategies.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Summer

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**MHS6470 - Human Sexuality and Relationships**

**Course Title**
Human Sexuality and Relationships

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A basic course in understanding how human beings form intra- and interpersonal relationships and how sexuality develops.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Fall
MHS6500 - Group Procedures and Theories in Counseling

Course Title

Group Procedures and Theories in Counseling

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- MHS 6401.

Course Description

This course is designed to give the student an understanding of the role of theories in group counseling as well as the many process applications of groups.

College

College of Community Innovation and Education

Department

Department of Counselor Education & School Psychology

Terms of Offering

Every Semester

MHS6510 - Advanced Group Counseling

Course Title

Advanced Group Counseling

Credits Hours

3

Lab/Studio/Field Work Hours

2

Prerequisites

- MHS 6500 or C.I.

Course Description

This course is designed to give students practical experience in leading groups. It is also intended to challenge students to explore professional and advanced issues in group counseling.

College

College of Community Innovation and Education

Department

Department of Counselor Education & School Psychology

Terms of Offering

Spring
MHS6600 - Consultation, Staffing, and Case Management

Course Title
Consultation, Staffing, and Case Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
MHS 6500 or C.I. Understanding the counselor’s role as consultant and staffing team member. Study of case management procedures.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Occasional

MHS6702 - Ethical and Legal Issues

Course Title
Ethical and Legal Issues

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
C.I.

Course Description
Studies of ethical standards and legal issues in counseling and other human service professions.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Odd Summer
MHS6803 - Practicum in Counselor Education

Course Title
Practice in Counselor Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 5005, MHS 6400, MHS 6401, MHS 6500, C.I.

Course Description
Supervised counseling emphasizing competence in (1) individual counseling (2) working with groups (3) tests in educational-career-personal counseling. May be repeated for credit.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Odd Fall
Even Spring
Odd Summer

MHS6830 - Counseling Internship

Course Title
Counseling Internship

Credits Hours
1 - 6

Lab/Studio/Field Work Hours
6-Jan

Prerequisites
- C.I.

Course Description
Supervised placement in setting appropriate for program track. May be repeated for credit.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Every Semester
MHS6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

MHS6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

MHS6938 - ST: Advanced Diagnosis and Treatment Approaches: Applications of Neuroscience in Counseling Practice

Course Title
ST: Advanced Diagnosis and Treatment Approaches: Applications of Neuroscience in Counseling Practice

Credits Hours
3

Lab/Studio/Field Work Hours
3

Course Description
The foundation of this class is to provide a sound and constructive road-map to neuroscience from a counselor’s perspective.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Odd Spring

2022-2023 Graduate Catalog
MHS6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
Department of Counselor Education & School Psychology

MHS6938 - ST: Tele-Mental Health for Counselors
Course Title
ST: Tele-Mental Health for Counselors
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Designed to provide counselors with the ethical, legal, technological and clinical framework for conducting tele-mental health sessions effectively.

College
College of Community Innovation and Education
Department
Department of Counselor Education & School Psychology
Terms of Offering
Fall
MHS6938.1 - ST: International Perspectives on Counseling

**Course Title**
ST: International Perspectives on Counseling

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admitted to COUMA

**Course Description**
An internationally immersive experience designed to provide students with a greater awareness and appreciation for counseling across global communities.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Spring

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MHS6949 - Cooperative Education in Mental Health Services

**Course Title**
Cooperative Education in Mental Health Services

**Credits Hours**
0 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology
MHS7311 - Scholarship and External Funding in Counselor Education  
**Course Title**  
Scholarship and External Funding in Counselor Education  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Admission into UCF's Counselor Education PhD program.  
**Course Description**  
Emphasis on review processes and grant writing for State and Federal agencies as well as Private Foundations.  
**College**  
College of Community Innovation and Education  
**Department**  
Department of Counselor Education & School Psychology  
**Terms of Offering**  
Spring  

MHS7340 - Advanced Career Development  
**Course Title**  
Advanced Career Development  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Admission to PhD in Education.  
**Course Description**  
An advanced study of career development theories, occupational and educational information, approaches to career decision-making, lifestyle and leisure in the development of the whole person.  
**College**  
College of Community Innovation and Education  
**Department**  
Department of Counselor Education & School Psychology  
**Terms of Offering**  
Spring
MHS7406 - Advanced Theories in Counseling

Course Title
Advanced Theories in Counseling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to PhD program in Education--Counselor Education track.

Course Description
Examination of counseling theories including historical foundations and emerging theories.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall

MHS7497 - Advanced Multiculturalism in Counseling

Course Title
Advanced Multiculturalism in Counseling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to UCF’s PhD in Education - Counselor Education Track program.

Course Description
The course examines multiculturalism from the perspective of higher education and also within the context of counseling multicultural competencies.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Even Summer
MHS7611 - Supervision in Counselor Education

Course Title
Supervision in Counselor Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to PhD in Education--Counselor Education track.

Course Description
An examination of the process and various theories of supervision in counselor education.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Summer

MHS7700 - Literature and Leadership in Counselor Education

Course Title
Literature and Leadership in Counselor Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to PhD program in Education--Counselor Education track.

Course Description
Emphasis on current trends, leadership development, and consultation in Counselor Education.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring
MHS7730 - Research Seminar in Counselor Education

Course Title
Research Seminar in Counselor Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to PhD in Education.

Course Description
An examination of outcome research design, methodological issues and empirical basis of counseling.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Even Summer

MHS7801 - Advanced Practicum in Counselor Education

Course Title
Advanced Practicum in Counselor Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to PhD program in Education--Counselor Education track.

Course Description
This course provides advanced graduate students an opportunity to demonstrate and develop counseling skills.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Occasional
MHS7808 - Internship in Counseling Supervision

Course Title
Internship in Counseling Supervision

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to PhD program in Education and MHS 7611.

Course Description
Integration of theory and practice in counseling supervision.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall

MHS7840 - Internship in Counselor Education

Course Title
Internship in Counselor Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to PhD program in Education--Counselor Education track.

Course Description
Examine and practice the various roles within a Counselor Education program under direct supervision.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring
Fall
MHS7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Counselor Education & School Psychology

MHS7939 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
Department of Counselor Education & School Psychology

MHS7980 - Dissertation
Course Title
Dissertation
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Counselor Education & School Psychology

MLS - Medical Laboratory Science

MLS5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Medicine
Department
College of Medicine Burnett School of Biomedical Sciences

2022-2023 Graduate Catalog
MLS5937 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Medicine  
**Department**  
College of Medicine Burnett School of Biomedical Sciences  

MLS6909 - Research Report  
**Course Title**  
Research Report  
**Credits Hours**  
1 - 99  
**College**  
College of Medicine  
**Department**  
College of Medicine Burnett School of Biomedical Sciences  

MLS6918 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Medicine  
**Department**  
College of Medicine Burnett School of Biomedical Sciences  

MLS6938 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Medicine  
**Department**  
College of Medicine Burnett School of Biomedical Sciences  

MMC - Mass Media Communications  

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**2022-2023 Graduate Catalog**
MMC5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Nicholson School of Communication and Media

MMC5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Nicholson School of Communication and Media

MMC6202 - Legal and Ethical Issues for Communication
Course Title
Legal and Ethical Issues for Communication
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
A study of social, ethical and legal issues for Communications practitioners and the impact on media consumers.
College
College of Sciences
Department
Nicholson School of Communication and Media
Terms of Offering
Occasional
MMC6307 - International Communication

**Course Title**
International Communication

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Case studies on global communication, coping with cultures, communicating across cultures, global media, global news flow and persuasive communication. May be repeated for credit.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional

MMC6567 - New Media

**Course Title**
New Media

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Communication M.A. program of Strategic Communication Ph.D. program or C.I.

**Course Description**
A study of the development and convergence of new technologies and their mediation.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional
MMC6600 - Media Effects and Audience Analysis

Course Title
Media Effects and Audience Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
A study of the effects of communication on society emphasizing the research in media effects.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional

MMC6612 - Communication and Government

Course Title
Communication and Government

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
A study of the relationship between the media and government.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
MMC6735 - Social Media as Mass Communication

Course Title
Social Media as Mass Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
COM 6008 or C.I. Overview of social media and its role in mass communication and society. A particular emphasis on scholarship and practice in corporate communication.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional

MMC6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media

MMC6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media
MTG - Mathematics Topology and Geometry

MTG5253 - Introduction to Differential Geometry
Course Title
Introduction to Differential Geometry
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- MAC 2313 or equivalent or C.I.
Course Description
Curves and surfaces in 2D and 3D, covariant derivative of a vector field, geodesics, Gauss-Bonnet Theorem.
College
College of Sciences
Department
Department of Mathematics
Terms of Offering
Fall
MTG5256 - Differential Geometry

Course Title
Differential Geometry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAA 4227, graduate status or senior standing, or C.I.

Course Description
Differentiable manifolds, tangent space and tangent bundle, flows and vector fields, Lie derivatives, cotangent space and cotangent bundles, Riemann metrics, connections and geodesics, applications in classical mechanics.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MTG5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MTG5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Mathematics
MTG6345 - Algebraic Topology

Course Title
Algebraic Topology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MTG 4302 Introduction to Topology and MAS 4301 Abstract Algebra I, or C.I.

Course Description
Topics of this course include fundamental group, singular and cellular homology, cohomology rings, Poincare duality, homotopy groups.

College
College of Sciences

Department
Department of Mathematics

Terms of Offering
Occasional

MTG6908 - Independent Study

Course Title
Independent Study

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Mathematics

MUC - Music: Composition
MUC5112 - Composition V

**Course Title**
Composition V

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in music education or C.I.

**Course Description**
Advanced music composition at the graduate level. May be used in the degree program a maximum of 4 times.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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MUC5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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MUC5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
School of Performing Arts
MUC6251 - Composition VI

Course Title
Composition VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study in musical composition. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

MUC6938 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MUE - Music Education
MUE5348C - K-12 Music Methods

Course Title
K-12 Music Methods

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music Education or C.I.

Course Description
Organization and administration of instruction for comprehensive music education, K-12. Instructional planning, techniques, and materials for general, choral, and instrumental music education.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

MUE5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts
MUE5921 - Music Education Workshop
Course Title
Music Education Workshop
Credits Hours
2
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
Variable topics in Music Education to offer hands-on instruction in a workshop format. May be used in the degree program a maximum of 4 times only when course content is different.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Summer

MUE5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts
MUE6080 - Foundations of Music Education
Course Title
Foundations of Music Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in music.

Course Description
Study of significant historical events that have shaped music education along with important research and philosophical writings. Designed for online delivery.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MUE6175 - Teaching Music Performance
Course Title
Teaching Music Performance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in M.A. or M.Ed. in Music Education or C.I.

Course Description
Techniques and skills for planning, administering and directing performing music organizations. Examination of historical, sociological and philosophical foundations of music education.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Summer
MUE6746 - Assessment and Evaluation in Music Education

Course Title
Assessment and Evaluation in Music Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Music learning theory and assessment in the K-12 music classroom.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Summer

MUE6785 - Introduction to Research in Music Education

Course Title
Introduction to Research in Music Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Basic concepts of research in Music Education. Students will read, analyze, and discuss current research literature, and write research reports.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional
MUE6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MUE6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MUE6936 - Current Topics in Music Education

Course Title
Current Topics in Music Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Study and application of current topics and issues in music education. May be used in the degree program a maximum of 2 times only when course content is different.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Summer
MUE6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

MUE6945 - Practicum in Music Education

**Course Title**
Practicum in Music Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
14

**Prerequisites**
- Basic Teacher Certificate.

**Course Description**
MUE 6349, MUE 6610 and MUE 6630 or C.I. Field experience in teaching music. May be repeated for credit.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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MUG - Music Conducting

MUG5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts
MUG5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts

MUG6106 - Advanced Conducting I

Course Title
Advanced Conducting I

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Basic conducting practices including introduction and general exploration of intermediate-level techniques in conducting gesture, score study and application of theory and personal musicianship skills.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional
MUG6306 - Conducting and Literature

**Course Title**
Conducting and Literature

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to Music MA and audition.

**Course Description**
Private lessons in conducting, combined with small group study of ensemble literature from different time periods.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Occasional

MUG6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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MUH - Music: History/Musicology
MUH5326 - Medieval and Renaissance Music

Course Title
Medieval and Renaissance Music

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in music education or C.I.

Course Description
Music and culture of Western Europe in the era c. 450-1600.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MUH5345 - Music of the Baroque

Course Title
Music of the Baroque

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in music or music education or C.I.

Course Description
Baroque music, 1600-1750. Investigates Baroque musical styles and composers within their diverse historical, musical, and cultural contexts.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional
MUH5356 - Eighteenth-Century Music

**Course Title**
Eighteenth-Century Music

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in music education or C.I.

**Course Description**
Music and culture of Western Europe in the era c. 1700-1800.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Occasional

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MUH5365 - Music of the 19th Century

**Course Title**
Music of the 19th Century

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in Music or C.I.

**Course Description**
Western Art Music of the 19th Century.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Odd Fall
### MUH5375 - Music Since 1900

**Course Title**
Music Since 1900

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in Music Education or C.I.

**Course Description**
Music and culture of Western and American art Music from c. 1900 to the present.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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### MUH5665 - Development of Opera

**Course Title**
Development of Opera

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in Music or C.I.

**Course Description**
An in-depth examination of Western European opera, from its origins around 1600 until the present day.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Even Spring
MUH5816 - Jazz Styles and Analysis

**Course Title**
Jazz Styles and Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Advanced study of historical style periods and master artists in jazz music.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Odd Fall

MUH5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

MUH5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
School of Performing Arts
MUH6916 - Music Bibliography and Research  
**Course Title**  
Music Bibliography and Research  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Admission into MA in Music degree program or C.I.  

**Course Description**  
Materials and techniques used in scholarly research in music.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Odd Fall  

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MUH6935 - Music History Seminar  
**Course Title**  
Music History Seminar  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- MUH 6916 or C.I.  

**Course Description**  
Seminar on selected topics in music history and literature. May be used in the degree program a maximum of 3 times.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Odd Fall
MUH6938 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MUL - Music: Music Literature

MUL5436 - Guitar Literature and Pedagogy

Course Title
Guitar Literature and Pedagogy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Survey of significant repertoire and pedagogy for classical guitar.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Spring
MUL5439 - String Literature and Pedagogy

Course Title
String Literature and Pedagogy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Study of string literature from the Baroque period to the 20th century, along with prominent pedagogical principles.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MUL5447 - Woodwind Literature and Pedagogy

Course Title
Woodwind Literature and Pedagogy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Major works written for woodwind instruments, as well as the study of the basic concepts and techniques fundamental to teaching woodwind instruments.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Spring
MUL5448 - Brass Literature and Pedagogy

Course Title
Brass Literature and Pedagogy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Significant brass repertoire, study materials and a review of teaching techniques for artistic brass performance.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Even Fall

MUL5645 - Choral Literature

Course Title
Choral Literature

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Survey of choral music from its beginnings to the present with consideration of historical perspective; genres, styles and performance practice; major composers and representative works.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional
MUL5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MUL5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MUN - Music: Music Ensembles

MUN5125 - Concert Band
Course Title
Concert Band
Credits Hours
1
Lab/Studio/Field Work Hours
3
Prerequisites
- Open to all graduate students by audition.
Course Description
Study and performance of music for large ensembles. May be used in the degree program a maximum of 4 times.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Odd Fall
Current Fee Per Student
$20.00
MUN5145 - Wind Ensemble

Course Title
Wind Ensemble

Credits Hours
1

Lab/Studio/Field Work Hours
4

Prerequisites
- Open to all graduate students by audition.

Course Description
Study and performance of music for wind ensemble and band. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

Current Fee Per Student
$20.00

MUN5215 - Symphony Orchestra

Course Title
Symphony Orchestra

Credits Hours
1

Lab/Studio/Field Work Hours
5

Prerequisites
- Open to all graduate students by audition.

Course Description
Rehearsal and performance of works from the symphonic repertoire. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

Current Fee Per Student
$20.00
MUN5325 - Women's Chorus

Course Title
Women's Chorus

Credits Hours
1

Lab/Studio/Field Work Hours
3

Prerequisites
- Open to all graduate students by audition.

Course Description
Study and performance of choral music for women's voices. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

Current Fee Per Student
$20.00

MUN5368L - Graduate Chamber Singers

Course Title
Graduate Chamber Singers

Credits Hours
1

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate standing in Music Education and C.I.

Course Description
A select, mixed choir that explores music appropriate to a small, advanced ensemble, and performs in the Orlando area each semester. May be used in the degree program a maximum of 5 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

Current Fee Per Student
$20.00
MUN5385L - Graduate University Chorus

Course Title
Graduate University Chorus

Credits Hours
1

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate standing in Music Education and C.I.

Course Description
Study and performance of large ensemble music. May be used in the degree program a maximum of 5 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Current Fee Per Student
$20.00

MUN5445 - Percussion Ensemble

Course Title
Percussion Ensemble

Credits Hours
1

Lab/Studio/Field Work Hours
2

Prerequisites
- Open to all graduate students by audition.

Course Description
Study and performance of music for small percussion ensembles. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

Current Fee Per Student
$35.00
MUN5465L - Graduate Chamber Music

Course Title
Graduate Chamber Music

Credits Hours
1

Lab/Studio/Field Work Hours
2

Prerequisites
- Graduate standing in Music Education and C.I.

Course Description
The study and performance of vocal and/or instrumental chamber ensemble literature. Flexible instrumentation to meet student needs. May be used in the degree program a maximum of 5 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Current Fee Per Student
$20.00

MUN5478L - Early Music Ensemble

Course Title
Early Music Ensemble

Credits Hours
1

Lab/Studio/Field Work Hours
1

Prerequisites
- Graduate standing in Music Education and C.I.

Course Description
Graduate ensemble experience with instruments and repertoire of the Medieval, Renaissance, and Baroque periods. May be used in the degree program a maximum of 5 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Current Fee Per Student
$5.00
MUN5715L - Jazz Ensemble

Course Title
Jazz Ensemble

Credits Hours
1

Lab/Studio/Field Work Hours
4

Prerequisites
- Audition, graduate or senior standing, and C.I.

Course Description
Study and performance of jazz big band music. May be used in the degree program a maximum of 4 times only when course content is different.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

Current Fee Per Student
$20.00

MUN5716L - Jazz Chamber Group

Course Title
Jazz Chamber Group

Credits Hours
1

Lab/Studio/Field Work Hours
2

Prerequisites
- Audition, graduate standing or senior standing, and C.I.

Course Description
Study and performance of jazz small group music. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

Current Fee Per Student
$20.00
MUN5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MUN5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MUN5937L - Special Topics
Course Title
Special Topics
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MUN6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts
MUN6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

MUN6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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MUO - Music Opera

MUO5505L - Graduate Opera Workshop

**Course Title**
Graduate Opera Workshop

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- C.I. and audition.

**Course Description**
Study of audition techniques, operatic roles and repertoire, and characterization through performance. May be used in the degree program a maximum of 5 times.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Current Fee Per Student**
$70.00
MUO5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MUO5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MUO5937L - Special Topics
Course Title
Special Topics
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MUS - Music
MUS5365 - Music and Technology

Course Title
Music and Technology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing, or C.I.

Course Description
The emergence of technology in music including MIDI, CD ROM, and the high-tech music classroom.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional

MUS5677 - Health and Wellness for the Performing Artist

Course Title
Health and Wellness for the Performing Artist

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Music MA or C.I.

Course Description
Focus on performing artists’ health and related topics.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
MUS5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MUS5927 - Music Performance Workshop

Course Title
Music Performance Workshop

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Music MA or C.I.

Course Description
Individual coaching and study of the art of music performance, including mock auditions and performances.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Every Semester

MUS5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts
MUS6465 - Intensive Chamber Music

Course Title
Intensive Chamber Music

Credits Hours
3

Lab/Studio/Field Work Hours
4

Prerequisites
- Admission to Music MA or C.I. and audition.

Course Description
Concentrated rehearsal and coaching in a chamber music ensemble, as well as study of the corresponding genre.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional

MUS6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MUS6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts
MUS6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MUS6949 - Cooperative Education in Music
Course Title
Cooperative Education in Music
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the graduate program in Music or C.I.
Course Description
Strategies to create a collaborative and inquiry-based learning environment in a range of K-12 music classes/ensembles.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Occasional
MUS6960 - Comprehensive Exam

Course Title
Comprehensive Exam

Credits Hours
0

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Music MA or C.I.

Course Description
Written exam used as a synthesis of knowledge for graduate students, normally taken in the last semester.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional

MUS6975L - Graduate Project

Course Title
Graduate Project

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Two semesters of graduate study in the appropriate area or C.I.

Course Description
Planning, researching, and creating a written document in a non-performance area in music, designed to serve as a cumulative synthesis of learning.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
MUS6976L - Graduate Recital  
**Course Title**  
Graduate Recital  

**Credits Hours**  
2  

**Lab/Studio/Field Work Hours**  
1  

**Prerequisites**  
- Two semesters of graduate level study in the appropriate area or C.I.  

**Course Description**  
Public performance in an area such as instrumental/vocal performance, conducting or composition, designed as a capstone experience.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Spring  
Fall  

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MUT - Music: Theory  

**MUT5316 - Orchestration**  
**Course Title**  
Orchestration  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate standing in Music or C.I.  

**Course Description**  
Study of the various instruments commonly found in orchestras and wind ensembles and how to write for these instruments in combination.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Odd Spring  

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2022-2023 Graduate Catalog
MUT5359 - Jazz Arranging and Orchestration I  
**Course Title**  
Jazz Arranging and Orchestration I  

**Credits Hours**  
2  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate Standing or C.I.  

**Course Description**  
Designed to develop composition and arranging skills required in the jazz idiom.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Spring  

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MUT5445 - Counterpoint  
**Course Title**  
Counterpoint  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate standing in Music or C.I.  

**Course Description**  
Principles of counterpoint and the study of contrapuntal styles in Western music from the 16th century to the present day.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Even Spring
MUT5620 - Analysis of Twentieth Century Music
Course Title
Analysis of Twentieth Century Music

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Analysis of music in a selection of the different styles practiced in the 20th century, with an emphasis on Western art music.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Fall

MUT5917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts
MUT5936 - Music Theory Seminar

Course Title
Music Theory Seminar

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in music education or C.I.

Course Description
One or more issues of importance in music theory with emphasis on recent scholarly literature and debates. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

MUT5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts
MUT6621 - Techniques and Concepts of Musical Analysis

Course Title
Techniques and Concepts of Musical Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission into MA in Music or C.I.

Course Description
Advanced techniques in musical analysis.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MUT6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MUT6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

2022-2023 Graduate Catalog
MUT6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts

MVB - Music: Applied-Brasses

MVB5451 - Trumpet V

Course Title
Trumpet V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
MVB5452 - French Horn V

Course Title
French Horn V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

MVB5453 - Trombone V

Course Title
Trombone V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
**MVB5454 - Baritone V**

**Course Title**
Baritone V

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or senior standing and C.I.

**Course Description**
May be repeated for credit.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Spring
Fall

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**MVB5455 - Tuba V**

**Course Title**
Tuba V

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or senior standing and C.I.

**Course Description**
May be repeated for credit.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Spring
Fall
MVB5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVB5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MVB6461 - Trumpet VI
Course Title
Trumpet VI
Credits Hours
2
Lab/Studio/Field Work Hours
1
Prerequisites
- Admission into MA in Music degree program and audition.
Course Description
Intensive advanced study of trumpet performance. May be used in the degree program a maximum of 4 times.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Odd Fall
MVB6462 - French Horn VI

Course Title
French Horn VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into M.A. in Music degree program and audition.

Course Description
Intensive advanced study of French Horn performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MVB6463 - Trombone VI

Course Title
Trombone VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of trombone performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall
MVB6464 - Euphonium VI

Course Title
Euphonium VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of euphonium performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MVB6465 - Tuba VI

Course Title
Tuba VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of tuba performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall
MVB6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVB6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVB6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MVJ - Applied Music Jazz
MVJ5350C - Jazz Piano V

Course Title
Jazz Piano V

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Audition, graduate standing or senior standing, and C.I.

Course Description
Study of jazz piano literature, styles, and techniques. May be used in the degree program a maximum of 3 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

MVJ5353C - Jazz Guitar V

Course Title
Jazz Guitar V

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Audition, graduate standing or senior standing, and C.I.

Course Description
Study of jazz guitar literature, styles and techniques. May be used in the degree program a maximum of 3 times only when course content is different.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
MVJ5354C - Jazz Bass V

Course Title
Jazz Bass V

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Audition, graduate standing or senior standing, and C.I.

Course Description
Study of jazz bass literature, styles and techniques. May be used in the degree program a maximum of 3 times only when course content is different.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

MVJ5359C - Jazz Drum Set V

Course Title
Jazz Drum Set V

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Audition, graduate standing or senior standing, and C.I.

Course Description
Study of jazz drum set literature, styles, and techniques. May be used in the degree program a maximum of 3 times only when course content is different.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

Current Fee Per Student
$35.00
MVJ6369C - Jazz Drum Set VI

Course Title
Jazz Drum Set VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into the MA in Music and an audition.

Course Description
Advanced study of jazz drum set literature, styles and techniques; continuation of Jazz Drum Set V. May be used in the degree program a maximum of 3 times only when course content is different.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

Current Fee Per Student
$35.00

MVJ6460C - Jazz Piano VI

Course Title
Jazz Piano VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to MA in Music and an audition.

Course Description
Advanced study of jazz piano literature, styles, and techniques; continuation of Jazz Piano V. May be used in the degree program a maximum of 3 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
MVJ6463C - Jazz Guitar VI

Course Title
Jazz Guitar VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to the MA in Music and an audition.

Course Description
Advanced study of jazz guitar literature, styles and techniques; continuation of Jazz Guitar V. May be used in the degree program a maximum of 3 times only when course content is different.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

MVJ6464C - Jazz Bass VI

Course Title
Jazz Bass VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into the MA in Music and an audition.

Course Description
Advanced study of jazz bass literature, styles and techniques; continuation of Jazz Bass V. May be used in the degree program a maximum of 3 times only when course content is different.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
MVJ6952 - Jazz VI

Course Title
Jazz VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into M.A. in Music degree program and audition.

Course Description
Intensive advanced study of jazz performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MVK - Music: Applied-Keyboard

MVK5451 - Piano V

Course Title
Piano V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

2022-2023 Graduate Catalog
MVK5917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MVK5937 - Special Topics
Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts

MVK6461 - Piano VI
Course Title
Piano VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of piano performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall
MVK6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVK6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVK6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MVO - Music: Applied-Other Instruments
MVO5250 - Advanced Secondary Instruction

Course Title
Advanced Secondary Instruction

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing, and C.I.

Course Description
Advanced instructional techniques on a secondary instrument or in voice. May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional

MVO5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MVO5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts
MVO6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVO6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVO6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MVP - Music: Applied-Percussion
MVP5451 - Percussion V

**Course Title**
Percussion V

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or senior standing and C.I.

**Course Description**
May be repeated for credit.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Spring
Fall

**Current Fee Per Student**
$35.00

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MVP5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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MVP5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
School of Performing Arts
MVP6461 - Percussion VI

Course Title
Percussion VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of percussion instruments. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

Current Fee Per Student
$35.00

MVP6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MVP6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

2022-2023 Graduate Catalog
MVP6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts

MVS - Music: Applied-Strings

MVS5451 - Violin V

Course Title
Violin V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
MVS5452 - Viola V

Course Title
Viola V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

MVS5453 - Cello V

Course Title
Cello V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
MVS5454 - Bass V
Course Title
Bass V
Credits Hours
2
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate status or senior standing and C.I.
Course Description
May be repeated for credit.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Spring
Fall

MVS5455 - Harp V
Course Title
Harp V
Credits Hours
2
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate status or senior standing and C.I.
Course Description
May be repeated for credit.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Spring
Fall
MVS5456 - Guitar V
Course Title
Guitar V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

MVS5917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MVS5937 - Special Topics
Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts
MVS6461 - Violin VI

Course Title
Violin VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of violin performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MVS6462 - Viola VI

Course Title
Viola VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of viola performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall
MVS6463 - Cello VI
Course Title
Cello VI
Credits Hours
2
Lab/Studio/Field Work Hours
1
Prerequisites
- Admission into MA in Music degree program and audition.
Course Description
Intensive advanced study of cello performance. May be used in the degree program a maximum of 4 times.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Odd Fall

MVS6465 - Harp VI
Course Title
Harp VI
Credits Hours
2
Lab/Studio/Field Work Hours
1
Prerequisites
- Admission into MA in Music degree program and audition.
Course Description
Intensive advanced study of harp performance. May be used in the degree program a maximum of 4 times.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Odd Fall
MVS6466 - Classical Guitar VI

Course Title
Classical Guitar VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of classical guitar performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MVS6467 - Bass VI

Course Title
Bass VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of string bass performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall
MVS6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVS6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

MVS6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

MVV - Music: Applied-Voice
MVV5451 - Voice V

Course Title
Voice V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or senior standing and C.I.

Course Description
May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

MVV5651 - Voice Pedagogy

Course Title
Voice Pedagogy

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Music or C.I.

Course Description
Vocal function, anatomy, and pedagogical methodology with application to the voice teacher and performer.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Spring
**MVV5917 - Directed Research**  
*Course Title*  
Directed Research  
*Credits Hours*  
1 - 99  
*College*  
College of Arts and Humanities  
*Department*  
School of Performing Arts

**MVV5937 - Special Topics**  
*Course Title*  
Special Topics  
*Credits Hours*  
3  
*College*  
College of Arts and Humanities  
*Department*  
School of Performing Arts

**MVV6452 - Voice VI**  
*Course Title*  
Voice VI  
*Credits Hours*  
2  
*Lab/Studio/Field Work Hours*  
1  
*Prerequisites*  
- Admission into MA in Music degree program and audition.  
*Course Description*  
Intensive advanced study of vocal performance. May be used in the degree program a maximum of 4 times.  
*College*  
College of Arts and Humanities  
*Department*  
School of Performing Arts  
*Terms of Offering*  
Odd Fall
MVV6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MVV6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MVV6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts

MVW - Music: Applied-Woodwinds
MVW5451 - Flute V
Course Title
Flute V
Credits Hours
2
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate status or senior standing and C.I.
Course Description
May be repeated for credit.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Spring
Fall

MVW5452 - Oboe V
Course Title
Oboe V
Credits Hours
2
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate status or senior standing and C.I.
Course Description
May be repeated for credit.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Spring
Fall
MVW5453 - Clarinet V  
**Course Title**  
Clarinet V  

**Credits Hours**  
2  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate status or senior standing and C.I.  

**Course Description**  
May be repeated for credit.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Spring  
Fall  

MVW5454 - Bassoon V  
**Course Title**  
Bassoon V  

**Credits Hours**  
2  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate status or senior standing and C.I.  

**Course Description**  
May be repeated for credit.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Spring  
Fall
MVW5455 - Saxophone V

Course Title
Saxophone V

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing and C.I.

Course Description
May be repeated for credit.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall

MVW5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

MVW5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts
MVW6461 - Flute VI

Course Title
Flute VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of flute performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

MVW6462 - Oboe VI

Course Title
Oboe VI

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission into MA in Music degree program and audition.

Course Description
Intensive advanced study of oboe performance. May be used in the degree program a maximum of 4 times.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall
MVW6463 - Clarinet VI
Course Title
Clarinet VI
Credits Hours
2
Lab/Studio/Field Work Hours
1
Prerequisites
- Admission into MA in Music degree program and audition.
Course Description
Intensive advanced study of clarinet performance. May be used in the degree program a maximum of 4 times.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Odd Fall

MVW6464 - Bassoon VI
Course Title
Bassoon VI
Credits Hours
2
Lab/Studio/Field Work Hours
1
Prerequisites
- Admission into MA in Music degree program and audition.
Course Description
Intensive advanced study of bassoon performance. May be used in the degree program a maximum of 4 times.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Odd Fall
MVW6465 - Saxophone VI

Course Title

Saxophone VI

Credits Hours

2

Lab/Studio/Field Work Hours

1

Prerequisites

Admission into MA in Music degree program and audition.

Course Description

Intensive advanced study of saxophone performance. May be used in the degree program a maximum of 4 times.

College

College of Arts and Humanities

Department

School of Performing Arts

Terms of Offering

Odd Fall

MVW6909 - Research Report

Course Title

Research Report

Credits Hours

1 - 99

College

College of Arts and Humanities

Department

School of Performing Arts

MVW6918 - Directed Research

Course Title

Directed Research

Credits Hours

1 - 99

College

College of Arts and Humanities

Department

School of Performing Arts
**GVW6938 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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**NGR - Nursing Graduate**

**NGR5003 - Advanced Health Assessment and Diagnostic Reasoning**

**Course Title**
Advanced Health Assessment and Diagnostic Reasoning

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the M.S. in Nursing or Doctor of Nursing Practice program tracks or C.I.

**Corequisites**
- NGR 5003L.

**Course Description**
Concepts and skills of advanced health assessment over the lifespan. Application of the diagnostic reasoning process through differential diagnoses. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester
NGR5003L - Advanced Health Assessment and Diagnostic Reasoning Lab

Course Title
Advanced Health Assessment and Diagnostic Reasoning Lab

Credits Hours
1

Lab/Studio/Field Work Hours
1

Corequisites
NGR 5003. Admission to the M.S. in Nursing or Doctor of Nursing Practice tracks or C.I.

Course Description
Application of concepts and skills for advanced health assessment and diagnostic reasoning over the lifespan. May be used in the degree program a maximum of two times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Every Semester

Current Fee Per Student
$45.00

NGR5090 - Urgent Care for the Advanced Practice Nurse

Course Title
Urgent Care for the Advanced Practice Nurse

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
NGR 6240 or C.I. Advanced practice evaluation and management of clients in urgent care settings.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Occasional
NGR5131 - Exploring Transcultural and Culturally Congruent Care for the Hispanic Population

**Course Title**
Exploring Transcultural and Culturally Congruent Care for the Hispanic Population

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Complete 1 of the following
  - Completion of BS degree in health-related field.
  - Declared social science or healthcare related major, or professional certification/license (example has BS HDFS with a ADN).
  - Permission of Department of Nursing Systems instructor, advisor, or director.

**Course Description**
Application of transcultural and culturally congruent care principles to the Hispanic community within a global context, using National CLAS Standards as a foundational resource.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester

NGR5141 - Pathophysiological Bases for Advanced Nursing Practice

**Course Title**
Pathophysiological Bases for Advanced Nursing Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to M.S. in Nursing or Doctor of Nursing Practice program or C.I.

**Course Description**
Critical examination of the physiological and pathophysiological mechanisms affecting individuals. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester
NGR5190 - Core Clinical Concepts for Nurse Educators

Course Title
Core Clinical Concepts for Nurse Educators

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Graduate Nursing Program or C.I; NGR 5141 or equivalent.

Course Description
Integrate concepts of Pharmacology and Health Assessment. Provides the foundation for Advanced Nursing Practice within the Nurse Educator role.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Spring
Fall

NGR5638 - Health Promotion

Course Title
Health Promotion

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M. S. in Nursing or Doctor of Nursing Practice or C.I.

Course Description
Exploration and analysis of concepts, theories, research evidence, clinical assessment and interventions for health promotion and wellness. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Every Semester
NGR5660 - Health Disparities: Issues and Strategies

Course Title
Health Disparities: Issues and Strategies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Explores disparities in access, utilization, services, outcomes, and status for different U.S. populations: data, research, programmatic issues, and strategies to close the gaps. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Occasional

NGR5690 - Interdisciplinary Care at End-of-Life

Course Title
Interdisciplinary Care at End-of-Life

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or C.I.

Course Description
Examination of interdisciplinary roles and strategies for enabling patients, families, and caregivers to approach end-of-life free from avoidable distress and suffering. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall
NGR5720 - Organizational Dynamics

Course Title
Organizational Dynamics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Baccalaureate degree in Nursing or C.I.

Course Description
Analysis of organizational theories related to health care organizations and the use of leadership, communication and power to influence health care delivery and policy. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall

NGR5800 - Theory for Advanced Practice Nursing

Course Title
Theory for Advanced Practice Nursing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Baccalaureate degree in Nursing or C.I.

Course Description
Conceptual and theoretical bases of nursing practice and research with emphasis on scholarly writing and critique. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Spring
Fall
NGR5871 - Health Care Informatics  
**Course Title**  
Health Care Informatics  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Baccalaureate in health related field or C.I.  
**Course Description**  
Use of information systems, clinical data management, communication strategies, and decision-making models. May be used in the degree program a maximum of 2 times.

**College**  
College of Nursing  
**Department**  
Department of Nursing Systems  
**Terms of Offering**  
Fall

NGR5884 - Legal and Professional Behavior in Advanced Practice Nursing  
**Course Title**  
Legal and Professional Behavior in Advanced Practice Nursing  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate standing and admission to the M.S. in Nursing or Doctor of Nursing Practice program.  
**Course Description**  
Examination of legal, ethical, cultural, and political issues related to professional advanced practice nursing. May be used in the degree program a maximum of 2 times.

**College**  
College of Nursing  
**Department**  
Department of Nursing Systems  
**Terms of Offering**  
Every Semester
NGR5894C - International Perspectives of Global Health

Course Title
International Perspectives of Global Health

Credits Hours
3

Lab/Studio/Field Work Hours
1

Course Description
Graduate standing or C.I. An analysis of global health in comparison with that of USA and other nation's health care systems.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Occasional

NGR5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Nursing

Department
Department of Nursing

NGR5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Nursing

Department
Department of Nursing
NGR6063L - Advanced Skills for the Management of Illness and Injuries

Course Title
Advanced Skills for the Management of Illness and Injuries

Credits Hours
2

Lab/Studio/Field Work Hours
6

Prerequisites
- Admission to the Doctor of Nursing Practice program or a Nurse Practitioner certificate track.

Course Description
Development of theoretical, and clinical skills for the evaluation, diagnosis, and management of illnesses and injuries.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Spring
Fall

Current Fee Per Student
$45.00

NGR6105 - Management of Symptoms and Outcomes of Disease

Course Title
Management of Symptoms and Outcomes of Disease

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Focused examination of the concepts, theories and research evidence that provide the basis for assessment and management of the patient experiences related to disease outcomes. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Summer
**NGR6172 - Pharmacology for Advanced Nursing Practice**

**Course Title**
Pharmacology for Advanced Nursing Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 5141 or C.I.

**Course Description**
Comprehensive study of medications used in the promotion and maintenance of health across the lifespan. Examination of the implications for advanced nursing practice. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Spring
Fall

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**NGR6175 - Critical Care Pharmacology**

**Course Title**
Critical Care Pharmacology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
NGR 6172 - Pharmacology for Advanced Nursing Practice. Provides a general overview of the pharmacologic agents unique to the care of the critically ill and medically-complex unstable adult-gerontology client.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester
NGR6186 - Genetics and Genomics in Advanced Nursing Practice  
**Course Title**  
Genetics and Genomics in Advanced Nursing Practice  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Baccalaureate degree in Nursing, NGR 5141 or approval of graduate coordinator or C.I.  
**Course Description**  
Application of genetics and genomic principles to advanced clinical nursing practice.  
**College**  
College of Nursing  
**Department**  
Department of Nursing Practice  
**Terms of Offering**  
Every Semester

NGR6200 - Gender Related Primary Care  
**Course Title**  
Gender Related Primary Care  
**Credits Hours**  
2  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Admission to the Doctor of Nursing Practice program, Family Nurse Practitioner or Adult/Gerontology Nurse Practitioner track; completion of NGR 5003; NGR 5003L; NGR 5141.  
**Corequisites**  
- 6342L  
**Course Description**  
Development of theoretical skills for evaluation, diagnosis, and management of the gender related health needs of men and women. May be used in the degree program a maximum of 2 times.  
**College**  
College of Nursing  
**Department**  
Department of Nursing Practice  
**Terms of Offering**  
Fall
NGR6201 - Adult I Primary Care

**Course Title**
Adult I Primary Care

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the DNP program FNP or ANP track; completion of NGR 5003, NGR 5003L, NGR 5141, or C.I.

**Corequisites**
- Adult I Primary Care Clinical, NGR 6172, or C.I.

**Course Description**
Development of theoretical skills for evaluation, diagnosis, and management of the primary care health needs of adults and communities. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Spring

NGR6201L - Adult I Primary Care Clinical

**Course Title**
Adult I Primary Care Clinical

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Corequisites**
- NGR 6201.

**Course Description**
Application of theory and skills for evaluation, diagnosis and management of the primary care health needs of adults and communities. Graded S/U. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Spring
NGR6202 - Adult II Primary Care

Course Title
Adult II Primary Care

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 6201, NGR 6201L

Corequisites
- NGR 6202L.

Course Description
Development of theoretical foundation for the evaluation, diagnosis, and management of the complex health needs of adults. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall

NGR6202L - Adult II Primary Care Clinical

Course Title
Adult II Primary Care Clinical

Credits Hours
3

Lab/Studio/Field Work Hours
9

Prerequisites
- Admission to the DNP program and completion of NGR 6201 and NGR 6201L or NGR 6240L.

Course Description
Development of theoretical and clinical skills for evaluation, diagnosis, and management of the complex and long-term needs of adults.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall
NGR6210 - Adult-Gerontology Acute Care Nurse Practitioner I

**Course Title**
Adult-Gerontology Acute Care Nurse Practitioner I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 6172, NGR 5003/NGR 5003L.

**Corequisites**
- NGR 6230L or C.I.

**Course Description**
Introduce graduate nursing students to the foundational concepts in acute and critical care patient management.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester

NGR6211 - Adult-Gerontology Acute Care Nurse Practitioner II

**Course Title**
Adult-Gerontology Acute Care Nurse Practitioner II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 6210, NGR 6230L; CR: NGR 6211L.

**Course Description**
Complex care of the stable and unstable adult-gerontology patient with complex cardiovascular, pulmonary, hematological, renal, and commonly occurring health care problems.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Fall
NGR6211L - Adult-Gerontology Acute Care Nurse Practitioner II Clinical

Course Title
Adult-Gerontology Acute Care Nurse Practitioner II Clinical

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- NGR 6210, NGR 6230L.

Corequisites
- NGR 6211.

Course Description
Complex clinical care of the stable and unstable adult-gerontology patient with complex cardiovascular, pulmonary, hematological, renal, and commonly occurring health care problems.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Every Semester

NGR6212 - Adult-Gerontology Acute Care Nurse Practitioner III

Course Title
Adult-Gerontology Acute Care Nurse Practitioner III

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 6211, NGR 6211L.

Corequisites
- NGR 6212L.

Course Description
Complex care of the stable and unstable adult-gerontology patient with complex endocrine, neurologic, gastrointestinal and commonly occurring health care problems in acutely and critically ill young, middle and older adults.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Every Semester
NGR6212L - Adult-Gerontology Acute Care Nurse Practitioner III Clinical

Course Title
Adult-Gerontology Acute Care Nurse Practitioner III Clinical

Credits Hours
3

Lab/Studio/Field Work Hours
3

Corequisites

Course Description
Complex clinical care of the stable and unstable adult-gerontology patient with common and complex occurring health care problems in acutely and critically ill young, middle and older adults.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Every Semester

NGR6215L - Adult-Gerontology Acute Care Nurse Practitioner Practicum

Course Title
Adult-Gerontology Acute Care Nurse Practitioner Practicum

Credits Hours
3 - 4

Lab/Studio/Field Work Hours
3-4

Prerequisites
Complete the following:
- NGR6212 - Adult-Gerontology Acute Care Nurse Practitioner III (3)
- NGR6212L - Adult-Gerontology Acute Care Nurse Practitioner III Clinical (3)

Course Description
Care of stable and unstable adult-gerontology patients with common and complex occurring healthcare problems in acutely and critically ill young, middle and older adults.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Every Semester
NGR6230L - Diagnostics and Skills for the Critically Ill

**Course Title**
Diagnostics and Skills for the Critically Ill

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Corequisites**
- NGR 6210.

**Course Description**
Introduce graduate nursing students to the skills and procedures used in the management of critically ill patients.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester

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NGR6240 - Adult I for APNs

**Course Title**
Adult I for APNs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Doctor of Nursing Practice program, Nurse Practitioner certificate, Family Nurse Practitioner or Adult Gerontology Nurse Practitioner tracks, NGR 5003, NGR 5003L.

**Corequisites**
- NGR 6240L.

**Course Description**
Development of theoretical skills for evaluation, diagnosis, and management of health needs of adults and communities. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Spring
NGR6240L - Adult I Clinical for APNs

Course Title
Adult I Clinical for APNs

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Admission to M.S. in Nursing program, Nursing certificate, Adult Nurse Practitioner or Family Nurse Practitioner track.

Corequisites
- NGR 6240.

Course Description
Application of skills for evaluation, diagnosis, and management of health needs of adults and communities.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall

NGR6248L - Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum

Course Title
Family Nurse Practitioner/Adult-Gero Nurse Practitioner Practice Practicum

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Completion of NGR 6201 Adult 1 and NGR 6240L Adult 1 Clinical AND NGR 6263 Gerontologic Care for APNs and NGR 6263L Gerontologic Care for APNs Clinical AND NGR 6334 Women's Health AND NGR 6342L Women's Health Clinical (if required by plan of study) AND NGR 6305 Pediatric Primary Care AND NGR 6205L Pediatric Primary Care (if required by plan of study) OR NGR 6202L Adult 2 Clinical (if required by plan of study)

Course Description
Supervised advanced clinical practice in the roles of the nurse practitioner in an individualized preceptorship. May be taken up to 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Every Semester
NGR6249 - Management of Common Health Problems of the Adult Patient  
**Course Title**  
Management of Common Health Problems of the Adult Patient  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- NGR 5141; NGR 5003 and NGR 5003L  
**Course Description**  
Analysis of current practices in management of adult patients. Incorporates diagnostic reasoning, nursing management, and evidence-based practices. May be used in the degree program a maximum of 2 times.  
**College**  
College of Nursing  
**Department**  
Department of Nursing Practice  
**Terms of Offering**  
Spring  
Fall  

NGR6263 - Gerontologic Care for APNs  
**Course Title**  
Gerontologic Care for APNs  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Admission to the Doctor of Nursing Practice program, Adult/Gerontology Clinical Nurse Specialist, Family Nurse Practitioner or Adult/Gerontology Nurse Practitioner track; and completion of NGR 5003, NGR 5003L, NGR 6201, and NGR 6240L, or C.I.  
**Corequisites**  
- NGR 6263L, or NGR 6264L.  
**Course Description**  
Development of the theoretical skills for evaluation, diagnosis and management of the health needs of older adults and communities.  
**College**  
College of Nursing  
**Department**  
Department of Nursing Practice  
**Terms of Offering**  
Summer
NGR6263L - Gerontologic Care Clinical for NPs

Course Title
Gerontologic Care Clinical for NPs

Credits Hours
2

Lab/Studio/Field Work Hours
6

Prerequisites
- Admission to the Doctor of Nursing Practice program, Adult/Gerontology Clinical Nurse Specialist, Family Nurse Practitioner or Adult/Gerontology Nurse Practitioner track; and completion of NGR 5003, NGR 5003L, NGR 6201, and NGR 6240L, or C.I.

Corequisites
- NGR 6263

Course Description
Development of clinical skills for evaluation, diagnosis, and management of the gerontologic health care needs common normal and abnormal variations in physical, cognitive, and psychologic states.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Summer

NGR6264L - Gerontologic Care Clinical for CNS

Course Title
Gerontologic Care Clinical for CNS

Credits Hours
2

Lab/Studio/Field Work Hours
2

Prerequisites
- NGR 6782 and NGR 6782L or C.I.

Corequisites
- NGR 6263

Course Description
Development of Clinical Nurse Specialist skills in management of an elderly population with acute and chronic conditions. Graded S/U. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Summer
NGR6265 - Adult/Gerontology CNS I
Course Title
Adult/Gerontology CNS I
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- NGR 5141; NGR 5003L; NGR 6874.
Course Description
Adult/Gerontology Clinical Nurse Specialist foundation. Role/scope of CNS; direct care/coaching focus. Health promotion and disease prevention across the adult lifespan. May be used in the degree program a maximum of 2 times.
College
College of Nursing
Department
Department of Nursing Systems
Terms of Offering
Spring

NGR6265L - Adult/Gerontology CNS I Clinical
Course Title
Adult/Gerontology CNS I Clinical
Credits Hours
3
Lab/Studio/Field Work Hours
3
Corequisites
- NGR 6265.
Course Description
Introduction to Adult/Gerontology CNS role; emphasis on direct care, coaching, systems leadership for health promotion and managing common problems. Graded S/U. May be used in the degree program a maximum of 2 times.
College
College of Nursing
Department
Department of Nursing Systems
Terms of Offering
Spring
NGR6266 - Adult/Gerontology CNS II

Course Title
Adult/Gerontology CNS II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 6265; NGR 6265L; NGR 6172; NGR 6801; NGR 5720.

Course Description
Continuation of Adult/Gerontology CNS I. Management of acute and/or complex problems; focus on research and ethical decision making. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall

NGR6266L - Adult/Gerontology CNS II Clinical

Course Title
Adult/Gerontology CNS II Clinical

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- NGR 6265; NGR 6265L

Corequisites
- NGR 6266.

Course Description
Continued development of Adult/Gerontology CNS role; emphasis on research, ethical decision making, and management of acute and chronic health problems.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall
NGR6267 - Adult/Gerontology CNS III

**Course Title**
Adult/Gerontology CNS III

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 6266; NGR 6266L.

**Course Description**
Continuation of Adult/Gerontology CNS II. Management of acute and/or complex problems. Focus on collaboration, systems leadership, and consultation. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring

NGR6267L - Adult/Gerontology CNS III Clinical

**Course Title**
Adult/Gerontology CNS III Clinical

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- NGR 6266; NGR 6266L

**Corequisites**
- NGR 6267.

**Course Description**
Continued development of adult/gerontology Clinical Nurse Specialist role; emphasis on collaboration, systems leadership, consultation in management of acute and chronic problems.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring

2022-2023 Graduate Catalog
NGR6305 - Pediatric Primary Care

**Course Title**
Pediatric Primary Care

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Doctor of Nursing Practice program, Family Nurse Practitioner track; completion of NGR 5003, NGR 5003L, or C.I.

**Corequisites**
- 6305L.

**Course Description**
Development of theoretical skills for evaluation, diagnosis, and management of the primary care needs of children and their families, including common normal and abnormal variations in physical, cognitive, and psychological development. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Summer
Spring

NGR6305L - Pediatric Primary Care Clinical

**Course Title**
Pediatric Primary Care Clinical

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Corequisites**
- NGR 6305.

**Course Description**
Development of clinical skills for evaluation, diagnosis, and management of the primary care needs of children and their families, including common normal and abnormal variations in physical, cognitive, and psychological development. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Spring
NGR6331L - Pediatrics I Clinical for APNs

**Course Title**
Pediatrics I Clinical for APNs

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to MSN program or nursing certificate, FNP or PNP track.

**Corequisites**
- NGR 6331.

**Course Description**
Evaluation diagnosis and management of the primary care needs of children and their families.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Spring

NGR6332L - Pediatrics II Clinical for APNs

**Course Title**
Pediatrics II Clinical for APNs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to M.S. in Nursing program, Nursing certificate, Pediatric Nurse Practitioner track, NGR 6332.

**Course Description**
Evaluation, diagnosis, and management of the complex health needs of children and their families.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Fall

2022-2023 Graduate Catalog
NGR6334 - Women's Health for APNs

Course Title
Women's Health for APNs

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.S. in Nursing program, Nursing certificate or track, NGR 5003, NGR 5003L, NGR 5141, NGR 6172.

Corequisites
- NGR 6342L (for Adult Nurse Practitioner and Family Nurse Practitioner tracks).

Course Description
Development of theoretical skills for evaluation, diagnosis, and management of women.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Summer

NGR6335L - Focused Pediatrics Clinical for APNs

Course Title
Focused Pediatrics Clinical for APNs

Credits Hours
1

Lab/Studio/Field Work Hours
3

Prerequisites
- Admission to M.S. in Nursing program, Nursing certificate, Pediatric Nurse Practitioner track, NGR 6331.

Course Description
Application of theory and skills for the in-depth developmental and physical assessment of children and their families.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Summer
NGR6342L - Women's Health for APNs Clinical

**Course Title**
Women's Health for APNs Clinical

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to M.S. in Nursing program, Nursing certificate, Adult Nurse Practitioner or Family Nurse Practitioner track.

**Corequisites**
- NGR 6334.

**Course Description**
Application of skills for evaluation, diagnosis, and management of the health needs of women. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Summer

NGR6351 - Nursing Care of Children and Childbearing Women

**Course Title**
Nursing Care of Children and Childbearing Women

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 5141; NGR 5003 and NGR 5003L

**Corequisites**
- NGR 6801 or C.I.

**Course Description**
Analysis of nursing care of children and childbearing women. Incorporates diagnostic reasoning, nursing management, and evidence-based practices. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Spring
Fall
NGR6627 - Management of Common Health Problems of Communities

Course Title
Management of Common Health Problems of Communities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 5141; NGR 5003 and NGR 5003L

Course Description
Analysis of current practices in management of communities. Incorporates diagnostic reasoning, nursing management, and evidence-based practices. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Spring
Fall

NGR6713 - Curriculum Development in Nursing Education

Course Title
Curriculum Development in Nursing Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admissions to M.S. in Nursing program or certificate of Nursing Education, or C.I.

Course Description
Analysis of external and internal influences affecting curriculum development for the nursing education. Examination of societal factors impacting nursing education. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Summer
NGR6714 - Clinical Teaching Strategies for Nursing

**Course Title**
Clinical Teaching Strategies for Nursing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 6791 or C.I.

**Course Description**
Synthesis of research-based literature and best practice in the development, implementation and evaluation of clinical education for nursing students. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Summer

NGR6715 - Application of Instructional Technology for Nursing Education

**Course Title**
Application of Instructional Technology for Nursing Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 6791 or C.I.

**Course Description**
Analysis of effective teaching and learning strategies with emphasis on developing techniques for teaching using instructional technology in nursing education. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring
NGR6717 - Introduction to Healthcare Simulation

**Course Title**
Introduction to Healthcare Simulation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to M.S. in Nursing or Nursing Certificate or C.I. Course applies pedagogical principles and knowledge of a range of technologies to developing healthcare simulation programs. Includes principles of educational evaluation.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester

NGR6718 - Evaluation in Nursing Education

**Course Title**
Evaluation in Nursing Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 6713; NGR 6791 or C.I.

**Course Description**
Analysis of the process of systematic evaluation of learning outcomes at individual, class and program levels. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Every Semester
NGR6722 - Financial Management and Resource Development

Course Title
Financial Management and Resource Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.S. in Nursing or Doctor of Nursing Practice program or C.I.

Course Description
Overview of health care financing and economics at the macro and micro level and their influence on health care delivery, resource development and health policy. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Summer

NGR6723 - Nursing Leadership and Management

Course Title
Nursing Leadership and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Science in Nursing, Doctor of Nursing Practice, Nursing Ph.D. program, or C.I.

Course Description
Analysis, synthesis and application of health care leadership principles including health and patient care, delivery systems, personnel management and finance, ethical, legal and regulatory requirements.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Spring
Fall
NGR6723L - Nursing Leadership Role Specialization Practicum

**Course Title**
Nursing Leadership Role Specialization Practicum

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- NGR 6723.

**Course Description**
Preceptor supervised experience with a nurse leader. Experience will focus on the analysis, synthesis and application of the principles related to leadership in the health care setting, including health care delivery systems, patient care delivery systems, staffing, personnel management, finance and ethical, legal and regulatory requirements.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
- Spring
- Fall

NGR6758L - Clinical Nurse Specialist Advanced Practicum

**Course Title**
Clinical Nurse Specialist Advanced Practicum

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
4

**Prerequisites**
- NGR 6781.

**Course Description**
Supervised advanced clinical practice in the clinical nurse specialist role. Integration of practice, education, consultation, research and administrative roles.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
- Spring
NGR6771L - Healthcare Simulation Practicum

**Course Title**
Healthcare Simulation Practicum

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Course Description**
NGR 6978 or C.I. Optional practicum course to prepare for roles in nursing and healthcare simulation design and evaluation.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester

NGR6772L - Nurse Leadership and Management Internship

**Course Title**
Nurse Leadership and Management Internship

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- NGR 5720, NGR 5871, NGR 6722, NGR 6723, and NGR 6723L.

**Course Description**
Perceived advanced leadership and management experience focusing on analysis, synthesis and application of principles related to nurse lead administration of health care systems.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring
Fall
NGR6773L - CNL Residency

**Course Title**
CNL Residency

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- NGR 6777L, NGR 6775L, NGR 6776L and NGR 6813.

**Course Description**
Intensive clinical immersion in role of the clinical nurse leader. Graded S/U. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Spring

NGR6775L - CNL Resources and Outcomes

**Course Title**
CNL Resources and Outcomes

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Corequisites**
- NGR 6105 and NGR 6722.

**Course Description**
Participation in clinical activities related to symptom and disease management and healthcare finance and resource utilization to improve patient outcomes.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Summer
NGR6776L - CNL Advocacy and Education

Course Title
CNL Advocacy and Education

Credits Hours
1

Lab/Studio/Field Work Hours
1

Corequisites
• NGR 5720.

Course Description
Participation in clinical activities related to organizational assessment, patient/staff education and advocacy, and professional development.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall

NGR6777L - CNL Quality and Safety

Course Title
CNL Quality and Safety

Credits Hours
1

Lab/Studio/Field Work Hours
1

Corequisites
• NGR 6874.

Course Description
Introduction to role of CNL in clinical setting; participation in clinical activities related to quality improvement and patient safety. Graded S/U. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Spring
NGR6783 - Adult CNS II
Course Title
Adult CNS II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 6172, NGR 6782, NGR 6782L, NGR 6263, NGR 6264L; C.I.

Course Description
Continuation of Adult Clinical Nurse Specialist I. Management of acute and/or complex patients. Clinical Nurse Specialist competencies of collaboration, consultation, systems leadership, and research. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall

NGR6783L - Adult CNS II Clinical
Course Title
Adult CNS II Clinical

Credits Hours
2

Lab/Studio/Field Work Hours
2

Prerequisites
- NGR 6782 and NGR 6782L; NGR 6263; NGR 6264L

Corequisites
- NGR 6783.

Course Description
Continued development of the Clinical Nurse Specialist role. Emphasis on direct care, collaboration, consultation, systems leadership, and research. Graded S/U. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall

2022-2023 Graduate Catalog
NGR6791 - Teaching Strategies for Nurse Educators

Course Title
Teaching Strategies for Nurse Educators

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to a graduate program in the College of Nursing or the graduate certificate in Nursing and Health Professional Education or C.I.

Course Description
Application of evidenced-based practice guidelines to the processes of teaching and learning. Analysis of external and internal influences affecting the educational process of health professionals. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall

NGR6794 - Organizational Leadership and Operations in Healthcare Simulation

Course Title
Organizational Leadership and Operations in Healthcare Simulation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
NGR 6717 or C.I. Prepares students with the knowledge and skills necessary to manage a simulation program in a healthcare environment.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Spring

2022-2023 Graduate Catalog
NGR6801 - Research Methods

Course Title
Research Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 5800.

Course Description
Identify and critically appraise existing scientific evidence, and apply evidentiary findings to nursing practice, population or setting. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Spring
Fall

NGR6813 - Evidence Based Nursing Practice

Course Title
Evidence Based Nursing Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 5800 and NGR 6801; must be in last 12 hours of M.S. in Nursing program or in Doctor of Nursing Practice plan of study.

Course Description
Apply research, theory and other evidence to advanced practice nursing. Processes for implementation, evaluation and synthesis of evidence-based nursing practice are included. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Every Semester
NGR6871 - Augmented, Virtual, and Mixed Realities in Healthcare

**Course Title**
Augmented, Virtual, and Mixed Realities in Healthcare

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Interdisciplinary examination of virtual, augmented, and mixed reality use in healthcare.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Occasional

NGR6874 - Nursing Environment Management

**Course Title**
Nursing Environment Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to the M.S. in Nursing or Doctor of Nursing Practice track or C.I. In-depth analysis of the use of informatics, quality management, risk reduction and patient safety concepts and tools to promote improved patient outcomes for nursing care. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring
NGR6886 - Professional Ethics and Rational Decision Making in Medicine and Advanced Nursing

Course Title
Professional Ethics and Rational Decision Making in Medicine and Advanced Nursing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
An analysis of ethical theories that guide clinical, policy, and research decision-making in medicine and advanced nursing in a diverse society. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Summer

NGR6899 - The Practice of Global Health Care

Course Title
The Practice of Global Health Care

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Graduate Nursing Program or C.I. An overview of health care from a global perspective, synthesizing the theory and practice of global health.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Every Semester
NGR6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Nursing
Department
Department of Nursing

NGR6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Nursing
Department
Department of Nursing

NGR6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Nursing
Department
Department of Nursing Systems
NGR6941 - Advanced Practice Practicum

**Course Title**
Advanced Practice Practicum

**Credits Hours**
1 - 99

**Prerequisites**
- Admission to M.S. in Nursing, Doctor of Nursing Practice, Clinical Nurse Specialist or Nurse Practitioner certificate.

**Course Description**
Can be started concurrently with final clinical course in program of study. (Varies with plan of study.). Supervised advanced clinical practice in the role of nurse practitioner in an individualized preceptorship.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Every Semester

NGR6942C - Internship in Nursing Education

**Course Title**
Internship in Nursing Education

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- NGR 6945L and NGR 6718.

**Course Description**
Application of principles of education through guided practice in classroom and clinical settings and assimilation of the nurse educator role.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Every Semester
NGR6945L - Clinical Specialty Practicum

**Course Title**
Clinical Specialty Practicum

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- NGR 5141, NGR 5190, or C.I.

**Course Description**
Supervised clinical practice activities related to nursing care of common health problems of specific patient population. Graded S/U. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring
Fall

NGR6978 - Healthcare Simulation Capstone Project

**Course Title**
Healthcare Simulation Capstone Project

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 6794 or C.I.

**Course Description**
Preparation and testing of a healthcare simulation project using a multi-disciplinary team approach.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Summer
Fall
NGR7065 - Advanced Clinical Management for Advanced Practice Nursing

Course Title
Advanced Clinical Management for Advanced Practice Nursing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Corequisites
◆ NGR 7748L.

Course Description
Advanced diagnostic reasoning and analysis of clients with complex health maintenance, health promotion and illness management specific to speciality. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall

NGR7115 - Philosophical and Ethical Foundations of Nursing Science

Course Title
Philosophical and Ethical Foundations of Nursing Science

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
◆ Doctoral standing in College of Nursing or C.I.

Course Description
Analysis of the philosophical and ethical underpinnings of nursing science, linking it to the development of philosophy of science and personal philosophy.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall
NGR7123 - Theory in Nursing Science

Course Title
Theory in Nursing Science

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to a doctoral program in Nursing or C.I.

Course Description
This course examines the foundations and application of theory in nursing science.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall

NGR7163 - Illness as a Social Construct

Course Title
Illness as a Social Construct

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 7818 or C.I.

Course Description
Focused examination of concepts, theories, and research related to physical expression of disease and its link to individual psychosocial responses, beliefs, relationships and social environment. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing

Terms of Offering
Occasional
NGR7661 - Healthcare for Vulnerable Populations

Course Title
Healthcare for Vulnerable Populations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing in the College of Nursing or C.I.

Course Description
Health and healthcare issues of vulnerable populations and the influence of social, cultural, political and economic factors. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall

NGR7673 - Epidemiology Principles in Advanced Practice Nursing

Course Title
Epidemiology Principles in Advanced Practice Nursing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Doctor of Nursing Practice program or C.I.

Course Description
Advanced application of epidemiological concepts in community and public health practice, including disease surveillance, prevalence, prevention and statistical management of patient aggregate data. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall
NGR7748L - Advanced Clinical Practice Selective for Advanced Practice Nursing

Course Title
Advanced Clinical Practice Selective for Advanced Practice Nursing

Credits Hours
1 - 3

Lab/Studio/Field Work Hours
3-Jan

Prerequisites
- NGR 7176

Corequisites
- NGR 7065.

Course Description
Clinical management of clients with complex health maintenance, health promotion and illness management needs. Graded S/U. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Fall

NGR7778L - Advanced Leadership Selective for DNP

Course Title
Advanced Leadership Selective for DNP

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Admission to the Doctor of Nursing Practice, Executive Doctor of Nursing Practice track or C.I.

Course Description
Application of evidence-based management processes to support decision making in the health care environment. Graded S/U. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall
NGR7779C - Program Development and Management for DNP

Course Title
Program Development and Management for DNP

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to the Doctor of Nursing Practice, Executive Doctor of Nursing Practice track or C.I.

Course Description
Application of inquiry, critical thinking and strategic planning skills related to project planning, management, evaluation and dissemination. Graded S/U. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall

NGR7793 - Leadership and Economics in Advanced Practice Nursing

Course Title
Leadership and Economics in Advanced Practice Nursing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 7891.

Course Description
Advanced analysis of change management, leadership theories/strategies, finance and resource management and the health care systems and economic structures in Advanced Practice Nursing.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Summer
NGR7805 - Doctoral Scholarship

Course Title
Doctoral Scholarship

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Ph.D. track or C.I.

Course Description
An introduction to doctoral scholarship in support of beginning a program of research. Includes responsible conduct of science and research ethics consideration. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Every Semester

NGR7806 - Doctoral Scholarship II

Course Title
Doctoral Scholarship II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 7805 or C.I.

Course Description
A continuation of Doctoral Scholarship with an emphasis on synthesizing the research and theoretical literature related to the students area of research. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Summer
NGR7807 - Research Approaches and Designs for Nursing and Healthcare

Course Title
Research Approaches and Designs for Nursing and Healthcare

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing in the College of Nursing or C.I.

Course Description
Quantitative and qualitative approaches to studying nursing and health related phenomena; ethical issues; internal and external validity; comparison of designs. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall

NGR7808 - Qualitative Methods in Nursing and Healthcare II

Course Title
Qualitative Methods in Nursing and Healthcare II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 7815 Qualitative Methods I or equivalent or C.I.

Course Description
Application of qualitative methodologies for in-depth study of nursing and health-related phenomena; hands-on experience with data collection, analysis, and interpretation. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall
NGR7812 - Advanced Study Design and Methods

Course Title
Advanced Study Design and Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- NGR 7807; NGR 7817; NGR 7815; and NGR 7818 or NGR 7808; or C.I.

Course Description
Identify and discuss evolving trends in advanced research design and methods as they apply to the development of nursing research programs.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Spring

NGR7815 - Qualitative Methods in Nursing Research and Healthcare I

Course Title
Qualitative Methods in Nursing Research and Healthcare I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Doctoral standing in the College of Nursing or C.I.

Course Description
Knowledge of qualitative research designs and methods for studying nursing and health-related phenomena. Course may be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Fall
NGR7817 - Quantitative Methods for Nursing and Healthcare I

**Course Title**
Quantitative Methods for Nursing and Healthcare I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 7807 or C.I.

**Course Description**
Designing quantitative studies and related statistical analysis; maximizing statistical power; ethical issues related to nursing research. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Fall

NGR7818 - Quantitative Methods for Nursing and Healthcare II

**Course Title**
Quantitative Methods for Nursing and Healthcare II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 7817 Quant Methods I or its equivalent or C.I.

**Course Description**
Advanced research designs; multivariate and biostatistical data analysis in nursing and health related research. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring
NGR7820 - Innovative Technologies in Healthcare

Course Title
Innovative Technologies in Healthcare

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing in the College of Nursing or C.I.

Course Description
Application of innovative technologies in healthcare to research, teaching and practice. Legal, ethical and cultural issues related to technology transfer. May be used in the degree program a maximum of 2 times.

College
College of Nursing

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Department of Nursing Systems

Terms of Offering
Summer

NGR7823 - Psychometrics and Measurement for Nursing Research

Course Title
Psychometrics and Measurement for Nursing Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- NGR 7817, NGR 7815, or C.I.

Course Description
Developing, testing and applying measurement theory in physiological and psycho social research analysis of psychometric properties of instruments and methods appropriate to theoretical perspectives and scientific rigor. May be used in the degree program a maximum of 2 times.

College
College of Nursing

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Terms of Offering
Fall
NGR7827 - Concepts, Measurement, and Data Management

Course Title
Concepts, Measurement, and Data Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Doctor of Nursing Practice program, NGR 6813 or equivalent, C.I.

Course Description
Identification, analysis, and measurement of concepts; analysis and management of clinical data. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Spring

NGR7855C - Evidence-Based Practice Development for DNP

Course Title
Evidence-Based Practice Development for DNP

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to the Doctor of Nursing Practice, Executive Doctor of Nursing Practice track or C.I.

Course Description
Critique and synthesis of evidence for practice related questions. Includes analysis of the context where evidence will be applied. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Practice

Terms of Offering
Spring
Fall
NGR7892 - Healthcare Systems and Policy

**Course Title**
Healthcare Systems and Policy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Doctoral standing in the College of Nursing or C.I.

**Course Description**
Underpinnings of healthcare policy; healthcare policy formation and change agency; influences on healthcare systems; related analysis and research. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring

NGR7911C - Doctoral Project I

**Course Title**
Doctoral Project I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Doctoral standing in the College of Nursing or C.I.

**Course Description**
Identification of a practice-based problem, integration of existing evidence to propose a project to address the problem. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Fall
NGR7912C - Doctoral Project 2

**Course Title**
Doctoral Project 2

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- NGR 7911C - Doctoral Project I, Doctoral standing in the College of Nursing or C.I.

**Course Description**
Implementation of a DNP Committee approved practice based project to address a health care problem. May be used in the degree program a maximum of 2 times.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring

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NGR7913 - Doctoral Project 3

**Course Title**
Doctoral Project 3

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 7912C - Doctoral Project 2, Doctoral standing in the College of Nursing or C.I.

**Course Description**
Completion of implementation, analysis of data, final paper approval and public presentation of DNP project.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Every Semester
NGR7916 - Research Grants Process and Proposal Writing

Course Title
Research Grants Process and Proposal Writing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Grants process include writing elements of research proposal for HIH R-series applications and strategies for successful proposal preparation. May be used in the degree program a maximum of 2 times.

College
College of Nursing

Department
Department of Nursing Systems

Terms of Offering
Occasional

NGR7919 - Doctoral Research

Course Title
Doctoral Research

Credits Hours
1 - 99

College
College of Nursing

Department
Department of Nursing Systems
NGR7932 - Nursing Research Grants Process and Proposal Writing

**Course Title**
Nursing Research Grants Process and Proposal Writing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
NGR 7916. The second of a Nursing two-course series on development and funding of programs of research; focuses on refinement of student research trajectories and grantsmanship for small research grant funding.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Spring

NGR7939C - Special Topics

**Course Title**
Special Topics

**Credits Hours**
1 - 99

**College**
College of Nursing

**Department**
Department of Nursing Systems

NGR7942L - DNP Professional Practice Immersion

**Course Title**
DNP Professional Practice Immersion

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Course Description**
Doctoral standing in the College of Nursing or C.I. Sponsored student immersion in a professional practice setting to promote advanced nursing leadership needs assessment, evaluation of public policy and design of care delivery models.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Every Semester
NGR7948L - Doctor of Nursing Practice Residency

**Course Title**
Doctor of Nursing Practice Residency

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
Jan-99

**Prerequisites**
- NGR 7065; NGR 7748L.

**Course Description**
Clinical management of clients with complex health maintenance, health promotion and illness management needs focusing on a continuum of care within health care systems or organizations. There is a 6 hour requirement.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Summer
Spring

NGR7952 - Scientific Writing for Nurses and Healthcare Professionals

**Course Title**
Scientific Writing for Nurses and Healthcare Professionals

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to Graduate Nursing or Healthcare related discipline. Identify, discuss, and practice effective scientific writing elements as they apply to nursing and healthcare related disciplines; prepare a scientific manuscript for publication.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Fall
NGR7974 - Doctor of Nursing Practice Project

**Course Title**
Doctor of Nursing Practice Project

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 7176; NGR 7673, NGR 7115; NGR 7817; NGR 7123; NGR 7892; NGR 6874.

**Course Description**
Analyze health care needs, develop an evidence based intervention and evaluate outcomes for a specific population within an identified health care setting.

**College**
College of Nursing

**Department**
Department of Nursing Practice

**Terms of Offering**
Even Spring
Odd Summer

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NGR7976L - Executive DNP Residency

**Course Title**
Executive DNP Residency

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Course Description**
NGR 7911C, NGR 7912C. Implementation of the Executive DNP Project.

**College**
College of Nursing

**Department**
Department of Nursing Systems

**Terms of Offering**
Every Semester

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OSE - Optical Sciences
OSE5041 - Introduction to Wave Optics

Course Title
Introduction to Wave Optics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- EEL 4440 or PHY 4424 or C.I.

Course Description
Electromagnetic foundation of light waves as applied to reflection, diffraction, interference, polarization, coherence, and guided waves.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Occasional

OSE5115 - Interference and Diffraction

Course Title
Interference and Diffraction

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to a graduate program in Optics, Physics or Electrical Engineering, or C.I.

Course Description
Interference of light, optical interferometry, Fraunhofer and Fresnel scalar diffraction, diffraction gratings, temporal coherence, spatial coherence, and partial coherence.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
Fall
OSE5203 - Geometrical Optics
Course Title
Geometrical Optics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to a graduate program in Optics, Physics or Electrical Engineering, or C.I.

Course Description

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
Fall

OSE5312 - Light Matter Interaction
Course Title
Light Matter Interaction

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Microscopic theory of absorption, dispersion, and refraction of materials; classical and quantum mechanical description of optical properties.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
Fall
OSE5414 - Fundamentals of Optoelectronic Devices

**Course Title**
Fundamentals of Optoelectronic Devices

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Operation, methods of fabrication, applications, and limitations of various optoelectronic devices including quantum well semiconductor devices.

**College**
College of Optics and Photonics

**Department**
College of Optics and Photonics

**Terms of Offering**
Fall

OSE5525 - Laser Engineering

**Course Title**
Laser Engineering

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Principles of laser amplification and oscillations; design of lasers; general characteristics of excitation systems.

**College**
College of Optics and Photonics

**Department**
College of Optics and Photonics

**Terms of Offering**
Summer
Spring
OSE5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Optics and Photonics

Department
College of Optics and Photonics

OSE5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Optics and Photonics

Department
College of Optics and Photonics

OSE6111 - Optical Wave Propagation

Course Title
Optical Wave Propagation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Optical propagation of light waves as applied to isotropic, anisotropic, and inhomogeneous media, guided waves and Gaussian beams.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
Fall
OSE6120 - Theoretical Foundations of Optics

Course Title
Theoretical Foundations of Optics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Mathematical concepts used in Optics. Topics covered include linear algebra, orthogonal expansions of functions, Fourier transforms, ordinary differential equations, and partial differential equations.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Fall

OSE6125 - Computational Photonics

Course Title
Computational Photonics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing, OSE 6111 or C.I.

Course Description
Computational methods for photonic guided wave structures, periodic structures, and integrated photonic structures and devices.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
OSE6143 - Fiber Optics Communication System

Course Title
Fiber Optics Communication System

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and OSE 6111 and OSE 6474 or C.I.

Course Description
Use of fiber optics as a communication channel. Principles of fiber optics. Mode theory, transmitters, modulators, sensors detectors and demodulators.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring

OSE6211 - Imaging and Optical Systems

Course Title
Imaging and Optical Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to a graduate program in Optics, Physics or Electrical Engineering, or C.I.

Course Description
Linear systems theory of discrete and continuous one- and two-dimensional systems. Applications to optical polarization, pulse propagation, and image formation.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
Fall
OSE6242 - Infrared Systems

Course Title
Infrared Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- GS in Electrical Engineering, or GS in Optics and Photonics, or C.I.

Course Description
This course provides the background, theory, and practice of how to design, analyze, and test high performance infrared imaging systems.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Fall

OSE6265 - Optical Systems Design

Course Title
Optical Systems Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing and OSE 5203 or C.I.

Course Description
Design principles of lens and mirror optical systems; evaluation of designs using computer techniques.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Occasional
OSE6313 - Materials for Optical Systems

Course Title
Materials for Optical Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Course reviews attributes of optical materials, physical properties and structural origin to predict performance and limitations of optical materials devices and components in optical systems.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Occasional

OSE6334C - Nonlinear Optics

Course Title
Nonlinear Optics

Credits Hours
3

Lab/Studio/Field Work Hours
0.5

Prerequisites
- Graduate standing and OSE 6111 or C.I.

Course Description
Maxwell’s equations in nonlinear media, frequency conversion techniques (SHG, SFG, OPO), stimulated scattering, phase conjugation, wave-guided optics, nonlinear crystals.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
OSE6335 - Nonlinear Guided Wave Optics

**Course Title**
Nonlinear Guided Wave Optics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing and OSE 6334C or C.I.

**Course Description**
The physics and applications of nonlinear optical interactions in fibers and planar waveguides is discussed, including parametric processes, all-optical effects and solutions.

**College**
College of Optics and Photonics

**Department**
College of Optics and Photonics

**Terms of Offering**
Even Fall

OSE6347 - Quantum Optics

**Course Title**
Quantum Optics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing and OSE 5312 or C.I.

**Course Description**
Semiclassical treatment of light/matter interactions (quantized atomic states plus Maxwell's equations). Density matrix theory, coherent optical transients, pulse propagation.

**College**
College of Optics and Photonics

**Department**
College of Optics and Photonics

**Terms of Offering**
Even Spring
OSE6349 - Applied Quantum Mechanics for Optics and Engineering

Course Title
Applied Quantum Mechanics for Optics and Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Presents the elements of quantum mechanics that are essential for understanding many areas in modern optics and photonics.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Fall

OSE6416 - Organic Photonics

Course Title
Organic Photonics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing, C.I. The course reviews optic and electronic properties inorganic molecules and polymers that are critical for photonic and opto-electronic applications.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
OSE6421 - Integrated Photonics

Course Title
Integrated Photonics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Graduate standing, OSE 6111 or C.I.

Course Description
Reviews working principle, system functionality and design and fabrication issues of semiconductor integrated photonic devices and circuits for optical telecommunication and interconnect applications.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring

OSE6445 - Fundamentals of Ultrafast Optics

Course Title
Fundamentals of Ultrafast Optics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Graduate standing, and OSE 6111 or PHY 5346, and OSE 5525, or C.I.

Course Description

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
OSE6447 - Attosecond Optics
Course Title
Attosecond Optics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing, and OSE 6349 or PHY 5606, and OSE 6111 or PHY 5346 or OSE 5525, or C.I. Introduction of the forefront of attosecond optics research. Topics include the fundamental theories and latest journal publications.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Fall

OSE6455C - Photonics Laboratory
Course Title
Photonics Laboratory

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate standing, and OSE 5414 and OSE 6474, or C.I.

Course Description
Experimental study of photonic devices and systems including liquid crystal displays, fiber-optic sensors, laser diodes, electro optic modulation, acousto-optic modulation, lightwave detection, optical communications, and photonic signal processing.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Even Fall
Odd Spring
OSE6474 - Fundamentals Optical Fiber Communications

Course Title
Fundamentals Optical Fiber Communications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing: OSE 6111, or C.I.

Course Description
GS; OSE 6111, or C.I. Introduces key principles and analysis of optical communication systems. Emphasis on developing the ability to analyze and design digital, analog fiber-based systems and networks.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring

OSE6526C - Laser Engineering Laboratory

Course Title
Laser Engineering Laboratory

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate standing and OSE 5525 or C.I.

Course Description
Designing and device implementation of diode pumped solid-state lasers, nonlinear frequency conversion, Q-switching, mode locking, and pulse second harmonic generation.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Summer
OSE6527 - Fiber Lasers

Course Title
Fiber Lasers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
GS and OSE 5525, and OSE 6432 or OSE 6474. This course combines an introduction to fiber lasers with detailed technical discussions based on reviews of recent progress and latest developments in fiber laser research.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Even Fall

OSE6536 - Semiconductor Lasers

Course Title
Semiconductor Lasers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and OSE 5414 or C.I.

Course Description
Light-matter interaction, thermal physics and solid state physics to understand, analyze, and engineer semiconductor lasers with different active region dimensionalities.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Spring
OSE6615L - Optoelectronic Device Fabrication Laboratory

**Course Title**
Optoelectronic Device Fabrication Laboratory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Design and micro-fabrication of semiconductor optoelectronics devices including passive waveguides, light emitting diodes (LEDs), laser diodes (LDs), photodetectors and electro-optic modulators.

**College**
College of Optics and Photonics

**Department**
College of Optics and Photonics

**Terms of Offering**
Fall

OSE6650 - Optical Properties of Nanostructured Materials

**Course Title**
Optical Properties of Nanostructured Materials

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing OSE 6111, OSE 5312, or C.I.

**Course Description**
Theory and application of nanostructured optical materials: Effective medium theory, nanostructured surfaces, plasmon waveguides, nanophotonic circuits, metallic near-field lenses, collective modes in nanoparticle arrays, metamaterials.

**College**
College of Optics and Photonics

**Department**
College of Optics and Photonics

**Terms of Offering**
Spring
OSE6820 - Flat Panel Displays

Course Title
Flat Panel Displays

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Liquid crystal display, projection display, micro display, plasma display, light emitting diodes, organic light emitting display, and field emission display.

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Occasional

OSE6908 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Optics and Photonics

Department
College of Optics and Photonics

OSE6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Optics and Photonics

Department
College of Optics and Photonics
OSE6938 - ST: Infrared Detectors

Course Title
ST: Infrared Detectors

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Discusses major types of infrared detectors including thermal, photoconductors, photovoltaic, and photodiodes. Emphasis on modern starring-infrared-focal-plane design. Review of design and measurement of detector properties that contribute to detector sensitivity.

College
College of Optics and Photonics

Department
College of Optics and Photonics

OSE6971 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Optics and Photonics

Department
College of Optics and Photonics

OSE7919 - Research

Course Title
Research

College
College of Optics and Photonics

Department
College of Optics and Photonics

Terms of Offering
Every Semester
OSE7980 - Dissertation
Course Title
Dissertation
Credits Hours
1 - 99
College
College of Optics and Photonics
Department
College of Optics and Photonics

PAD - Public Administration

PAD5041 - Ethics and Values in Public Administration
Course Title
Ethics and Values in Public Administration
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Examination of ethics in the public sector. Public concerns, past patterns, and individual/social aspects of ethical behavior are explored.
College
College of Community Innovation and Education
Department
School of Public Administration
Terms of Offering
Occasional
PADS145 - Volunteerism in Nonprofit Management

**Course Title**
Volunteerism in Nonprofit Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Nonprofit Management degree, Nonprofit certificate or C.I.

**Course Description**
Volunteer development in nonprofit organizations, including board selection, development and leadership, volunteer recruitment, training, retention and theories of motivation, leadership, ethical issues.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Spring
Fall

PADS146 - Nonprofit Resource Development

**Course Title**
Nonprofit Resource Development

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Nonprofit Management, Certificate in Nonprofit Management, Certificate in Fundraising or C.I.

**Course Description**
Examines human resource development and financial resource development in nonprofit organizations including management issues.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Spring
Fall
PADS185 - Foundations of Social Justice for Public Service

Course Title
Foundations of Social Justice for Public Service

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate standing.

Course Description
The course provides an overview and foundation for understanding the roots of some of today's most complex public management social problems.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PADS186 - Policy Advocacy for Social Justice

Course Title
Policy Advocacy for Social Justice

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate standing.

Course Description
Community-based policy advocacy seeks to strengthen group solidarity to promote change. Policy analysis and interpersonal skills to mobilize groups and communities are examined.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall
PAD5336 - Introduction to Urban Planning

Course Title
Introduction to Urban Planning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Science in Urban and Regional Planning, or Master of Public Administration, or Master of Nonprofit Management, or Certificate in Emergency Management and Homeland Security, or Certificate in Urban and Regional Planning, or C. I.

Course Description
Issues of urbanization, regional development, land use and comprehensive planning, environmental planning, and social planning.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Fall

PAD5337 - Urban Design

Course Title
Urban Design

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Science in Urban and Regional Planning, or Master of Public Administration, or Master of Nonprofit Management, or Certificate in Urban and Regional Planning, or C. I.

Course Description
Planning techniques such as planned unit developments, capital improvements planning, and growth management, and planning methods, including needs assessment and graphic design.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Fall
PADS338 - Land Use and Planning Law

Course Title
Land Use and Planning Law

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Science in Urban and Regional Planning, or Master of Public Administration, or Master of Nonprofit Management, or Certificate in Emergency Management and Homeland Security, or Certificate in Urban and Regional Planning, or C. I.

Course Description
Review of national and local aspects of the legal underpinnings of urban planning aspects such as zoning, growth management, and environmental regulation.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring

PADS356 - Managing Community and Economic Development

Course Title
Managing Community and Economic Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Science in Urban and Regional Planning, or Master of Public Administration, or Master of Nonprofit Management, or Certificate in Emergency Management and Homeland Security, or Certificate in Urban and Regional Planning, or C. I.

Course Description
Overview of economic development activities focusing on policy and managerial issues at the local level.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
PAD5425 - Dispute Resolution in the Public Sector

**Course Title**
Dispute Resolution in the Public Sector

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
An examination of the skills needed to resolve disputes in the public sector through facilitation, mediation, and other alternative methods.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional

PAD5807 - Local Government Operations

**Course Title**
Local Government Operations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Operational Functions of municipal and county governments and the role of the chief executive officer.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional
PADS850 - Grant and Contract Management

Course Title
Grant and Contract Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master of Nonprofit Management, or Master of Research Administration, Certificate in Nonprofit Management, Certificate in Emergency Management and Homeland Security, Certificate in Public Administration, or Certificate in Fundraising, or C.I.

Course Description
Study of government or public nonprofit agency grant and contract administration and management responding to funding assistance solicitations and grant and contract preparation, evaluation, and presentation.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PADS855 - Introduction to Public Procurement

Course Title
Introduction to Public Procurement

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master of Public Administration, or Master of Nonprofit Management, or C.I.

Course Description
Acquisition of knowledge and skills relating to the public procurement process.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD5887 - Energy Policy

Course Title
Energy Policy

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate Student or C.I.

Course Description
This course will address the history and future of energy technology trajectories, and the interaction of policy, economics, politics, and institutions on these developments. Particular emphasis will be on clean energy and air pollution policies in the US, but this course will also review transportation, environmental, and resource policies along with international agreements and fossil-based sources of energy.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Every Semester

PAD5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Public Administration
PAD5930 - Global Cities

Course Title
Global Cities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Master student in the School of Public Administration.

Course Description
The course seeks to understand the interdependencies that define living conditions for residents in the world's interconnected global cities. Monetary, material, energy, vehicle and information flows continuously transform the city's built environment, livability, employment opportunities, and cultural practices. Sustainability, resilience to environmental changes, social cohesion, effective governance and innovation are key desirable outcomes for global city residents.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Every Semester

PAD5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Public Administration
PAD6035 - Public Administration in the Policy Process

Course Title
Public Administration in the Policy Process

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Public Administration, or Master of Science in Urban and Regional Planning, or Certificate in Public Administration, or Certificate in Police Leadership, or C. I.

Course Description
Analysis of the role of the public administrator in the analysis, formulation, implementation, and evaluation of public policies, especially at the state and local levels.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Every Semester

PAD6036 - Change Management in Public Organizations

Course Title
Change Management in Public Organizations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Human and political dimensions of change within public organizations; applications of strategic management, budgeting, organizational culture, public policy and performance to organizational change.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD6037 - Public Organization Management

Course Title
Public Organization Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master of Public Administration, or Certificate in Public Administration, or Certificate in Emergency Management and Homeland Security, or Certificate in Police Leadership, or C. I.

Course Description
Structure, functioning, performance of public organizations; behavior of individuals and groups; application for public management, includes both macro and micro approaches to organizational behavior.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD6053 - Public Administrators in the Governance Process

Course Title
Public Administrators in the Governance Process

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Master of Public Administration, or Master of Science in Urban and Regional Planning, or Certificate in Public Administration, or C. I. An examination of the political, social, economic, and moral context of modern public administration, with special attention to the ethical dimensions of the administrator’s role.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Every Semester
PAD6062 - Advanced Concepts and Applications in Public Administration

Course Title
Advanced Concepts and Applications in Public Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PAD 6035, PAD 6037, PAD 6053, PAD 6227, PAD 6417 and PAD 6701 or C.I.

Course Description
An integrative course applying the skills, knowledge, and values considered in the program to selected public problems.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD6086 - Advanced Concepts and Applications in Emergency and Crisis Management

Course Title
Advanced Concepts and Applications in Emergency and Crisis Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- All core courses in Master of Emergency and Crisis Management.

Course Description
Combines knowledge and skills gained and applies them in an integrative manner to challenges facing emergency managers today. Provides a foundation to be an effective leader in emergency management.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Every Semester
PAD6142 - Nonprofit Organizations

**Course Title**
Nonprofit Organizations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to Master of Nonprofit Management, or Master of Science in Urban and Regional Planning, or Certificate in Nonprofit Management, or Certificate in Fundraising, or Certificate in Emergency Management and Homeland Security, or C.I. Synthesis of best practices and research literature in nonprofit organization management. Instruction method is simulation where students act as nonprofit organization Board Members developing policies and procedures.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Spring
Fall

PAD6149 - Nonprofit Administration

**Course Title**
Nonprofit Administration

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master in Nonprofit Management or Graduate Certificate and PAD 5145, PAD 5146, PAD 6142, PAD 6208 and PAD 6335 or C.I.

**Course Description**
Provides an overview of nonprofit leadership and board development, focusing on the ethical, legal and administrative responsibilities of those individuals responsible for nonprofit management.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration
PAD6167 - Graduate Nonprofit Leadership Seminar

Course Title
Graduate Nonprofit Leadership Seminar

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Nonprofit Management or Nonprofit certificate program and C.I.

Course Description
Discussion and activity-based course exploring nonprofit competencies to prepare students for management and leadership positions in human services.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Odd Fall

PAD6200 - International Emergency and Crisis Management

Course Title
International Emergency and Crisis Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Master student in the School of Public Administration.

Course Description
This course will engage students to the world of crises, disasters, and emergencies. They devastate, injure, and kill, wherever they occur, but when they strike the least among us, the devastation, the injuries, and the fatalities increase exponentially. Students are expected to complete the course with a well-defined mental map - a map that will guide your understanding of new crises, disasters, and emergencies as they increase in frequency and intensity around the world. We want you to be both engaged and thoughtful observers and participants in the WORLD of emergency management.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Every Semester
PAD6207 - Public Financial Management

Course Title
Public Financial Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
PAD 6227 and PAD 6700, or C.I.

Course Description
Survey of financial management functions in local government, such as accounting, fund structures, debt and case management, and financial reporting.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD6208 - Nonprofit Financial Management

Course Title
Nonprofit Financial Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Master of Nonprofit Management, or Certificate in Nonprofit Management, or Certificate in Fundraising or C.I. Financial management in nonprofit organizations, including nonprofit funding, budgeting policies and procedures, orientation of department managers to budgeting, estimating income and expenses, and ethical implications of budgeting and finance.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall
PAD6227 - Public Budgeting

**Course Title**
Public Budgeting

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Public Administration, or Master of Emergency and Crisis Management, or Certificate in Public Administration, or Certificate in Public Budgeting, or C.I. and PAD 6700.

**Course Description**
A political and rational examination of the government budgetary process and document to better understand their managerial, policy, planning, and communication functions.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Every Semester

PAD6234 - Public Capital and Debt

**Course Title**
Public Capital and Debt

**Credits Hours**
3

**Prerequisites**
- Admission to Public Budgeting and Finance Graduate Certificate or any graduate degree program in the School of Public Administration or C.I.

**Course Description**
Financial economic theories and financial management techniques to solve complex financing problems in securities markets; development of innovative financing techniques.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional
PAD6235 - Fundraising as a Profession

Course Title
Fundraising as a Profession

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Master of Nonprofit Management, or Master of Public Administration, or Certificate in Fundraising, or C. I. Examines principles involved in fundraising profession including current trends and best practices utilized by professional fundraisers. Topics include donor research, psychology of giving and volunteer involvement.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring

PAD6236 - Philanthropy and Society

Course Title
Philanthropy and Society

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
A historic overview of philanthropy focusing on voluntary action for public good, for moral action, and as a foundation of democracy.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD6237 - Ethics and Governance in Nonprofit Management

Course Title
Ethics and Governance in Nonprofit Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Nonprofit Management, or Fundraising Certificate.

Course Description
Ethical competence in public service leadership in the nonprofit sector, ethical decision making, creation of a culture of ethics through leadership, stewardship, and governance.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD6238 - Revenue Policy and Administration

Course Title
Revenue Policy and Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Graduate Certificate in Public Budgeting and Finance or any School of Public Administration graduate degree program or C.I.

Course Description
Political and economic aspects of tax administration, tax policy and fundamentals of tax legislations with emphasis on state and local government.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall
PAD6254 - Economics of Land Use Planning and Development

Course Title
Economics of Land Use Planning and Development

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Links basic growth and economic theory with applied challenges resulting from planning and development. Provides understanding of economic consequences of private market decisions on land use and development.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD6260 - Fundamentals of Public Sector Accounting

Course Title
Fundamentals of Public Sector Accounting

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Budgeting and Finance Graduate Certificate or any graduate degree program in the School of Public Administration or C.I.

Course Description
Emphasizes municipal entity fund accounting; development and use of financial statements, transaction evaluation, accounting rules and procedures.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD6307 - Public Policy Analysis and Management

**Course Title**
Public Policy Analysis and Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Public Administration, or Master of Nonprofit Management, or Master of Science in Urban and Regional Planning, or Certificate in Public Administration, or C.I.

**Course Description**
Program analysis and organization structure as policy tools, examining the implementation of differential policy and the administrator as policy maker and change agent.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional

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PAD6316 - Planning Methods

**Course Title**
Planning Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing. Encompasses two fundamental types of analyses in planning - population and economic analysis for localities and regions. Content covers data collection, analytical methods and techniques of report presentation for population and economic analysis.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Fall
PAD6327 - Public Program Evaluation Techniques

Course Title
Public Program Evaluation Techniques

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Nonprofit Management, or Master of Science in Urban and Regional Planning, or Master of Research Administration, or Certificate in Public Administration, or Certificate in Police Leadership, or C.I.

Course Description
Techniques and skills utilized in the evaluation of public programs.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD6335 - Strategic Planning and Management

Course Title
Strategic Planning and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Public Administration and PAD 6700, or Master of Nonprofit Management, or Master of Science in Urban and Regional Planning, or Master of Research Administration, or Certificate in Nonprofit Management, or Certificate in Fundraising, or Certificate in Public Administration, or C.I.

Course Description
An examination and analysis of planning, goal setting, and strategic management in public sector organizations.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall
PAD6339 - Housing Development and Planning

Course Title
Housing Development and Planning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Graduate standing or C.I.

Course Description
Metropolitan and regional planning course with primary focus on familiarizing students with housing planning and development in communities.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD6353 - Environmental Planning and Policy

Course Title
Environmental Planning and Policy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing. Underlying concepts, approaches and critical issues in the field of environmental planning and management. Environmental planning processes will be examined from various political/geographical scales and within a policy content.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
PAD6355 - Growth Management Approaches and Techniques

Course Title
Growth Management Approaches and Techniques

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Regional and metropolitan planning course that focuses on how growth management works in communities.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD6357 - Urban Resilience

Course Title
Urban Resilience

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Master student in the School of Public Administration.

Course Description
This course will examine a range of issues associated with understanding urban resilience from community, environment, infrastructure, security, to planning, and assessment aspects. Specific topics will include urban resilience and resilient communities, urban resilience, urban vulnerability, disaster resilience, resilience policy and practice, adaptive planning and hazard mitigation, urban resilience assessment, climate change adaptation, infrastructure interdependency and security, disaster recovery and housing recovery, and interdisciplinary research in urban resilience.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Every Semester
PAD6387 - Transportation Policy

Course Title
Transportation Policy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing. An examination of the process of public policy formulation and implementation in the field of transportation.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD6397 - Managing Emergencies and Crises

Course Title
Managing Emergencies and Crises

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Analyzes and integrates the basic crisis management steps: hazard mitigation, disaster preparedness, disaster response, and recovery --building analytical and practical skills necessary to perform effectively in homeland security/emergency management-related positions.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD6398 - Hazard Analysis and Disaster Planning

**Course Title**
Hazard Analysis and Disaster Planning

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing; School of Public Administration Major.

**Course Description**
Examines geospatial aspects of hazards analysis and planning with reference to disaster preparedness, recovery, mitigation, and resilience.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional

PAD6399 - Foundations of Emergency Management and Homeland Security

**Course Title**
Foundations of Emergency Management and Homeland Security

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Analyzes the policy and organizational design issues confronting managers of emergency management and homeland security programs by: examining the natural and manmade threats; by analysis of the network of actors - national, state, local, and private; and by assessing the policy, plans, and procedures at governmental and community levels.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional
PAD6417 - Human Resource Management

**Course Title**
Human Resource Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Public Administration, or Master of Nonprofit Management, or Master of Research Administration, or Certificate in Public Administration, or Certificate in Corrections Leadership, or C. I.

**Course Description**
Administrator as manager and motivator of public employees with particular emphasis on organizational behavior and contemporary public service legislation.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Spring
Fall

PAD6439 - Leadership in Public Service

**Course Title**
Leadership in Public Service

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 7916.

**Course Description**
Admission to School of Public Administration graduate degree programs. Importance of sound public leadership and development of analytical skills to recognize and resolve critical public management issues.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Fall
PAD6616 - Economic Principles for Public Policy and Management

Course Title
Economic Principles for Public Policy and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Graduate Certificate in Public Budgeting or Master of Public Administration. Economic concepts, relationships, and methods of analysis that are relevant for public sector management decisions and policy analysis; usefulness of economic analysis in Public Sector decision making.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Every Semester

PAD6700 - Research Methods in Public Administration

Course Title
Research Methods in Public Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Public Administration program or C.I.

Course Description
Statistical methodology and use of computers as a tool for decision making in the public sector.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall
PAD6701 - Analytical Techniques for Public Administration

Course Title
Analytical Techniques for Public Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PAD 6700 or C.I.

Course Description
Applied analytical tools for administrators in the public sector. Practical use of computers in policy and decision making.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD6705 - Public Sector Communications

Course Title
Public Sector Communications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Administration or Nonprofit Management master's programs.

Course Description
Recognizing stakeholders and their needs; focusing on communications specific to reputation management, branding and marketing strategies in keeping with regulatory standards.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
PAD6716 - Information Systems for Public Managers and Planners

Course Title
Information Systems for Public Managers and Planners

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing. Use of systems concept, software and computers in contemporary public sector management and planning information systems.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD6741 - Research Integrity for Research Administrators

Course Title
Research Integrity for Research Administrators

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to Master of Research Administration program.

Course Description
This course provides an overview of research integrity from the perspective of those in the field of research administration.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Summer
PAD6742 - Introduction to Research Administration

Course Title
Introduction to Research Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
Overview of research administration including history, roles and relationships, partnership, purpose and core value of research and research organizational types.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD6743 - Leadership and Organization Models in Research Administration

Course Title
Leadership and Organization Models in Research Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
General management concepts in preparation for leadership roles in Research Administration, the tools of managerial decision-making and team building, and acquaints students with theories and principles of research and development organizations.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD6744 - Financial Management in Research Administration

Course Title
Financial Management in Research Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
Overview of financial management in research administration to establish an understanding of the complex financial management and reporting environment.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD6745 - Contracting for Sponsored Programs

Course Title
Contracting for Sponsored Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
Overview of the contracting mechanisms that are relevant to sponsored program management, including federal regulations; policy-, business- and risk-based decisions impacting sponsored program contracting.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD6746 - Intellectual Property, Technology Transfer and Commercialization

Course Title
Intellectual Property, Technology Transfer and Commercialization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
Role of research administration in technology transfer and commercialization of new innovations, including intellectual property relating to copyright, patents and trademarks.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD6747 - Audits in Research Administration

Course Title
Audits in Research Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
Overview of financial and non-financial audit process for research contracts and grants. Includes audit process, types of audits and do's and don'ts when an organization is audited.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD6748 - Governance and Regulatory Issues for Sponsored Programs

Course Title
Governance and Regulatory Issues for Sponsored Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
Provides an overview of the governing and regulatory structure for which research organizations must comply and operate to administer and manage research projects and programs.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Fall

PAD6825 - Cross-Sectoral Governance

Course Title
Cross-Sectoral Governance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Examines the structures, dynamics and processes associated with developing and delivering public services through networks and partnerships involving public, nonprofit, voluntary and private sectors.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAD6826 - Urban Policy and Regional Governance
Course Title
Urban Policy and Regional Governance

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate student in School of Public Administration.

Course Description
This course explores conceptual, analytical and applied aspects of regional governance to achieve more effective local economic, environmental and social policy outcomes.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD6829 - Network Analysis in Public Policy and Management
Course Title
Network Analysis in Public Policy and Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Public Administration graduate student. Advance understanding and appreciation of design and evaluation of public policy and management networks.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
PAD6836 - Comparative Global Public Administration

Course Title
Comparative Global Public Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or C.I.

Course Description
Public Administration at the national level, to include political system, policy structure, institutional frameworks, institutional capacity and level of technology.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD6847 - Planning Healthy Communities

Course Title
Planning Healthy Communities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Addresses impact of community design on health and provision of health care to the population. Includes land use patterns, transportation, water/air quality, sanitation, mental health, provision of health care services and social capital in maintaining health.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Even Spring
PAD6848 - Policy Analysis Capstone

Course Title
Policy Analysis Capstone

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Students must complete majority of the MPP core before enrolling in Capstone.

Course Description
Provide environment in which students integrate, synthesize, and apply knowledge, skills, and perspectives acquired in MPP curriculum to real world public policy and management problem.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring

PAD6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Public Administration

PAD6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Public Administration
PAD6920 - Visualization and Presentation Workshop for Urban Planners

**Course Title**
Visualization and Presentation Workshop for Urban Planners

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Graduate standing, PAD 5337, and PAD 6716.

**Course Description**
Introduction to methods for observing, interpreting, representing, and transforming the urban environment. Through various lenses, our surroundings can be understood and expressed within a professional practice framework.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Fall

PAD6934 - Special Issues in Public Administration

**Course Title**
Special Issues in Public Administration

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Substantive and theoretical issues confronting the broad spectrum of contemporary public administration. May be repeated for credit only when course content is different.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional
PAD6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Public Administration

PAD6946 - Internship
Course Title
Internship
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Admission to Master of Public Administration, or Master of Nonprofit Management, or Master of Science in Urban and Regional Planning, or Certificate in Fundraising, or Certificate in Emergency Management and Homeland Security, and consent of Internship Director.
College
College of Community Innovation and Education
Department
School of Public Administration
Terms of Offering
Every Semester

PAD6949 - Cooperative Education in Public Administration
Course Title
Cooperative Education in Public Administration
Credits Hours
0 - 99
College
College of Community Innovation and Education
Department
School of Public Administration
PAD7006 - Intellectual History of Public Administration

**Course Title**

Intellectual History of Public Administration

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

3

**Prerequisites**

- Admission to PhD in Public Administration program.

**Course Description**

Exposure to intellectual historical background using foundational readings in public administration theory, to include research design foundations, and critical thinking about theory and practice.

**College**

College of Community Innovation and Education

**Department**

School of Public Administration

**Terms of Offering**

Fall

PAD7016 - Public Policy Processes and Theory

**Course Title**

Public Policy Processes and Theory

**Credits Hours**

3

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission to Public Administration PhD Program.

**Course Description**

Analysis of public policy aspects with an empirical focus rather than normative, although both important policy processes components. Focus on policymaking in the U.S.

**College**

College of Community Innovation and Education

**Department**

School of Public Administration

**Terms of Offering**

Odd Fall

2022-2023 Graduate Catalog
PAD7026 - Advanced Seminar in Public Administration

Course Title
Advanced Seminar in Public Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
 Admission to Public Affairs Ph.D. program or C.I.

Course Description
Discuss emerging issues in public administration research using current journal articles and exemplary research in areas such as public management.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional

PAD7057 - Advanced Public Management

Course Title
Advanced Public Management

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
 Admission to Public Affairs Ph.D. program.

Course Description
Examines the literature and practice in public organization management focusing on empirical findings and theoretical discussion in critical areas of public management and administration.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Even Spring
PAD7106 - Public Organization Theory and Behavior

Course Title
Public Organization Theory and Behavior

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Admission to PhD in Public Administration Program.

Course Description
This doctoral seminar is designed for Ph.D. students to study the theory and behavior of public organizations. It examines classic and latest literature and discusses key topics such as motivation, team and groups, organizational structure, decision making, economics of organizations, and networks. The course should guide students to develop a focused area of study prior to their dissertations.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAD7308 - Advanced Public Policy Analysis

Course Title
Advanced Public Policy Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
3

Prerequisites
- Admission to PhD in Public Administration program.

Course Description
This doctoral seminar exposes Ph.D. students to study the theory, practice, and methods of public policy analysis. It examines topics of rational policy choice, economics of public policy, policy evaluation theory and practice, and methods for impact evaluation. The course will also explore policy analysis in areas of students' specialties and interests and illustrate how researchers have applied the theoretical models and empirical methods to policy issues and public programs.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall
PAD7317 - Program Design and Management

**Course Title**
Program Design and Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. program or C.I.

**Course Description**
Analysis of community-based advanced organizational design and development theories and management techniques utilized in designing and developing public and nonprofit programs.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Even Summer

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PAD7701 - Quantitative Methods for Public Administration & Policy I

**Course Title**
Quantitative Methods for Public Administration & Policy I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to PhD in Public Administration; PAD 7706.

**Course Description**
Using probability theory, students will develop robust regression models (including time, heteroscedasticity, serial correlation, and complete regression diagnostics) with computer-based statistical software.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Spring
Fall
PAD7706 - Advanced Research Design for Public Administration and Policy

**Course Title**
Advanced Research Design for Public Administration and Policy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to PhD in Public Administration program.

**Course Description**
Students will use scientific inquiry to design and critically evaluate research methodologies. Topics include: causality, validity, reliability, conceptualization, operationalization, measurement, sampling theory, experimentation, and ethics.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Spring
Fall

PAD7707 - Advanced Research in Public Administration

**Course Title**
Advanced Research in Public Administration

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. program or C.I.

**Course Description**
Integration of knowledge and research skills gained through the doctoral program with integrative application to the most current issues in the field of public administration.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Odd Spring
PAD7709 - Advanced Qualitative Methods for Public Administration and Policy

**Course Title**
Advanced Qualitative Methods for Public Administration and Policy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission in Public Administration PhD program; PAD 7706.

**Course Description**
Students identify, gather, analyze, and report various kinds of qualitative data using observation, interviews, case studies, visual methodologies, narrative analysis, grounded theory, and action research.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Odd Fall

PAD7756 - Quantitative Methods for Public Administration and Policy II

**Course Title**
Quantitative Methods for Public Administration and Policy II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to PhD in Public Administration; PAD 7706; PAD 7701.

**Course Description**
Students will test multivariate analytic models using continuous and categorical dependent variables, and master techniques for correcting models that violate statistical assumptions.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Spring
Fall
PAD7827 - Network Governance

Course Title
Network Governance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. program or C.I.

Course Description
Analysis of theory, skills and processes of designing, developing, evaluating and managing networks in a public policy and management setting with emphasis on building capacity across organization and sectoral boundaries.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Odd Spring

PAD7919 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Public Administration

PAD7939 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Public Administration

PAF - Public Affairs
PAF6720 - Graduate Seminar in Global Health and Public Affairs Research

Course Title
Graduate Seminar in Global Health and Public Affairs Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Global Health Graduate Certificate or C.I. Interdisciplinary seminar on global health and public affairs. Impacts of science and technology, health, education, welfare and environmental policy on globalization will be examined from a comparative perspective.

College
College of Community Innovation and Education

Department
Public Affairs PhD Department

Terms of Offering
Fall

PAF7000 - Foundations of Public Affairs: People, Places, Policies and Paradigms

Course Title
Foundations of Public Affairs: People, Places, Policies and Paradigms

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. Program or C.I.

Course Description
Provides an overview of public affairs and is taught from an interdisciplinary perspective focused on the necessary components to effectively address community-based problems.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Fall
PAF7055 - Seminar in State and Local Government Policy Research

**Course Title**
Seminar in State and Local Government Policy Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. program or C.I.

**Course Description**
State and local governments explored from a comparative perspective. Focusing upon similarities and differences between states with implications for state and local policy.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Even Spring

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PAF7230 - Strategic Change and Management for Public Affairs

**Course Title**
Strategic Change and Management for Public Affairs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. program or C.I.

**Course Description**
Course deals with change in: organizations, governance relationships and communities. The course uses a "tools" approach.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Spring
PAF7317 - Social Inquiry and Public Policy

**Course Title**
Social Inquiry and Public Policy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. or C.I.

**Course Description**
Course examines the philosophical foundations of social inquiry and the importance of theory in public policy and evaluation research.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Fall

PAF7325 - Policy and Program Evaluation for Public Affairs

**Course Title**
Policy and Program Evaluation for Public Affairs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. PAF 7802 and PAF 7804, or C.I.

**Course Description**
Course is designed to use empirical information to assess the effectiveness of policies and programs in public and nonprofit settings.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Fall
PAF7510 - Seminar in Policy Evaluation and Performance Measurement

**Course Title**
Seminar in Policy Evaluation and Performance Measurement

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. Program or C.I.

**Course Description**
Applies quantitative methods to policy evaluation and performance measurement, particularly related to national and global policy changes for human development and growth.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Odd Fall

PAF7757 - Seminar in Global Governance and Policy Research

**Course Title**
Seminar in Global Governance and Policy Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. program or C.I.

**Course Description**
Comparative analysis in Public Affairs from global perspective examining and comparing U.S. Public Affairs and International Global areas.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional
PAF7802 - Advanced Research Methodology for Public Affairs

Course Title
Advanced Research Methodology for Public Affairs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. program or C.I.

Course Description
Course focuses on the nature and process of scientific inquiries including specific methods for conducting social science research in a community setting.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Fall

PAF7804 - Advanced Statistics for Public Affairs I: Multivariate Analysis

Course Title
Advanced Statistics for Public Affairs I: Multivariate Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. Program or C.I.

Course Description
An advanced statistical course that efficiently and effectively perform multivariate modeling and analyze multivariate statistical data to address critical issues in public affairs.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
PAF7805 - Advanced Statistics for Public Affairs II: Survey of Statistical Methods

Course Title

Advanced Statistics for Public Affairs II: Survey of Statistical Methods

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- Admission to Public Affairs Ph.D. program, PAF 7802 and PAF 7804 or C.I.

Course Description

Introduction to an array of statistical modeling techniques for different types of data and research designs. Coverage of theory and application of each technique.

College

College of Community Innovation and Education

Department

School of Public Administration

Terms of Offering

Fall

PAF7820 - Qualitative Methods for Public Affairs

Course Title

Qualitative Methods for Public Affairs

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- Admission to Public Affairs Ph.D. program and PAF 7802 and PAF 7804, or C.I.

Course Description

Course is an overview of qualitative research methods and their application in interdisciplinary and mixed methods community-based public affairs research.

College

College of Community Innovation and Education

Department

School of Public Administration

Terms of Offering

Fall
PAF7856 - Applications of Structural Equation Modeling in Public Affairs

Course Title
Applications of Structural Equation Modeling in Public Affairs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. program or C.I.

Course Description
Course introduces advanced methods that include causal thinking, predictor tree analysis, propensity source matching and analysis, latent growth curve modeling and multilevel modeling.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring

PAF7858 - Advanced Seminar in Governance and Policy Research

Course Title
Advanced Seminar in Governance and Policy Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PAF 7000, PAF 7300, PAF 7806 or C.I.

Course Description
Integrates theoretical and methodological applications to public policy analysis, particularly related to environmental, science and technological, health and welfare impacts.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Odd Spring
PAF7868 - Public Affairs Mixed Methods Research

Course Title
Public Affairs Mixed Methods Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. and PAF 7805 Advanced Stats for Public Affairs II or C.I.

Course Description
Develops advanced expertise in research methods skills which can include mixed methods, statistics skills, geographic information analysis, research syntheses, meta-analyses, and/or economic analysis such as cost effectiveness analysis.

College
College of Community Innovation and Education

Department
Public Affairs PhD Department

Terms of Offering
Spring

Current Fee Per Student
$44.00

PAF7925 - Symposium on Public Affairs Issues

Course Title
Symposium on Public Affairs Issues

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs program or C.I.

Course Description
Exploration of issues and trends impacting the four subject areas in U.S. Public Affairs along with the interdisciplinary characteristics of the respective cognate areas.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Occasional
PAF7947 - Public Affairs Community-Based Research

Course Title
Public Affairs Community-Based Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. and PAF 7000, PAF 7802, PAF 7804, PAF 7317, PAF 7820, PAF 7325, PAF 7805 or C.I.

Course Description
This course provides students an experiential engagement working with interdisciplinary teams and community partners to conduct and report on a community-engaged research study.

College
College of Community Innovation and Education

Department
School of Public Administration

Terms of Offering
Spring
Fall

PAF7981 - Dissertation Prospectus Seminar in Public Affairs

Course Title
Dissertation Prospectus Seminar in Public Affairs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. program and C.I.

Course Description
Train and guide students as they begin the dissertation prospectus process. Includes planning the study, conducting the literature review, developing the research questions and choosing theories and methods.

College
College of Community Innovation and Education

Department
Public Affairs PhD Department

PAZ - Parks and Zoos
PAZ5235 - Zoo and Aquarium Biology Management

**Course Title**
Zoo and Aquarium Biology Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I. Conservation, propagation and exhibition of wild animals in captivity.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Summer

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PCB - Process Cell Biology

PCB5025 - Molecular and Cellular Pharmacology

**Course Title**
Molecular and Cellular Pharmacology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing, PCB 3522.

**Course Description**
The cellular and molecular events that lead to disease states and the molecular basis of agents that modulate these processes will be covered.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Spring
PCB5235 - Molecular Immunology

Course Title
Molecular Immunology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MCB 3020C or equivalent.

Course Description
Fundamental functions of the human immune system, focusing on cellular and molecular aspects of the innate and adaptive immune response.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall

PCB5236 - Cancer Biology

Course Title
Cancer Biology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PCB 4524 and graduate standing.

Course Description
Current knowledge and research on molecular mechanism of tumor development, tumor progression, metastasis and therapy of cancer.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional
PCB5238 - Immunobiology

Course Title
Immunobiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• PCB 3233, PCB 4280.

Course Description
Advanced topics in immune system dysregulation with special emphasis on innate immunity.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Spring

PCB5265 - Stem Cell Biology

Course Title
Stem Cell Biology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Graduate standing.

Course Description
Introduction to embryonic and adult stem cells, procedures to isolate them, principles and applications of stem cells in animal and human diseases.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional
PCB5275 - Signal Transduction Mechanics

Course Title
Signal Transduction Mechanics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PCB 3522 and PCB 4524.

Course Description
A course emphasizing various signal transduction cascades used in mammalian cells to control growth and differentiation. Discussion of original research papers will occur.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional

PCB5326C - Ecosystems of Florida

Course Title
Ecosystems of Florida

Credits Hours
5

Lab/Studio/Field Work Hours
2

Course Description
Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I. Ecosystems of Florida will be discussed to include geography, geology, climate, energetics, nutrient cycling, community structure and conservation.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Occasional

Current Fee Per Student
$15.00
PCB5362C - Wetland Ecology and Biogeochemistry

Course Title
Wetland Ecology and Biogeochemistry

Credits Hours
4

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate standing in the Department of Biology or C.I.

Course Description
Examination of wetland ecosystems, laws and policy, current research, global biogeochemical cycles, and relevant field and laboratory techniques.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Even Spring

PCB5416 - Sensory Ecology

Course Title
Sensory Ecology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
How and why animals acquire, process and use information from their environment, and how sensory systems influence evolutionary processes.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Odd Spring
Even Spring
PCB5435C - Marine Ecology of Florida

**Course Title**
Marine Ecology of Florida

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Admission to the M.S. in Biology, Ph.D. in Conservation Biology, PSM in Conservation Biology, or Certificate in Conservation Biology, or C.I.

**Course Description**
Survey of experimental methods used in the study of marine communities in central and southern Florida, combining field manipulation and readings from primary literature.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Odd Spring

PCB5447 - Disease Ecology and Ecoimmunology

**Course Title**
Disease Ecology and Ecoimmunology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A grade of B (3.0) or better in Genetics (PCB 3063 or equivalent) and Ecology (PCB 3044 or equivalent), or C.I., or graduate standing. Examination of how hosts, parasites and environment interact to shape organisms, populations and communities.

**College**
College of Sciences

**Department**
Department of Biology
PCB5469 - GIS for Biologists and Ecologists

Course Title
GIS for Biologists and Ecologists

Credits Hours
3

Lab/Studio/Field Work Hours
6

Prerequisites
- Graduate standing in the Dept. of Biology, or C.I.

Course Description
Investigates how GIS is currently being used to better understand and address environment problems and to help manage and conserve natural resources.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Fall

PCB5527 - Genetic Engineering and Biotechnology

Course Title
Genetic Engineering and Biotechnology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PCB 3522 and PCB 4524 or C.I.

Course Description
Principles of Genetic Engineering/Biotechnology in Bacteria, Yeast, Viral, Mammalian, Non-mammalian systems, Plants, including human gene therapy, novel pharmaceuticals, recombinant proteins will be discussed in depth.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall
PCB5596 - Biomedical Informatics: Sequence Analysis

Course Title
Biomedical Informatics: Sequence Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PCB 3522 or equivalent or C.I.

Course Description
Introduction of useful bioinformatics tools and resources on sequence analysis.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall

PCB5688 - Wildlife Genomics

Course Title
Wildlife Genomics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate student in Biology MS or Conservation Biology PhD

Course Description
Understanding of how Genomic methods are applied to problems in wildlife biology, with an emphasis on vertebrate animal species in terrestrial and marine ecosystems.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Odd Fall
PCB5709C - Laboratory Virtual Simulations in Physiology

Course Title
Laboratory Virtual Simulations in Physiology

Credits Hours
3

Lab/Studio/Field Work Hours
2

Corequisites
- PCB 5834C

Course Description
Advanced Human Physiology. Conduct experiments in physiology that enhance the ability to design, collect, analyze data and report results in a scientific manner.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional

PCB5815 - Molecular Aspects of Obesity, Diabetes and Metabolism

Course Title
Molecular Aspects of Obesity, Diabetes and Metabolism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PCB 3522 or BCH 4053 or BSC 6432.

Course Description
Biochemical, molecular and physiological aspects of obesity, diabetes and metabolic diseases and how scientific findings can be translated towards prevention and treatment.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Odd Spring
PCB5834C - Advanced Human Physiology
Course Title
Advanced Human Physiology
Credits Hours
4
Lab/Studio/Field Work Hours
2
Prerequisites
- Graduate standing or C.I.
Course Description
Designed to provide graduate students advanced knowledge of physiological processes at the cellular, molecular and system levels.
College
College of Medicine
Department
College of Medicine Burnett School of Biomedical Sciences
Terms of Offering
Fall

PCB5837 - Cellular and Molecular Neuroscience
Course Title
Cellular and Molecular Neuroscience
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Graduate standing. An advanced and thorough course providing understanding of the cellular components and molecular signaling pathways involved in the nervous system function.
College
College of Medicine
Department
College of Medicine Burnett School of Biomedical Sciences
Terms of Offering
Every Semester
PCB5838 - Cellular and Molecular Basis of Brain Functions

**Course Title**
Cellular and Molecular Basis of Brain Functions

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Designed to provide graduate students the concepts required to understand the physiological basis of brain functions at the molecular, cellular and system levels.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Fall

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PCB5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Biology
PCB5935 - Population Genetics

**Course Title**
Population Genetics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I. Population genetics and the study of the various forces that result in evolutionary changes through time.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Even Fall

PCB5937 - ST: Advanced Inferences in Conservation Biology

**Course Title**
ST: Advanced Inferences in Conservation Biology

**Credits Hours**
1 - 99

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- PCB 6466 or Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I.

**Course Description**
An Introduction to fundamental concepts of processing high-dimensional data in an applied conservation biology context. The course includes lectures, discussions, and computer lab modules.

**College**
College of Sciences

**Department**
Department of Biology
PCB6041 - Ecological Modeling

Course Title
Ecological Modeling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PCB 6466, or C.I.

Course Description
Mathematical models used in ecology and offers tools for process-based model development in ecology.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Spring

PCB6042 - Conservation Biology Theory

Course Title
Conservation Biology Theory

Credits Hours
4

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing in Biology or C.I. Review and analysis of the literature of conservation biology.

College
College of Sciences

Department
Department of Biology
PCB6046 - Advanced Ecology
Course Title
Advanced Ecology
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing in Biology, admission to Certificate in Conservation Biology, or C.I.
Course Description
Population and community ecology with emphasis on growth, regulation, species interactions, succession, and community classification.
College
College of Sciences
Department
Department of Biology
Terms of Offering
Occasional

PCB6047 - Advances in Plant Ecological Research
Course Title
Advances in Plant Ecological Research
Credits Hours
1
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the M.S. in Biology, Ph.D. in Conservation Biology, or Certificate in Conservation Biology, or C.I.
Course Description
Current methodological and conceptual developments in plant ecological research. Examination of newly published and on-going research through presentations and group discussions. Graded S/U. May be used in the degree program a maximum of 2 times.
College
College of Sciences
Department
Department of Biology
Terms of Offering
Occasional
PCB6053C - Restoration Ecology

**Course Title**
Restoration Ecology

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
4

**Course Description**
Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I. Survey of the general ecological principles that guide restoration ecology: the process of assisting the recovery of degraded, damaged or destroyed ecosystems.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Spring

**Current Fee Per Student**
$70.00

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PCB6068 - Cellular Function & Medical Genetics

**Course Title**
Cellular Function & Medical Genetics

**Credits Hours**
5

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admitted to a program offered by College of Medicine Burnett School of Biomedical Sciences

**Course Description**
Relates cellular biology, biochemistry, and medical genetics to the normal cellular processes which comprise human body functions as well as pathologic or disease-causing processes.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Fall
PCB6095 - Professional Development in Biology I

Course Title
Professional Development in Biology I

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the M.S. in Biology, Ph.D. in Conservation Biology, or Certificate in Conservation Biology, or C.I.

Course Description
Methods in experimental design, research, and the ethics of animal research.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Occasional

PCB6096 - Professional Development in Biology II

Course Title
Professional Development in Biology II

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the M.S. in Biology, Ph.D. in Conservation Biology, or Certificate in Conservation Biology, or C.I.

Course Description
Preparation and presentation of research grants, scientific presentations, and scientific papers.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Occasional
**PCB6124 - Structure Bioinformatics**

**Course Title**
Structure Bioinformatics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- PCB 5596 or equivalent.

**Course Description**
Focus on tools and resources in RNA and protein structure analyses.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Occasional

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**PCB6328C - Landscape Ecology**

**Course Title**
Landscape Ecology

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to the M.S. in Biology, Ph.D. in Conservation Biology, PSM in Conservation Biology, or Certificate in Conservation Biology, or C.I.

**Course Description**
Influence of spatial heterogeneity on ecological processes. Emphasizes quantitative methods (e.g., GIS, remote sensing and modeling) to characterize landscape patterns and dynamics.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Occasional

**Current Fee Per Student**
$15.00
PCB6409 - Global Change Biology

Course Title
Global Change Biology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examination of global climate change science applied to biological systems. Topics include physical basis, physiological and evolutionary responses, range shifts, biogeochemical cycles, disturbance, uncertainty, and effective communication.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Odd Spring

PCB6466 - Methods in Experimental Ecology

Course Title
Methods in Experimental Ecology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I.

Course Description
An introduction to methods of population ecology. Experimental design, statistics, experimental variables and treatments and measurements of organisms and the environment.

College
College of Sciences

Department
Department of Biology
PCB6468 - Methods in Experimental Ecology II

**Course Title**
Methods in Experimental Ecology II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
PCB 6466 Methods in Experimental Ecology. Strengthen student's ability to collect, organize and interpret ecological data. Confronts concepts in experimental design, execution and analysis as a tool to improve ecological research.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Even Spring

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PCB6480C - Quantitative Conservation Biology

**Course Title**
Quantitative Conservation Biology

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- C.I.

**Course Description**
Data analysis & modeling to evaluate population dynamics, basic training in programming & statistical procedures of population analysis of different modeling approaches, uses & limitations.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Occasional
**PCB6528 - Plant Molecular Biology**

**Course Title**
Plant Molecular Biology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- PCB 4524 or C.I.

**Course Description**
Structure and function of plant genomes, genes, gene products and experimental approaches for genetic engineering for production of edible vaccines, antibodies or other pharmaceuticals.

**College**
College of Medicine

**Department**
Department of Biology

**Terms of Offering**
Occasional

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**PCB6556 - Conservation Genetics**

**Course Title**
Conservation Genetics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I. Applications of genetic models to the understanding and conservation of animal and plant populations.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Odd Spring
PCB6595 - Regulation of Gene Expression

Course Title
Regulation of Gene Expression

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Advanced course in molecular biology of BSC 6407C.

Course Description
Concepts of molecular biology focusing on major areas in transcriptional and translational processes.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional

PCB6655 - Advanced Invertebrate Genetics

Course Title
Advanced Invertebrate Genetics

Credits Hours
1

Lab/Studio/Field Work Hours
2

Prerequisites
- PCB 3063 or equivalent, graduate standing.

Course Description
Literature based discussion of recent developments in classical and molecular genetics of invertebrates. May be used in the degree program a maximum of 3 times.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Spring
Fall
PCB6675C - Evolutionary Biology

Course Title
Evolutionary Biology

Credits Hours
4

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I.

Course Description
Review of modern concepts and theories in evolutionary biology with emphasis on readings in the primary literature.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Even Fall

PCB6677 - Molecular Evolution and Phylogenetics

Course Title
Molecular Evolution and Phylogenetics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I.

Course Description
Advanced understanding of evolution at the molecular level based on phylogenetic analysis of changes in DNA, RNA and protein.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Odd Fall
PCB6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology

PCB6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology

PCB6930 - Current Topics in Ecology

Course Title
Current Topics in Ecology

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Research on current ecological topics will be added. The instructor will assign readings on a weekly basis. Students will lead discussion. Graded S/U. May be repeated for credit.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Occasional

2022-2023 Graduate Catalog
PCB6935 - Advanced Topics in Cardiovascular Science

Course Title
Advanced Topics in Cardiovascular Science

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing.

Course Description
Cutting-edge research in cardiovascular science is presented with emphasis on molecular mechanisms of cardiac development, vascular inflammation, oxidative stress, and neural regulation of the cardiovascular system.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Occasional

PCB6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Biology
PCB6939 - Topics in Genomics

Course Title
Topics in Genomics

Credits Hours
1

Lab/Studio/Field Work Hours
0

Course Description
PCB 3063. Review current literature in Genomics, one of the fastest growing fields in Biology.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Occasional

PCB7919 - Doctoral Research

Course Title
Doctoral Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology

PEM - Physical Education Acts (Gen)-Perform Centrd Land

PEM5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
PEM5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education

PEO - Physical Education Acts (Profnl)-Object Cent Land

PEOS917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

PEOS937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

PET - Physical Education Theory
PET5495 - Critical Issues: Ethics in Coaching and Sport

**Course Title**
Critical Issues: Ethics in Coaching and Sport

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Specializes in coaching and sport leadership in self-evaluating, examining, and developing philosophy, values, and moral reasoning skills.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy- Kinesiology

**Terms of Offering**
Even Summer

PET5766 - Advanced Coaching Theory

**Course Title**
Advanced Coaching Theory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
Advanced study of theories and methods of coaching for optimum sports performance.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy- Kinesiology

**Terms of Offering**
Occasional
PET5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

PET5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

PET6347 - Advanced Coaching Methods

Course Title
Advanced Coaching Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Graduate standing.

Course Description
Stimulate philosophic thinking and foster a spirit of confidence in the coaching profession by showing coaches various methods they can use to teach their athletes.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Odd Spring
PET6363 - Dietary and Nutritional Supplementation for Athletic Performance

Course Title
Dietary and Nutritional Supplementation for Athletic Performance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
An in-depth study of the efficacy of dietary and nutritional supplements used to enhance athletic performance and improve activities of daily living.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Even Spring

PET6367 - Bioenergetics of Human Movement and Performance

Course Title
Bioenergetics of Human Movement and Performance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or C.I.

Course Description
Analysis of substrate metabolism at rest, during acute exercise and following exercise training.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Occasional
PET6372 - Physical Activity and Nutritional Epidemiology

Course Title
Physical Activity and Nutritional Epidemiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Kinesiology MS or Education PhD-Exercise Physiology track or C.I.

Course Description
Overview of the epidemiology of physical activity, sedentary behavior and nutrition and the interaction of physical activity and nutrition with disease from a global and cultural perspective.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional

PET6391 - Training and Conditioning Techniques for Coaches

Course Title
Training and Conditioning Techniques for Coaches

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PET 5355.

Course Description
Knowledge and application of training and conditioning as it relates to the improvement of physical athletic performance and fitness.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional
PET6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy - Kinesiology

PET6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy - Kinesiology

PET6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy - Kinesiology
PET6946 - Practicum, Clinical Practice

Course Title
Practicum, Clinical Practice

Credits Hours
3 - 6

Lab/Studio/Field Work Hours
16-Aug

Prerequisites
- Admission to Kinesiology MS and C.I.

Course Description
Field experience in a kinesiology-related organization, association or business. May be repeated for credit.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Every Semester

PET7387 - Exercise Endocrinology

Course Title
Exercise Endocrinology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the program or C.I.

Course Description
An in-depth study of the neuroendocrine system and the hormonal responses to exercise.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Occasional
PGY - Photography

PGY5108C - Photography Theory and Practice
Course Title
Photography Theory and Practice
Credits Hours
3
Lab/Studio/Field Work Hours
4
Prerequisites
- Graduate Standing or C.I.
Course Description
Focus on study and practice of theory & photography as contemporary art making through readings, discussions, lectures, demos, web-based resources, in-class exercises and projects.

College
College of Arts and Humanities
Department
School of Visual Arts and Design
Terms of Offering
Occasional

PGY5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Visual Arts and Design
PGY5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Visual Arts and Design

PHC - Public Health Concentration

PHC5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
School of Global Health Management and Informatics

PHC5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Community Innovation and Education
Department
School of Global Health Management and Informatics
PHC6000 - Epidemiology

Course Title
Epidemiology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Health Services Administration graduate program or C.I.

Course Description
A study of the distribution and determination of diseases and injuries in human populations.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Summer

PHC6003 - Epidemiology of Chronic Diseases

Course Title
Epidemiology of Chronic Diseases

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Health Sciences M.S. Clinical and Lifestyle Sciences track or C.I.

Course Description
Selected topics in chronic disease with critical analysis of the current epidemiologic literature; opportunity to study methodological issues, contemporary findings and future direction of research.

College
College of Health Professions and Sciences

Department
Department of Health Sciences

Terms of Offering
Occasional
PHC6146 - Health Planning and Policy

**Course Title**
Health Planning and Policy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Health Services Administration graduate program or C.I.

**Course Description**
Review of the determinants of the revolution of the health care system in the United States; analysis of public health, preventive medicine, and therapeutic medicine in terms of quality, access, and cost; methodologies and issues in comprehensive health planning; and trends in health policy development.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Fall

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PHC6160 - Health Care Finance

**Course Title**
Health Care Finance

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- HSA 5177 or passing score on finance assessment exam.

**Course Description**
The identification of resources available to health care institutions, allocation of resources, and control of resource expenditures.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Fall
PHC6164 - Health Care Finance II

**Course Title**
Health Care Finance II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- PHC 6160.

**Course Description**
Course facilitates the development of strategic financial plans and its application to current health care management issues.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring

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PHC6183 - Health Care Emergency Management

**Course Title**
Health Care Emergency Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
Broad overview of topics related specifically to how the health care industry addresses issues associated with disasters and emergencies.

**College**
College of Community Innovation and Education

**Department**
School of Global Health Management and Informatics

**Terms of Offering**
Spring
PHC6420 - Case Studies in Health Law

Course Title
Case Studies in Health Law

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Admission to the Health Services Administration graduate program or C.I.

Course Description
Health law including patient care, liability, malpractice, workmen's compensation, and legal responsibilities of health personnel.

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

Terms of Offering
Spring

PHC6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

PHC6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics
PHC6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Global Health Management and Informatics

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PHI - Philosophy

PHI5225 - Philosophy of Language

Course Title
Philosophy of Language

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate certificate in Cognitive Sciences or C.I.

Course Description
Philosophy of the nature of language and relationships between language, reality, cognition, and culture.

College
College of Arts and Humanities

Department
Department of Philosophy

Terms of Offering
Occasional
PHI5324 - Foundations Cognitive Sciences
Course Title
Foundations Cognitive Sciences
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the Cognitive Sciences MA program or C.I.

Course Description
Critical evaluation of conceptual, historical, and theoretical foundations of the cognitive sciences.

College
College of Arts and Humanities
Department
Department of Philosophy
Terms of Offering
Fall

PHI5325 - Topics in Philosophy of Mind
Course Title
Topics in Philosophy of Mind
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission into graduate certificate program in Cognitive Sciences or C.I.

Course Description
Contemporary issues in philosophy of mind, including explanatory gap, and the problem of other minds.

College
College of Arts and Humanities
Department
Department of Philosophy
Terms of Offering
Occasional
**PHI5327 - Topics in the Cognitive Sciences**

**Course Title**
Topics in the Cognitive Sciences

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to graduate certificate program in Cognitive Sciences or C.I.

**Course Description**
Theoretical issues and empirical studies in the cognitive sciences, including contemporary discussions of mind, brain, artificial intelligence, pathologies, behavioral capacities.

**College**
College of Arts and Humanities

**Department**
Department of Philosophy

**Terms of Offering**
Fall

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**PHI5328 - Philosophies of Embodiment**

**Course Title**
Philosophies of Embodiment

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to graduate certificate in Cognitive Sciences or C.I.

**Course Description**
Relations among mind, body, and nature. Knowledge of self, world and others as articulated by Western philosophy, with special emphasis on embodied cognition.

**College**
College of Arts and Humanities

**Department**
Department of Philosophy

**Terms of Offering**
Occasional
PHI5329 - Philosophy of Neuroscience

Course Title
Philosophy of Neuroscience

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate certificate in Cognitive Sciences or C.I.

Course Description
Neurophilosophy, including discussion of promises and limitations of neuroscience for understanding of the mind.

College
College of Arts and Humanities

Department
Department of Philosophy

Terms of Offering
Occasional

PHI5340 - Research Methods in the Cognitive Sciences

Course Title
Research Methods in the Cognitive Sciences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate certificate program in Cognitive Sciences or C.I.

Course Description
Interdisciplinary research methods in the cognitive sciences.

College
College of Arts and Humanities

Department
Department of Philosophy

Terms of Offering
Spring
PHI5627 - Theoretical and Applied Ethics

Course Title
Theoretical and Applied Ethics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Senior undergraduate standing and at least one of the following: PHI 3670, PHI 3638, or graduate standing or C.I.

Course Description
A seminar in theoretical and applied ethics with emphasis on application in professional fields. Variable content.

College
College of Arts and Humanities

Department
Department of Philosophy

Terms of Offering
Fall

PHI5634 - Medical Ethics

Course Title
Medical Ethics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Ethics for practitioners of clinical medicine, health care delivery and medical research.

College
College of Arts and Humanities

Department
Department of Philosophy

Terms of Offering
Fall
PHI5665 - Knowledge, Responsibility, and Society

**Course Title**
Knowledge, Responsibility, and Society

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Senior undergraduate standing and at least one of the following: PHI 3670, PHI 3638, PHI 4300, PHI 4341, PHI 4400, PHI 4633, PHI 4931 or Graduate standing.

**Course Description**
A seminar exploring the relationship between ethics and epistemology with application to social concerns. Variable content.

**College**
College of Arts and Humanities

**Department**
Department of Philosophy

**Terms of Offering**
Occasional

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PHI5687 - Ethics in Science and Technology

**Course Title**
Ethics in Science and Technology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
The relationship between ethics and the pursuit and application of human knowledge, emphasizing the responsibility of scientists to society.

**College**
College of Arts and Humanities

**Department**
Department of Philosophy

**Terms of Offering**
Occasional
PHI5697 - Neuroethics

Course Title
Neuroethics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Advanced ethical issues associated with the mind sciences, especially neuroscience.

College
College of Arts and Humanities

Department
Department of Philosophy

Terms of Offering
Occasional

PHI5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of Philosophy

PHI5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of Philosophy
PHI6679 - Digital Ethics

**Course Title**
Digital Ethics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Critical examination of the nature and scope of the digital and its ethical implications for social structures and institutions, and human and nonhuman nature.

**College**
College of Arts and Humanities

**Department**
Department of Philosophy

**Terms of Offering**
Occasional

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PHM - Philosophy of Man and Society

PHM5035 - Environmental Philosophy

**Course Title**
Environmental Philosophy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- PHI 3640, PHI 2630, graduate status or senior standing, or C.I.

**Course Description**
In-depth examination of the major contemporary positions in environmental philosophy, including deep ecology, ecofeminism, and social ecology.

**College**
College of Arts and Humanities

**Department**
Department of Philosophy

**Terms of Offering**
Occasional
PHM5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
Department of Philosophy

PHM5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
Department of Philosophy

PHT - Physical Therapy

PHT5003 - Foundations of Physical Therapy
Course Title
Foundations of Physical Therapy
Credits Hours
2
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the Physical Therapy program.
Course Description
Introduction to the profession of physical therapy.
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy - Kinesiology
Terms of Offering
Summer
PHT5125 - Clinical Kinesiology

**Course Title**
Clinical Kinesiology

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Corequisites**
- PHT 5125L.

**Course Description**
Investigates the mechanical aspects of human movement, joint mechanics of the upper and lower extremity, the vertebral column and tissue mechanics of relevant human tissues.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Summer

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PHT5125L - Clinical Kinesiology Lab

**Course Title**
Clinical Kinesiology Lab

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
2

**Corequisites**
- PHT 5125.

**Course Description**
Graduate level study of human musculoskeletal movement with an emphasis on joint mechanics and clinical applications.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Summer

**Current Fee Per Student**
$35.00

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2022-2023 Graduate Catalog
PHT5218C - Therapeutic Modalities in Rehabilitation

Course Title
Therapeutic Modalities in Rehabilitation

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to the Doctor of Physical Therapy Program.

Course Description
Theories of physical agents, heat, light, cold, water, sound, and massage; problem solving rationale and selection of interventions for inflammation, pain, edema, and weakness.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Spring

Current Fee Per Student
$30.00

PHT5240 - Physical Assessment

Course Title
Physical Assessment

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Physical Assessment Lab. Extensive theory and practice in the examination of the patient.

Course Description
Incorporate a systems approach, utilizing screening, and patient problem solving.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall
**PHT5240L - Physical Assessment Lab**

**Course Title**
Physical Assessment Lab

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
4

**Corequisites**
- Physical Assessment.

**Course Description**
Lab course emphasizing the examinations required to perform an evaluation of physical therapy patient.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Fall

**Current Fee Per Student**
$45.00

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**PHT5241 - Therapeutic Exercises I**

**Course Title**
Therapeutic Exercises I

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Corequisites**
- Therapeutic Exercises I Lab.

**Course Description**
Theory of developing, implementing, and evaluating a therapeutic exercise program for patients with musculoskeletal dysfunction.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Spring

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2022-2023 Graduate Catalog
PHT5241L - Therapeutic Exercise Lab I  
**Course Title**  
Therapeutic Exercise Lab I  

**Credits Hours**  
2  

**Lab/Studio/Field Work Hours**  
4  

**Prerequisites**  
- Therapeutic Exercise I.  

**Course Description**  
Lab course emphasizing therapeutic exercise skills for the treatment of patients with musculoskeletal dysfunction.  

**College**  
College of Health Professions and Sciences  

**Department**  
School of Kinesiology and Physical Therapy - Kinesiology  

**Terms of Offering**  
Spring  

**Current Fee Per Student**  
$20.00

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PHT5260 - Patient Care Skills  
**Course Title**  
Patient Care Skills  

**Credits Hours**  
2  

**Lab/Studio/Field Work Hours**  
0  

**Corequisites**  
- Patient Care Skills Lab.  

**Course Description**  
Affective, cognitive, and psychomotor skills, regarding patient care. Basic skills of patient care, transfers, mobility skills, draping, gait training.  

**College**  
College of Health Professions and Sciences  

**Department**  
School of Kinesiology and Physical Therapy - Kinesiology  

**Terms of Offering**  
Fall
PHT5260L - Patient Care Skills Lab
Course Title
Patient Care Skills Lab
Credits Hours
2
Lab/Studio/Field Work Hours
4
Corequisites
- PHT 5260
Course Description
Skills of patient care, transfers, mobility skills.
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy– Kinesiology
Terms of Offering
Fall
Current Fee Per Student
$30.00

PHT5718 - Neurological Physical Therapy
Course Title
Neurological Physical Therapy
Credits Hours
3
Lab/Studio/Field Work Hours
0
Corequisites

Course Description
Analysis of selected neuromotor theories and their clinical applications. Examinations and interventions for the evaluation and treatment of neurological patients presented.
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy– Kinesiology
Terms of Offering
Summer
PHT5718L - Neurological Physical Therapy Lab

**Course Title**
Neurological Physical Therapy Lab

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
2

**Corequisites**
- Neurological Physical Therapy.

**Course Description**
Lab Course emphasizing the clinical application of selected neuromotor theories.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Summer

**Current Fee Per Student**
$30.00

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PHT5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

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PHT5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology
PHT5937L - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

PHT6070C - Radiology/Imaging for Physical Therapy

Course Title
Radiology/Imaging for Physical Therapy

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to DPT program.

Course Description
A diagnostic imaging course focusing on clinical implications in rehabilitation. The focus will be on patients with neurological and orthopedic disorders.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall
PHT6115C - Gross Anatomy/Neuroscience I

Course Title
Gross Anatomy/Neuroscience I

Credits Hours
6

Lab/Studio/Field Work Hours
6

Prerequisites
- Admission to DPT program.

Course Description
Study of human anatomy via lecture and cadaver dissection emphasizing upper and lower extremity, musculoskeletal, peripheral vascular and peripheral nervous systems, thoracic and abdominopelvic cavities.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Summer

Current Fee Per Student
$70.00

PHT6118C - Gross Anatomy/Neuroscience II

Course Title
Gross Anatomy/Neuroscience II

Credits Hours
6

Lab/Studio/Field Work Hours
6

Prerequisites
- Gross Anatomy/Neuroscience I.

Course Description
Comprehensive study of anatomy and physiology of the nervous system to develop DPT students' improved treatment strategies for patients with neurological problems.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall

Current Fee Per Student
$70.00
**PHT6119L - Seminar in Anatomical Sciences Techniques**

**Course Title**
Seminar in Anatomical Sciences Techniques

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Admission to the Anatomical Sciences Graduate Certificate.

**Course Description**
Development of skills as an anatomist with an emphasis on integrating a diverse repertoire of scientific technique.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Occasional

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**PHT6153 - Physiologic Assessment in Physical Therapy Practice**

**Course Title**
Physiologic Assessment in Physical Therapy Practice

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- PHT 6156C.

**Course Description**
Course provides clinical applications and laboratory demonstrations of human musculoskeletal, neurological, cardiovascular, hemopoietic, respiratory, gastrointestinal, and renal systems.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Fall
PHT6156 - Applied Human Physiology for Health Sciences

Course Title
Applied Human Physiology for Health Sciences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Doctor of Physical Therapy program.

Course Description
Course provides in-depth study of human cardiovascular, hemopoietic, respiratory, gastrointestinal, renal and reproductive systems with emphasis on mechanisms responsible for maintaining homeostasis.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Summer

Current Fee Per Student
$25.00

PHT6156C - Applied Human Physiology for Health Sciences

Course Title
Applied Human Physiology for Health Sciences

Credits Hours
3

Prerequisites
- Admission to the Doctor of Physical Therapy program.

Course Description
Course provides in-depth study of human cardiovascular, hemopoietic, respiratory, gastrointestinal, renal and reproductive systems with emphasis on mechanisms responsible for maintaining homeostasis.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Rehabilitation Sciences

Terms of Offering
Summer

Current Fee Per Student
$25.00
PHT6161C - Neuroplasticity of Human Movement

Course Title
Neuroplasticity of Human Movement

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Complete at least 2 courses of the following types:
  Anatomy at the undergraduate or graduate level.

Course Description
Anatomical foundation of brain function as it pertains to normal body movements and the neuroplasticity that occurs during the process of rehabilitation after injury.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Rehabilitation Sciences

Terms of Offering
Even Spring
Odd Spring

Current Fee Per Student
70

PHT6219C - Pain Mechanisms and Treatment in Rehabilitation

Course Title
Pain Mechanisms and Treatment in Rehabilitation

Credits Hours
2

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to Doctor of Physical Therapy program.

Course Description
This course will cover current concepts in pain science, including theoretical models for the basis of pain and the multidimensional nature of pain.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Summer

Current Fee Per Student
$45.00
PHT6242 - Orthopedic Physical Therapy

**Course Title**
Orthopedic Physical Therapy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- NGR 6210, NGR 6230L.

**Corequisites**
- PHT 6242L

**Course Description**
Examination and interventions for the evaluation and treatment of specific orthopedic cases and injuries presented.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Fall

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PHT6242L - Orthopedic Physical Therapy Lab

**Course Title**
Orthopedic Physical Therapy Lab

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
2

**Corequisites**
- Orthopedic Physical Therapy.

**Course Description**
Lab course emphasizing the examinations and interventions for the evaluation and treatment of specific orthopedic cases and injuries.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Fall

**Current Fee Per Student**
$40.00
PHT6245 - Therapeutic Exercise II  
**Course Title**  
Therapeutic Exercise II  

**Credits Hours**  
2  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- PHT 5218 and PHT 5218L  

**Corequisites**  
- PHT 6245L  

**Course Description**  
Exploration of the various therapeutic exercise modalities, and their application to the rehabilitation course of treatment.  

**College**  
College of Health Professions and Sciences  

**Department**  
School of Kinesiology and Physical Therapy– Kinesiology  

**Terms of Offering**  
Fall  

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PHT6245L - Therapeutic Exercise II Lab  
**Course Title**  
Therapeutic Exercise II Lab  

**Credits Hours**  
1  

**Lab/Studio/Field Work Hours**  
2  

**Prerequisites**  
- Therapeutic Exercise I and Lab  

**Corequisites**  
- Therapeutic Exercise II.  

**Course Description**  
Lab course emphasizing the use of the various therapeutic exercise modalities.  

**College**  
College of Health Professions and Sciences  

**Department**  
School of Kinesiology and Physical Therapy– Kinesiology  

**Terms of Offering**  
Fall  

**Current Fee Per Student**  
$15.00
PHT6306 - Pathology in Rehabilitation
Course Title
Pathology in Rehabilitation
Credits Hours
2
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Doctor of Physical Therapy program.
Course Description
Organized seminars on the pathophysiology and clinical manifestations and treatments of various medical conditions as they relate to medical management in rehabilitation.
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy– Kinesiology
Terms of Offering
Spring

PHT6322C - Pediatric Physical Therapy
Course Title
Pediatric Physical Therapy
Credits Hours
3
Lab/Studio/Field Work Hours
2
Prerequisites
- Admission to DPT program.
Course Description
Study of the normal neurodevelopmental sequences for pediatric clinical assessment and physical therapy intervention provided to clients with abnormal diseases and dysfunction.
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy– Kinesiology
Terms of Offering
Fall
PHT6356 - Pharmacology in Rehabilitation

Course Title
Pharmacology in Rehabilitation

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Doctor of Physical Therapy program.

Course Description
Mechanisms of drug action, dose-response relations, pharmacokinetics, drug delivery systems, drug metabolism, toxicity of pharmacological agents, and drug interaction as it relates to rehabilitation.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Spring

PHT6374C - Geriatric Physical Therapy

Course Title
Geriatric Physical Therapy

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to the Doctor of Physical Therapy program.

Course Description
This course provides an introduction to physiological aging and physical therapy management of the older adult. Includes examination, evaluation, and development of intervention programs focusing on exercise, prevention, education, and modification programs.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Spring
PHT6381C - Cardiopulmonary Physical Therapy

Course Title
Cardiopulmonary Physical Therapy

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to DPT program.

Course Description
Examinations and interventions for the management of chronic and acute cardiopulmonary problems. Teaching patient strategies for preventing/managing dysfunction.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall

Current Fee Per Student
$15.00

PHT6510 - Administration of Anatomical Sciences Laboratory

Course Title
Administration of Anatomical Sciences Laboratory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate or professional level gross human cadaver dissection course.

Course Description
Developing administrative skills for educators in the anatomical sciences with an emphasis on laboratory safety, health concerns, and cadaver procurement and storage to prepare educators for graduate and professional programs.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Summer

2022-2023 Graduate Catalog
PHT6521 - Management of Physical Therapy Services

Course Title

Management of Physical Therapy Services

Credits Hours

2

Lab/Studio/Field Work Hours

0

Prerequisites

♦ Admission to DPT program.

Course Description

Planning, organizing, delivering and evaluating physical therapy services within a health care system, including quality management, third party payers, DRG's and legislative impact.

College

College of Health Professions and Sciences

Department

School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering

Spring

PHT6606 - Research Methods in Physical Therapy

Course Title

Research Methods in Physical Therapy

Credits Hours

2

Lab/Studio/Field Work Hours

0

Prerequisites

♦ Admission to DPT program.

Course Description

Methods of research applied to clinical environment of physical therapy. Coverage of the language, logic, design and analysis of clinical research.

College

College of Health Professions and Sciences

Department

School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering

Spring
PHT6618 - Research Applications in Physical Therapy

Course Title
Research Applications in Physical Therapy

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Research methods in Physical Therapy - PHT 6606.

Course Description
To evaluate research studies, focus on evidence-based practice. SPSS and principles of epidemiology will be introduced.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall

PHT6702C - Orthotics and Prosthetics in Rehabilitation

Course Title
Orthotics and Prosthetics in Rehabilitation

Credits Hours
1

Lab/Studio/Field Work Hours
1

Prerequisites
- Admitted to PTDPPT

Course Description
Integration of orthotic and prosthetic devices into rehabilitation with additional focus on device functions, indications for use, and integration into patient care in physical rehabilitation.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Rehabilitation Sciences

Terms of Offering
Fall
PHT6716C - Advanced Orthopedic Physical Therapy

Course Title
Advanced Orthopedic Physical Therapy

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Orthopedic Physical Therapy

Corequisites
- Advanced Orthopedic Physical Therapy Lab.

Course Description
Specific rehabilitative protocols regarding particular orthopedic injuries and illnesses are presented. Focus on the previous course work in therapeutic modalities, anatomy, physiology, and therapeutic exercises incorporated.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Spring

Current Fee Per Student
$25.00

PHT6719 - Advanced Neurological Physical Therapy

Course Title
Advanced Neurological Physical Therapy

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- PHT 5718

Corequisites
- PHT 6719L.

Course Description
Examinations and interventions for the evaluation and treatment of the neurological patient. Emphasis on patients with spinal cord injury and neurological diseases.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall
PHT6719L - Advanced Neurological Physical Therapy Lab

Course Title
Advanced Neurological Physical Therapy Lab

Credits Hours
1

Lab/Studio/Field Work Hours
2

Prerequisites
- PHT 5718L

Corequisites
- PHT 6719.

Course Description
Course emphasizing examinations and interventions for the evaluation and treatment of patients with neurological disease. Emphasis on patients with spinal cord injury and neurological disease.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy – Kinesiology

Terms of Offering
Fall

Current Fee Per Student
$25.00

PHT6720 - Integumentary Physical Therapy

Course Title
Integumentary Physical Therapy

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Physical Therapy program.

Course Description
Instruction in contemporary issues and specialized care of the integumentary system provided by physical therapists.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy – Kinesiology

Terms of Offering
Spring

Current Fee Per Student
$45.00
PHT6805C - Clinical Education I

Course Title
Clinical Education I

Credits Hours
4

Lab/Studio/Field Work Hours
20

Prerequisites
- Admission to DPT program.

Course Description
Collaborative course where students meet to analyze, synthesize and discuss current professional, ethical and moral decision-making in physical therapy setting, culminating in a six-week clinical internship.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

Terms of Offering
Fall

Current Fee Per Student
$12.50

PHT6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology

PHT6918 - Directed Research

Course Title
Directed Research

Credits Hours
0 - 99

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy– Kinesiology
PHT6938C - ST: Neuroplasticity of Human Movements

Course Title
ST: Neuroplasticity of Human Movements

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
Complete at least 2 courses of the following types:
Anatomy at the undergraduate or graduate level.

Course Description
Anatomical foundation of brain function as it pertains normal body movements and the neuroplasticity that occurs during the process of rehabilitation after injury

College
College of Health Professions and Sciences

Department
School of Kinesiology and Rehabilitation Sciences

Terms of Offering
Even Spring
Odd Spring

PHT6938ST1 - ST: Seminar in Anatomical Sciences Techniques

Course Title
ST: Seminar in Anatomical Sciences Techniques

Credits Hours
2

Lab/Studio/Field Work Hours
0

Course Description
Development of skills as an anatomist with an emphasis on integrating a diverse repertoire of scientific technique.

PHT6938ST2 - ST: Administration of Anatomical Sciences Laboratory

Course Title
ST: Administration of Anatomical Sciences Laboratory

Credits Hours
1

Lab/Studio/Field Work Hours
0

Course Description
The course focuses on developing administrative skills as an educator in the anatomical sciences emphasizing laboratory safety, health concerns, and cadaver procurement and storage.
PHT6958 - Study Abroad
Course Title
Study Abroad
Credits Hours
0 - 99
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy – Kinesiology

PHT7021 - Professional Practice in Physical Therapy
Course Title
Professional Practice in Physical Therapy
Credits Hours
2
Lab/Studio/Field Work Hours
0
Prerequisites
- Foundations of Physical Therapy.
Course Description
Professional development, ethics and strategies to address cultural diversity issues, communication skills and different styles of learning to prepare for clinical practice as a doctoring healthcare professional in physical therapy.
College
College of Health Professions and Sciences
Department
School of Kinesiology and Physical Therapy – Kinesiology
Terms of Offering
Spring
PHT7134C - Physical Therapy Integration

Course Title
Physical Therapy Integration

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- PHT 7722C

Course Description
This course integrates foundational knowledge of physiology and pathology to develop physical therapy skills for examinations and interventions of medically complex patients and special populations.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Spring

Current Fee Per Student
$15.00

PHT7329C - Advanced Pediatric Physical Therapy

Course Title
Advanced Pediatric Physical Therapy

Credits Hours
1

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to DPT program.

Course Description
Course provides an advanced look into abnormal motor development, neurological and orthopedic diseases/conditions, interventions, examinations and other aspects of the patient/client management model for the pediatric population.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Fall
PHT7521 - Management of Physical Therapy Services II

**Course Title**
Management of Physical Therapy Services II

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- PHT 6521.

**Course Description**
Application of management, finance and economic health-related principles for strategy development, implementation and assessment for the physical therapy manager.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Fall

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PHT7702C - Advanced Orthotics and Prosthetics

**Course Title**
Advanced Orthotics and Prosthetics

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- PHT 6245, PHT 6245L.

**Course Description**
Advanced considerations for the amputee patient with regards to rehabilitation. Students will review the primary focal issues surrounding rehabilitation after an amputation and how prosthetics may assist with functional return.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Spring
PHT7721C - Integrations in Orthopedic Physical Therapy

**Course Title**
Integrations in Orthopedic Physical Therapy

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- PHT 6716C.

**Course Description**
Designed to correlate all previous coursework in curriculum in study presentations. Advanced evaluation procedures included. Advanced knowledge of differential diagnosis in the orthopedic patient covered.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Fall

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PHT7722C - Integrative Clinical Practice

**Course Title**
Integrative Clinical Practice

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to DPT program.

**Course Description**
This course emphasizes the synthesis of clinical and differential diagnostic skills required of a physical therapist in order to enter clinical practice.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Summer

**Current Fee Per Student**
$15.00
PHT7730C - Primary Care for the Physical Therapist

Course Title
Primary Care for the Physical Therapist

Credits Hours
2

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to DPT program.

Course Description
Students learn higher level diagnostic screening skills to make clinical decisions. The course takes a system approach including system review, clinical signs and symptoms and case studies.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Fall

PHT7742C - Acute Care Physical Therapy

Course Title
Acute Care Physical Therapy

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- PHT 6306

Course Description
Considerations and evidence-based evaluation, treatment, and management of patients in various settings within acute care.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Fall
PHT7764C - Advanced Neurological Treatment

Course Title
Advanced Neurological Treatment

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- PHT 6719, PHT 6719L, PHT 7772C.

Course Description
This course can provide third year students with the opportunity to further explore evidence-based neurological intervention.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Spring

PHT7772C - Advanced Neurological Physical Therapy II

Course Title
Advanced Neurological Physical Therapy II

Credits Hours
1

Lab/Studio/Field Work Hours
1

Prerequisites
- PHT 6719 and PHT 6719L.

Course Description
Problem-based learning provides a team based interdisciplinary problem-solving environment where students devise solutions and approaches to problems encountered by physical therapists treating patients with neurological problems.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy- Kinesiology

Terms of Offering
Fall
PHT7778C - Advanced Manual Therapy

**Course Title**
Advanced Manual Therapy

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- PHT 6716C, PHT 7721C.

**Course Description**
Concepts associated with advanced manipulative interventions in the context of physical therapy care. Indications and contraindications will be reviewed and applied in a clinical context.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Spring

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PHT7779C - Sports Physical Therapy

**Course Title**
Sports Physical Therapy

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to the Doctor of Physical Therapy program.

**Course Description**
Considerations and evidence-based evaluation, treatment, and management of patients with sport-related injuries.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Spring
PHT7780C - Advanced Geriatric Physical Therapy

Course Title
Advanced Geriatric Physical Therapy

Credits Hours
1

Lab/Studio/Field Work Hours
1

Prerequisites
- PHT 6374C.

Course Description
Advanced topics in geriatric rehabilitation.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Fall

PHT7822C - Clinical Education II

Course Title
Clinical Education II

Credits Hours
6

Lab/Studio/Field Work Hours
40

Prerequisites
- Admission to the Doctor of Physical Therapy program.

Course Description
Collaborative course for third year students to meet, analyze, synthesize and discuss current ethical, legal, and moral decision-making in physical therapy clinical setting culminating in internship.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Summer

Current Fee Per Student
$12.50
PHT7823C - Clinical Education III

Course Title
Clinical Education III

Credits Hours
4

Lab/Studio/Field Work Hours
20

Prerequisites
- PHT 7822C.

Course Description
Clinical education course to synthesize ethical, legal, and professional contemporary practice with evidence-based intervention, culminating in a full-time, 8-week clinical internship in physical therapy practice setting.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Fall

Current Fee Per Student
$12.50

PHT7829C - Clinical Education IV

Course Title
Clinical Education IV

Credits Hours
4

Lab/Studio/Field Work Hours
20

Prerequisites
- PHT 7823C.

Course Description
Clinical education course to synthesize ethical, legal, and professional contemporary practice with evidence-based intervention, culminating in a full-time, terminal 8-week clinical internship in physical therapy practice setting prior to graduation.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Spring

Current Fee Per Student
$12.50
PHT7900 - Capstone Project in Physical Therapy

**Course Title**
Capstone Project in Physical Therapy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to DPT program.

**Course Description**
Directed research culminating in a substantive paper related to the art or science of Physical Therapy.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Spring

**Current Fee Per Student**
$13.09

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PHT7999 - Physical Therapy Residency

**Course Title**
Physical Therapy Residency

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
1

**Course Description**
Beyond the earned Doctor of Physical Therapy degree and C.I. Instruction for post-professional physical therapy residency program fostering advanced clinical practice as outlined by the American Board of Physical Therapy Specialties.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy– Kinesiology

**Terms of Offering**
Every Semester

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**PHY - Physics**
PHY5346 - Electrodynamics I

Course Title
Electrodynamics I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 4324, and graduate status or senior standing or C.I.

Course Description

College
College of Sciences

Department
Department of Physics

Terms of Offering
Fall

PHY5524 - Statistical Physics

Course Title
Statistical Physics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 3513, STA 3032, and graduate status or senior standing or C.I.

Course Description

College
College of Sciences

Department
Department of Physics

Terms of Offering
Spring
PHY5606 - Quantum Mechanics I

Course Title
Quantum Mechanics I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 4605, and graduate status or senior standing or C.I.

Course Description
Basic postulates of quantum mechanics, operators, eigenvalues, parity, potential wells, harmonic oscillator, time dependent and time independent Schrodinger equation, matrix formulation, and time independent perturbation theory.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Fall

PHY5715 - Physical Basis of Life

Course Title
Physical Basis of Life

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Molecular and physical principles of origin of life, physical and chemical interpretation of life processes.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Fall
PHYS5817L - Building Physics Apparatus

**Course Title**
Building Physics Apparatus

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Graduate standing or senior standing and C.I.

**Course Description**
Hands-on shop course. Focus will be machine shop practice with possible extension to printed circuit boards and glass work.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Occasional

**Current Fee Per Student**
$45.00

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PHYS5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Physics
PHY5933 - Selected topics in biophysics of macromolecules

Course Title
Selected topics in biophysics of macromolecules

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 3101, CHM 2046, and graduate status or senior standing or C.I.

Course Description
Physical concepts and techniques for spectroscopic studies of dynamic structure and function of biological macromolecules; Connections with other complex systems. May be repeated for credit.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional

PHY5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Physics
PHY6246 - Classical Mechanics

**Course Title**
Classical Mechanics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Occasional

PHY6347 - Electrodynamics II

**Course Title**
Electrodynamics II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- PHY 5346, or C.I.

**Course Description**

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Spring
PHY6600C - Theory and Computations of Molecular Wavefunctions

Course Title
Theory and Computations of Molecular Wavefunctions

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Undergraduate Quantum Mechanics or Physical Chemistry or C.I.

Course Description

College
College of Sciences

Department
Department of Physics

Terms of Offering
Even Fall

PHY6624 - Quantum Mechanics II

Course Title
Quantum Mechanics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 5606 or C.I.

Course Description
Time dependent perturbation theory, exchange symmetry, Dirac Equation, second quantization, and scattering theory.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Spring
PHY6667 - Quantum Field Theory I

Course Title
Quantum Field Theory I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 6347 and PHY 6624 or C.I.

Course Description
Second quantization and fields, relativistic equations, path integral quantization, gauge fields.

College
College of Sciences

Department
Department of Physics

PHY6673 - Advanced Quantum Mechanics

Course Title
Advanced Quantum Mechanics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 6624.

Course Description
Fields, radiation, Klein-Gordon equation, Dirac equation, relativistic quantum scattering, photon propagator.

College
College of Sciences

Department
Department of Physics

PHY6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Physics
PHY6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Physics

PHY6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Physics

PHY6949 - Cooperative Education in Physics
Course Title
Cooperative Education in Physics
Credits Hours
0 - 99
College
College of Sciences
Department
Department of Physics
PHY 7669 - Quantum Field Theory II

Course Title
Quantum Field Theory II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 6667 or C.I.

Course Description
Regularization, renormalization, spontaneous symmetry breaking, unification, topological objects, supersymmetry.

College
College of Sciences

Department
Department of Physics

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PHZ - Physics Continued

PHZ 5156 - Computational Physics

Course Title
Computational Physics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHZ 3151 or C.I.

Course Description
Computational methods applied to the solution of problems in many branches of physics. May be repeated for credit.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Fall
PHZ5304 - Nuclear and Particle Physics

Course Title
Nuclear and Particle Physics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
PHY 4604 or equivalent, and graduate status or senior standing or C.I.

Course Description
Particles and nuclei, symmetries and conservation laws, interactions, models.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional

PHZ5405 - Condensed Matter Physics

Course Title
Condensed Matter Physics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
PHY 4604, PHY 3101, and graduate status or senior standing or C.I.

Course Description
Crystal lattice cell structure, phonons, free electron model, band theory of solids, Fermi surface, solid state applications, and polymers.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional
PHZ5432 - Introduction to Soft Condensed Matter Physics
Course Title
Introduction to Soft Condensed Matter Physics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 3513 or C.I.

Course Description
Introduction to the physics of polymers, colloids, surfactants using basic tools of statistical mechanics.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional

PHZ5505 - Plasma Physics
Course Title
Plasma Physics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 4324, and graduate status or senior standing or C.I.

Course Description
Introduction to theory and experimental basis of both weakly and highly ionized plasmas. Instabilities, plasma waves, nonlinear effects, controlled thermonuclear fusion.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional
PHZ5625 - General Relativity

Course Title
General Relativity

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Introduction to Einstein's theory of gravitation.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Odd Spring

PHZ5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Physics

PHZ5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Physics
PHZ6234 - Atomic Physics

Course Title
Atomic Physics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 6624 or OSE 6347.

Course Description

College
College of Sciences

Department
Department of Physics

PHZ6420 - First Principles Computational Methods in Condensed Matter Physics

Course Title
First Principles Computational Methods in Condensed Matter Physics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 5606 - Quantum Mechanics I.

Course Description
Introduction to density functional theory and first principles computational methods used in modern condensed matter physics with hand-on sessions using computers.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional
PHZ6426 - Condensed Matter Physics I

Course Title
Condensed Matter Physics I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHY 5606, and either PHY 6624 or OSE 6347.

Course Description
Quantum theory of crystalline solids: crystals, electronic band structure, metals, insulators, semiconductors, electron interactions in solids, lattice dynamics.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional

PHZ6428 - Condensed Matter Physics II

Course Title
Condensed Matter Physics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- PHZ 6426.

Course Description
Many-body theory: Green's functions, Feynman diagrams, screening in the electron gas, linear response theory, magnetism, conductivity, electron-phonon interactions, superconductivity, superfluids.

College
College of Sciences

Department
Department of Physics

Terms of Offering
Occasional
PHZ6439 - Interfacial Physics

**Course Title**
Interfacial Physics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing and PHY 5606, or C.I. A conceptual understanding of fundamental electronic and structural characteristics relevant to surfaces and the experimental methodologies used to investigate them.

**College**
College of Sciences

**Department**
Department of Physics

**Terms of Offering**
Odd Fall

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PHZ6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Physics

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PHZ6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Physics
PHZ6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Physics

PLA - Paralegal/Legal Assistant/Legal Administration

PLA5587 - Current Issues in Cyberlaw
Course Title
Current Issues in Cyberlaw
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
Advanced examination and discussion of free speech, copyright, trademark, patent and privacy issues in the online environment through interactive class discussions, online discussions, postings, case study reviews, and legal research projects.
College
College of Community Innovation and Education
Department
Department of Legal Studies
Terms of Offering
Occasional

PLA5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Community Innovation and Education
Department
Department of Legal Studies
PLA6245 - Advanced Applied Negotiation and Conflict Resolution

Course Title
Advanced Applied Negotiation and Conflict Resolution

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing. Students should have already completed either PLA 6247 Conflict Resolution Theory or PLA 6515 Understanding Human Behavior and Conflict prior to enrolling in this course.

Course Description
Course provides students ability to understand the negotiation process and become stronger negotiators. Students delve into real-world conflict situations with an eye toward resolution.

College
College of Community Innovation and Education

Department
Department of Legal Studies

Terms of Offering
Spring

PLA6246 - Advanced Mediation and Conflict Resolution Practicum

Course Title
Advanced Mediation and Conflict Resolution Practicum

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Graduate Standing. Students should have already completed all other requirements of their program or be completing their degree in the same semester they are participating in the practicum.

Course Description
Real-world or simulated real-world experience to enhance mediation and conflict resolution skills by engaging in community mediation program, externship, or graduate academic competition.

College
College of Community Innovation and Education

Department
Department of Legal Studies

Terms of Offering
Occasional
PLA6247 - Conflict Resolution Theory

Course Title
Conflict Resolution Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing.

Course Description
This course is an exploration of various theories on conflict resolution and practice.

College
College of Community Innovation and Education

Department
Department of Legal Studies

Terms of Offering
Fall

PLA6486 - Administrative Law

Course Title
Administrative Law

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
The study of administrative law and procedure on the federal, state and local levels.

College
College of Community Innovation and Education

Department
Department of Legal Studies

Terms of Offering
Occasional
PLA6487 - Legal and Ethical Compliance

Course Title
Legal and Ethical Compliance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
Critical compliance issues and the importance of responsible conduct of research including export control, conflict of interest, protection of animal/human subjects and research misconduct.

College
College of Community Innovation and Education

Department
Department of Legal Studies

Terms of Offering
Occasional

PLA6488 - Legal and Regulatory Framework

Course Title
Legal and Regulatory Framework

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Research Administration program or C.I.

Course Description
Outline the various requirements governing research (OMB Circulars, Federal Acquisition Regulations and other federal state and local regulations).

College
College of Community Innovation and Education

Department
Department of Legal Studies

Terms of Offering
Occasional
PLA6515 - Understanding Human Behavior and Conflict

Course Title
Understanding Human Behavior and Conflict

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing and PLA 6247.

Course Description
This course is an exploration of theories underpinning human behavior in conflict and the tools for navigating these behaviors in a variety of settings.

College
College of Community Innovation and Education

Department
Department of Legal Studies

Terms of Offering
Fall

PLA6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Legal Studies

PLA6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Legal Studies
PLA6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Department of Legal Studies

POS - Political Science

POS5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
School of Politics, Security, and International Affairs

POS5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
School of Politics, Security, and International Affairs
POS6045 - Seminar in American National Politics

Course Title
Seminar in American National Politics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to a graduate degree-seeking program or C.I.

Course Description
Examines major aspects of the American system, including mass behavior, public opinion, and political institutions.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Fall

POS6079 - The Politics of Race, Ethnicity, Gender, and Class in the United States

Course Title
The Politics of Race, Ethnicity, Gender, and Class in the United States

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate program or C.I.

Course Description
Examines the political consequences of race, ethnicity, gender, and class in the US.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Spring
POS6174 - Seminar in Southern Politics

Course Title
Seminar in Southern Politics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Will provide an overview of the political and social changes that have occurred in the American South in the post-World War II period.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

POS6207 - Political Behavior

Course Title
Political Behavior

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status.

Course Description
A review of theory and findings in regard to mass political behavior, including participation, voter choice, public opinion, collective action, and communication.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
POS6415 - The American Presidency

**Course Title**
The American Presidency

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Presidency research with attention to historical, personal, institutional, and political development.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional

POS6427 - Congress and the Legislative Process

**Course Title**
Congress and the Legislative Process

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Examination of Congress as a dynamic institution with emphasis on general legislative procedures, legislator recruitment, institutional rules, legislative norms, and the committee system.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Even Fall
POS6639 - Seminar in Public Law and Judicial Politics

**Course Title**
Seminar in Public Law and Judicial Politics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate or post bac status.

**Course Description**
This course is intended to acquaint students broadly with the scholarly literature in the subfield of Public law. It surveys the meaning of the field and its development, using books and articles to illustrate the major research and teaching concentrations in the subfield.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional

POS6686 - National Security Law

**Course Title**
National Security Law

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Domestic and international law affecting national security, with emphasis on branches' competing legal claims of authority and law affecting modern security challenges.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional
POS6729 - Political Network Analysis
Course Title
Political Network Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or consent of instructor.

Course Description
Introduces concepts, analytic metrics and methods, and empirical applications in political network analysis.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

POS6736 - Conduct of Political Inquiry
Course Title
Conduct of Political Inquiry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to graduate program or C.I.

Course Description
Research design and quantitative and qualitative analysis in political science.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Fall
POS6743 - Geographic Tools for Political Science Research

Course Title
Geographic Tools for Political Science Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Graduate standing or C.I.

Course Description
Provides an introduction to the theoretical assumptions, analytical possibilities and application of geographic tools of analysis for political science research.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Odd Spring

POS6746 - Quantitative Methods in Political Research

Course Title
Quantitative Methods in Political Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Admission to a graduate degree-seeking program or C.I.

Course Description
Methods of model building and research design, including conceptualization and measurement of political variables; techniques of data collection and quantitative analysis and computer usage.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
POS6747 - Advanced Topics in Quantitative Political Analysis

Course Title
Advanced Topics in Quantitative Political Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the graduate program.

Course Description
Successful completion of POS 6746, or equivalent, or C.I. Advanced topics in quantitative political analysis, including OLS variants, regression problems, time series, limited dependent variables and SPSS.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

POS6757 - Survey Design for Political Science Research

Course Title
Survey Design for Political Science Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Survey methods and survey design, including survey experiment techniques, used in political science.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional
POS6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
School of Politics, Security, and International Affairs

POS6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
School of Politics, Security, and International Affairs

POS6938 - Special Topics/Political Analysis
Course Title
Special Topics/Political Analysis
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
This course title covers all political analysis special topics courses which are not listed in the catalog with a course number. May be repeated for credit only when course content is different.
College
College of Sciences
Department
School of Politics, Security, and International Affairs
Terms of Offering
Occasional
POS6949 - Cooperative Education in Political Science

Course Title
Cooperative Education in Political Science

Credits Hours
0 - 99

College
College of Sciences

Department
School of Politics, Security, and International Affairs

POS7267 - Professional Development: The Practice of Security Studies

Course Title
Professional Development: The Practice of Security Studies

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Security Studies Ph.D. program or C.I.

Course Description
Addresses ethics in security studies and prepares students for careers in the security sector, including topics such as ethics in decision making.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Even Spring
POS7707 - Advanced Qualitative Methods in Political Research

Course Title
Advanced Qualitative Methods in Political Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Security Studies Ph.D. or C.I.

Course Description
Advanced qualitative methods employed in political science research, including case studies, the logic of comparison, and archival and interview-based research.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Odd Spring

POS7745 - Advanced Quantitative Methods in Political Research

Course Title
Advanced Quantitative Methods in Political Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Security Studies Ph.D. or C.I.

Course Description
Survey of advanced quantitative methods used in political science research, including problems in regression analysis and nonlinear models.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Even Spring
**POS7930 - Professional Development: Academic Careers in Security Studies**

**Course Title**
Professional Development: Academic Careers in Security Studies

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Security Studies Ph.D. program or C.I.

**Course Description**
Prepares students for teaching, submission of articles to peer-reviewed journals, grant writing, ethics in the discipline, and other questions related to an academic career.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Odd Spring

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**POT - Political Theory**

**POT5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**POT5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs
POT6007 - Seminar in Political Theory

Course Title
Seminar in Political Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Admission to a graduate degree-seeking program or C.I.

Course Description
An examination of analytic and normative theories of politics and society, using selected topics as a substantive focus.

College
College of Sciences

Department
School of Politics, Security, and International Affairs

Terms of Offering
Occasional

POT6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
School of Politics, Security, and International Affairs

POT6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
School of Politics, Security, and International Affairs
POT6938 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Sciences  
**Department**  
School of Politics, Security, and International Affairs

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**PPE - Psychology of Personality**

PPE5917 - Directed Research  
**Course Title**  
Directed Research  
**Credits Hours**  
1 - 99  
**College**  
College of Sciences  
**Department**  
Department of Psychology

PPE5937 - Special Topics  
**Course Title**  
Special Topics  
**Credits Hours**  
3  
**College**  
College of Sciences  
**Department**  
Department of Psychology

PPE6909 - Research Report  
**Course Title**  
Research Report  
**Credits Hours**  
1 - 99  
**College**  
College of Sciences  
**Department**  
Department of Psychology
PPE6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

PPE6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

PSB - Psychobiology

PSB5005 - Physiological Psychology
Course Title
Physiological Psychology
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
• Admission to Masters in Clinical Psychology Program or C.I.
Course Description
An advanced survey of the physiological basis of behavior, emphasizing the relationship between the nervous system and behavior.
College
College of Sciences
Department
Department of Psychology
Terms of Offering
Spring
PSB5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

PSB5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

PSB6328 - Psychophysiology
Course Title
Psychophysiology
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing, or C.I.
Course Description
Anatomy and function of the nervous system, use of psychophysiological recording methods, and design of studies exploring the biological bases and indicators of behavior.
College
College of Sciences
Department
Department of Psychology
Terms of Offering
Spring
PSB6348 - The Neuroanatomical Basis of Psychological Function

Course Title
The Neuroanatomical Basis of Psychological Function

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing, or C.I.

Course Description
Fundamental human neuroscience course that includes thorough review of neuroanatomy and physiology at cellular, anatomical and functional region levels in the context of psychological function.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

PSB6352 - Neuroimaging Design and Analysis Methods

Course Title
Neuroimaging Design and Analysis Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Overview and hands-on practice in design of neuroimaging studies and analysis of neuroimaging data.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Spring
PSB6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

PSB6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

PSB6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology
PSB7048 - Affective Neuroscience

Course Title
Affective Neuroscience

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to PSYCH-PHD

Course Description
Provide advanced recent knowledge on the topics of affective neuroscience and social affective neuroscience. Also foundational knowledge in affective psychology and physiological psychology.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

PSB7349 - Advanced Topics in Cognitive Neuroscience

Course Title
Advanced Topics in Cognitive Neuroscience

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing, or C.I. In-depth study of the neural substrates underlying cognitive processing (e.g., attention, memory, language) and the linkage between the brain and behavior.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Fall

PSY - Psychology
PSY5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Psychology

PSY5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Psychology

PSY6216C - Research Methodology
Course Title
Research Methodology
Credits Hours
4
Lab/Studio/Field Work Hours
2
Prerequisites
- Admission to Industrial Organizational Psychology Master's Program, Clinical Psychology Master's Program, or C.I.
Course Description
Logic and procedures of psychological research and evaluation; application of experimental and non-experimental techniques in analyzing psychological variables; review of relevant psychological research.
College
College of Sciences
Department
Department of Psychology
Terms of Offering
Fall

2022-2023 Graduate Catalog
PSY6308C - Psychological Testing

**Course Title**
Psychological Testing

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to Industrial Organizational Psychology M.S. or C.I.

**Course Description**
Theory of test construction, including test reliability and validity.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Occasional

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PSY6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
0 - 99

**Prerequisites**
- Graduate standing and C.I.

**Course Description**
Directed Research.

**College**
College of Sciences

**Department**
Department of Psychology

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PSY6949 - Cooperative Education in Psychology

**Course Title**
Cooperative Education in Psychology

**Credits Hours**
0 - 99

**College**
College of Sciences

**Department**
Department of Psychology
**PSY6971 - Thesis**  
**Course Title**  
Thesis  
**Credits Hours**  
1 - 99  
**College**  
College of Sciences  
**Department**  
Department of Psychology  

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**PSY7217C - Advanced Research Methodology I**  
**Course Title**  
Advanced Research Methodology I  
**Credits Hours**  
4  
**Lab/Studio/Field Work Hours**  
2  
**Prerequisites**  
- Admission to Psychology Ph.D. or C.I.  
**Course Description**  
Logic and procedures of psychological research and evaluation; application of experimental and non-experimental techniques in analyzing psychological variables; review of relevant psychological research.  
**College**  
College of Sciences  
**Department**  
Department of Psychology  
**Terms of Offering**  
Occasional
PSY7218C - Advanced Research Methodology II

Course Title
Advanced Research Methodology II

Credits Hours
4

Lab/Studio/Field Work Hours
2

Prerequisites
- PSY 7217C or C.I.

Course Description
Structure and planning of complex psychological experiments; internal and external validity; application of advanced experimental procedures in analyzing psychological variables; review of relevant psychological research.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional

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PSY7219C - Advanced Research Methodology III

Course Title
Advanced Research Methodology III

Credits Hours
4

Lab/Studio/Field Work Hours
2

Prerequisites
- PSY 7217C and PSY 7218C, or C.I.

Course Description
Application of research design and statistical problems to selected human factors, industrial and/or clinical settings.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
**PSY7315 - Psychometric Theory and Practice**

**Course Title**
Psychometric Theory and Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- PSY 6216C and graduate admission.

**Course Description**
The construction, evaluation, and use of psychological measures; classical test theory, views of reliability, and item analysis; validity; generalizability theory; item response theory.

**College**
College of Sciences

**Department**
Department of Psychology

**Terms of Offering**
Spring

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**PSY7919 - Research**

**Course Title**
Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Psychology

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**PUP - Public Policy**

**PUP5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

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PUP5937 - Special Topics
Course Title: Special Topics
Credits Hours: 3
College: College of Sciences
Department: School of Politics, Security, and International Affairs

PUP6208 - Environmental Politics
Course Title: Environmental Politics
Credits Hours: 3
Lab/Studio/Field Work Hours: 0
Prerequisites: Admission to a graduate degree-seeking program or C.I.
Course Description: Examines the political ideas and practices which have shaped environmental politics and practices in the U.S.
College: College of Sciences
Department: School of Politics, Security, and International Affairs
Terms of Offering: Occasional
PUP6247 - Contemporary Issues in Environmental Politics

**Course Title**
Contemporary Issues in Environmental Politics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
A detailed examination of recent developments in one or more areas of environmental politics. Topics may include land and water regulation and pollution control.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional

PUP6607 - Politics of Health

**Course Title**
Politics of Health

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate or post bac status.

**Course Description**
Analysis of public health policies, primary focus upon political processes, policy makers, and interest groups. Comparative health practices.

**College**
College of Sciences

**Department**
School of Politics, Security, and International Affairs

**Terms of Offering**
Occasional
PUP6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
School of Politics, Security, and International Affairs

PUP6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
School of Politics, Security, and International Affairs

PUP6938 - Special Topics/Public Policy
Course Title
Special Topics/Public Policy
Credits Hours
3
Lab/Studio/Field Work Hours
0
Course Description
Admission to graduate program or C.I. This course title covers all public policy special topics courses which are not listed in the catalog with a course number. May be repeated for credit only when course content is different.
College
College of Sciences
Department
School of Politics, Security, and International Affairs
Terms of Offering
Occasional

PUR - Public Relations

2022-2023 Graduate Catalog
PUR5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Nicholson School of Communication and Media

PUR5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Nicholson School of Communication and Media

PUR6005 - Theories of Public Relations

Course Title
Theories of Public Relations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Communication M.A. program or C.I.

Course Description
Focus on theories of public relations with implications for communications practices in corporate and other organizations and government agencies.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Occasional
PUR6215 - Communicating Corporate Social Responsibility

**Course Title**
Communicating Corporate Social Responsibility

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Communication processes required for developing, implementing, publicizing, and evaluating corporate social responsibility program in organizations.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional

PUR6403 - Crisis Public Relations

**Course Title**
Crisis Public Relations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
The course examines the management of crisis situations from a PR perspective, as well as how to manage issues to prevent them from becoming crises.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Occasional
PUR6405 - Communication and Public Relations in Politics and Government

**Course Title**
Communication and Public Relations in Politics and Government

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
COM 6008 or C.I. Role of professional and practical public relations communication skills and knowledge in contemporary politics and government.

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**Terms of Offering**
Fall

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PUR6918 - DIRECTED INDIVIDUAL Research IN PUBLIC RELATIONS

**Course Title**
DIRECTED INDIVIDUAL Research IN PUBLIC RELATIONS

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

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QMB - Quantitative Methods in Business

QMB5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Business Administration

**Department**
Department of Economics
QMB5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Economics

QMB6010 - Mathematical Tools for Business Analytics

Course Title
Mathematical Tools for Business Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Acceptance into a graduate business program of study.

Course Description
Introduction to the most used mathematical tools in business analytics, specifically, different and integral calculus as well as linear algebra.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Occasional
**QMB6304 - Data Visualization**

**Course Title**
Data Visualization

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
This course uses data visualization concepts and tools to analyze data sets, create visual insights that generate action using dashboards, and cover narrative best-practices.

**College**
College of Business Administration

**Department**
Department of Economics

**Terms of Offering**
Occasional

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**QMB6357 - Microeconomic Analysis for Business Analytics**

**Course Title**
Microeconomic Analysis for Business Analytics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Introduction to the main tools of microeconomic analysis for use in business analytics.

**College**
College of Business Administration

**Department**
Department of Economics

**Terms of Offering**
Spring
QMB6358 - Software Tools for Business Analytics

Course Title
Software Tools for Business Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admitted to Accounting MSA (any track) or Business Analytics MS or Management MS-Business Analytics track.

Course Description
Introduction to the main software tools used in business analytics, specifically, Python, R, and SQLite as well as UNIX.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Occasional

QMB6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Economics
QMB6912 - Capstone Project in Business Analytics

Course Title
Capstone Project in Business Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission into the MSM Business Analytics program, successful completion of all required courses in the program, permission of instructor.

Course Description
Integration of all the tools developed in the program to solve an empirical problem.

College
College of Business Administration

Department
Department of Economics

Terms of Offering
Occasional

QMB6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Economics

QMB6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Department of Economics
QMB7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Economics

QMB7939 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Economics

RED - Reading Education

RED5147 - Developmental Reading
Course Title
Developmental Reading
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
Principles, procedures, organization, and current practices in K-12 reading programs. Materials and methods of instruction.
College
College of Community Innovation and Education
Department
School of Teacher Education
Terms of Offering
Fall
Spring
Summer
RED5517 - Classroom Diagnosis and Development of Reading Proficiencies

Course Title
Classroom Diagnosis and Development of Reading Proficiencies

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- RED 5147 or equivalent.

Course Description
Classroom diagnosis and corrective teaching in reading; instructional materials. Case study required.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Even Fall

RED5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

RED5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education
RED5948 - Practicum in Reading Assessment and Instruction

Course Title
Practicum in Reading Assessment and Instruction

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- RED 5517.

Course Description
Practicum that requires application of reading assessment and instruction in order to increase reading proficiency of struggling readers. Concurrent K-12 field experiences required.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Every Semester

RED6116 - Advanced Study in Foundations of Reading

Course Title
Advanced Study in Foundations of Reading

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- RED 5147 or C.I.

Course Description
Historical development and current research-based practice related to language and cognitive foundations of reading components: phonemic awareness, phonics, vocabulary, fluency, comprehension, investigation of research.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Every Semester
RED6336 - Teaching Content Area and Disciplinary Literacy

**Course Title**
Teaching Content Area and Disciplinary Literacy

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Basic Teacher Certificate or C.I.

**Course Description**
Differentiation of and strategies for content area reading and disciplinary literacy instruction for K-12 readers; focus on print and digital texts.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Fall

RED6337 - Reading in the Secondary School

**Course Title**
Reading in the Secondary School

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- RED 6336, Basic Teacher Certification, or C.I.

**Course Description**
Motivation and engagement of the adolescent reader. Strategies for differentiation to support all proficient and non-proficient adolescent readers.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Fall
RED6746 - Literacy Leadership and Coaching

Course Title

Literacy Leadership and Coaching

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- RED 5517 or C.I.

Course Description

Collaboration with stakeholders to plan, implement, and supervise reading programs in K-12 settings, including data mining and professional development. Exploration of coaching models and facilitation of a school-wide literate environment.

College

College of Community Innovation and Education

Department

School of Teacher Education

Terms of Offering

Spring

RED6845 - Advanced Evaluation and Instruction in Reading

Course Title

Advanced Evaluation and Instruction in Reading

Credits Hours

3

Lab/Studio/Field Work Hours

0

Prerequisites

- RED 5517 or C.I.

Course Description

Administration and interpretation of formal and informal evaluation techniques. Instructional strategies (including multisensory and motivation) contributing to reading achievement at classroom and individual level. Emphasis on parent involvement.

College

College of Community Innovation and Education

Department

School of Teacher Education

Terms of Offering

Spring
RED6846 - Reading Practicum

Course Title
Reading Practicum

Credits Hours
6

Lab/Studio/Field Work Hours
6

Prerequisites
- RED 6845 or C.I.

Course Description
Evaluation and instructional practices for the individualization of reading instruction in a supervised clinical setting. Development of personalized instructional plan and parent communication.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Summer

RED6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

RED6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
**RED6938 - Special Topics**

**Course Title**  
Special Topics

**Credits Hours**  
3

**College**  
College of Community Innovation and Education

**Department**  
School of Teacher Education

**RED6946 - Practicum, Clinical Practice**

**Course Title**  
Practicum, Clinical Practice

**Credits Hours**  
3

**Lab/Studio/Field Work Hours**  
0

**College**  
College of Community Innovation and Education

**Department**  
School of Teacher Education

**RED7648 - Analysis and Evaluation of Trends and Issues in Literacy Education**

**Course Title**  
Analysis and Evaluation of Trends and Issues in Literacy Education

**Credits Hours**  
3

**Lab/Studio/Field Work Hours**  
0

**Prerequisites**  
- RED 7797.

**Course Description**  
Critical analysis and evaluation of trends and issues in literacy education: research, policy, and instruction.

**College**  
College of Community Innovation and Education

**Department**  
School of Teacher Education

**Terms of Offering**  
Even Summer
RED7697 - Literacy for the Twenty-First Century

Course Title
Literacy for the Twenty-First Century

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- RED 6116, RED 7797, RED 7648.

Course Description
Investigates changing role of literacy in a technology-based world; explores issues of literacy in an increasingly diverse world.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring

RED7743 - Reading and Writing Processes

Course Title
Reading and Writing Processes

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- RED 5147 or equivalent.

Course Description
Investigates reading and writing as interrelated processes; focuses on research that shapes reading and writing instruction in the U.S.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
RED7745 - Research in Reading Education Seminar

Course Title
Research in Reading Education Seminar

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- RED 5147 or equivalent; RED 6116.

Course Description
The study of the reading research process and the design of a research proposal in the reading education field.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Even Fall

RED7797 - Theoretical Processes of Reading Comprehension

Course Title
Theoretical Processes of Reading Comprehension

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- RED 5147 or equivalent.

Course Description
Investigates theoretical processes and factors related to comprehension. Studies relevant issues and research.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall
Spring
RED7919 - Doctoral Research

Course Title
Doctoral Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

RED7947 - Internship in Reading Education

Course Title
Internship in Reading Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PhD in Education--Reading Education Track.

Course Description
College teaching of reading education courses under supervision of reading education faculty mentor.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall

REE - Real Estate

REE5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Department of Finance
REE5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Finance

REE6006 - Real Estate Markets and Institutions
Course Title
Real Estate Markets and Institutions
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Acceptance into the MS Real Estate program.
Course Description
Overview of the core real estate concepts, property fundamentals, and the role of various institutions in real estate transactions and operations.
College
College of Business Administration
Department
Department of Finance
Terms of Offering
Occasional
REE6147 - Real Estate Market Analysis and Appraisal

Course Title
Real Estate Market Analysis and Appraisal

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- FIN 6406, acceptance into the MS Real Estate program.

Course Description
An applied introduction to the major concepts, principles and methods used in appraising commercial real estate, performing market analysis, and basic economic analysis.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Occasional

REE6209 - Real Estate Finance and Investment Analysis

Course Title
Real Estate Finance and Investment Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- FIN 6406, acceptance into the MS Real Estate program.

Course Description
Direct real estate investing in the apartment, office, industrial and retail sectors. Financing real estate transactions, real estate capital markets, and investment analysis.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Occasional
REE6380 - Financial Analysis of Real Estate Firms

Course Title
Financial Analysis of Real Estate Firms

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- FIN 6406.

Course Description
Focus on advanced financial statement analysis and valuations for real estate firms.

College
College of Business Administration

Department
Dr P Phillips School of Real Estate

Terms of Offering
Occasional

REE6418 - Real Estate Contracts and Negotiations

Course Title
Real Estate Contracts and Negotiations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Acceptance into the MS Real Estate Program.

Course Description
The course covers various legal and ethical concepts applicable to the real estate industry including contracts, securities laws, construction management, negotiations, and entity structure.

College
College of Business Administration

Department
Department of Finance

Terms of Offering
Odd Spring
REE6455 - Real Estate Law
Course Title
Real Estate Law
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Acceptance into the MS Real Estate program.
Course Description
Overview of the legal system and key laws affecting real estate. Emphasis on property rights, contracts, development law, theory of title, and commercial leases.
College
College of Business Administration
Department
Department of Finance
Terms of Offering
Occasional

REE6737 - Real Estate Development
Course Title
Real Estate Development
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Must take in final term of the MS Real Estate program.
Course Description
Capstone project course covering the real estate development process, regulatory considerations, financial and market feasibility, management control, and environmental aspects of real estate development.
College
College of Business Administration
Department
Department of Finance
Terms of Offering
Occasional
REE6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Finance

REE6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Business Administration
Department
Department of Finance

REE6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Business Administration
Department
Department of Finance
**REE7935 - Seminar in Finance and Real Estate Research**

**Course Title**
Seminar in Finance and Real Estate Research

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to business doctoral program and ECO 6416 or equivalent.

**Course Description**
An introduction to doctoral-level topics in finance, real estate research; including land economics, spatial markets for real property, and the economics of property law.

**College**
College of Business Administration

**Department**
Department of Finance

**Terms of Offering**
Even Fall

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**REL - Religion**

**REL5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
Department of Philosophy

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**SCE - Science Education**
SCE5325 - Teaching Middle School Science

**Course Title**
Teaching Middle School Science

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDG 6415, TSL 5085 or admission to MED program or Initial Teacher Professional Preparation certificate.

**Course Description**
This course will provide experiences that promote effective science teaching in grades 5-9 including interdisciplinary teaming, technology use, ESOL, and inquiry in science.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Occasional

SCE5337 - Issues and Methods in Secondary School Science

**Course Title**
Issues and Methods in Secondary School Science

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDG 6415, TSL 5085, or admission to MED program or Initial Teacher Professional Preparation certificate.

**Course Description**
Secondary science education special methods course is designed to augment students' understanding of instructional methods and their applications to middle and high school science curriculum.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring
Fall
SCE5836 - Space and Physical Science for Educators

**Course Title**
Space and Physical Science for Educators

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Introduction to space and physical science, manned space flight, and space education curriculum.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer

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SCE5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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SCE5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
SCE6315 - Methods in Elementary School Science

**Course Title**
Methods in Elementary School Science

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- EDE 6933 or C.I.

**Course Description**
Organization of instruction in elementary school science including methods, evaluation, materials, strategies, and current practices.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Every Semester

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SCE6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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SCE6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
**SCE6938 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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**SCE7145 - Design of Post Secondary Science Curriculum**

**Course Title**
Design of Post Secondary Science Curriculum

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Doctoral standing, admission to the PhD or EdD Education programs, and C.I.

**Course Description**
Successful completion of ESE 6217 or an approved equivalent. This course will examine issues of curriculum theory, research, and practice at the post-secondary level situated in science education.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Odd Fall
SCE7146 - Professional Issues in Science Education

Course Title
Professional Issues in Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PhD in Education or C.I.

Course Description
Students will study issues and forces that have shaped science education policies, classroom practices, ethics development, and professional identity.

College
College of Community Innovation and Education

Department
School of Teacher Education

SCE7242 - Assessment in Science Teaching, Learning and Research

Course Title
Assessment in Science Teaching, Learning and Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing, admission to the PhD or EdD Education programs, and C.I.

Course Description
This course will examine current instruments/tools used in science assessment covering standardized science testing and authentic and performance-based science assessments.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Odd Fall
SCE7746 - Teaching Theory and Research in Science Education

Course Title
Teaching Theory and Research in Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PhD in Education or C.I.

Course Description
Course will provide students means to become familiar with trends and current status of research in science teaching and learning.

College
College of Community Innovation and Education

Department
School of Teacher Education

SCE7864 - Science Technology and Society

Course Title
Science Technology and Society

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PhD in Education or C.I.

Course Description
The course is focused on the history of science in the U.S. with particular emphasis on institutional configurations that emerged in the period since nationhood.

College
College of Community Innovation and Education

Department
School of Teacher Education
SCE7935 - Seminar–Professional Writing/Grants in Science Education

Course Title
Seminar–Professional Writing/Grants in Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Ph.D. in Education or C.I.

Course Description
The focus of the course is on scholarly writing and grant writing in science teaching, learning, assessment and relationships.

College
College of Community Innovation and Education

Department
School of Teacher Education

SCE7942 - Internship/Practicum in Science Education

Course Title
Internship/Practicum in Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PhD in Education or C.I.

Course Description
The focus of this course is students' participation in current research projects in science/science education.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Every Semester
**SCE7980 - Doctoral Dissertation**

**Course Title**
Doctoral Dissertation

**Credits Hours**
0 - 99

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Taken and passed comprehensive exam.

**Course Description**
Approval of Education Ph.D SCE?track program coordinator. May be repeated for credit.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

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### SDS - Student Development Services

**SDS5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**SDS5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology
SDS6200 - Procedures for Group Testing  
**Course Title**  
Procedures for Group Testing  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
1  

**Prerequisites**  
- EGC 5005 or EGC 6426, EDF 6481 or EDF 6482.  

**Course Description**  
Survey of various educational and psychological objective instruments used in schools to measure achievement, aptitude, interests, ability. Emphasis on administration and score interpretation.  

**College**  
College of Community Innovation and Education  

**Department**  
Department of Counselor Education & School Psychology  

**Terms of Offering**  
Occasional  

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SDS6308 - Applied Practice in Career Services  
**Course Title**  
Applied Practice in Career Services  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Course Description**  
SDS 6347 and SDS 6XXX Career and College Readiness in Schools PK-12. This course provides an opportunity to work with individuals in various school and community settings to experience career development activities.  

**College**  
College of Community Innovation and Education  

**Department**  
Department of Counselor Education & School Psychology  

**Terms of Offering**  
Fall
SDS6347 - Career Development  
**Course Title**  
Career Development  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- C.I.  
**Course Description**  
A study of career development theories, occupational and educational information, approaches to career decision-making life-style and leisure in the development of the whole person.  
**College**  
College of Community Innovation and Education  
**Department**  
Department of Counselor Education & School Psychology  
**Terms of Offering**  
Summer  
Fall  

SDS6411 - Counseling with Children and Adolescents  
**Course Title**  
Counseling with Children and Adolescents  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- EGC 6436 and EDF 6155 or C.I.  
**Course Description**  
Study of counseling theory, process, and techniques as applied to children and adolescents. Course will contain an experiential component.  
**College**  
College of Community Innovation and Education  
**Department**  
Department of Counselor Education & School Psychology  
**Terms of Offering**  
Spring
SDS6620 - Coordination of Comprehensive Professional School Counseling Programs

Course Title
Coordination of Comprehensive Professional School Counseling Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 5005, MHS 6400, MHS 6401, MHS 6500, MHS 6702.

Course Description
In-depth analysis of comprehensive developmental professional school counseling programs, including the coordination of these programs.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Odd Spring
Summer

SDS6622 - Career and College Readiness in Schools PK-12

Course Title
Career and College Readiness in Schools PK-12

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. This course provides graduate students and practitioners with a developmental overview of child and adolescent career growth focusing on interventions for career education and counseling.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring
SDS6909 - Research Report  
Course Title: Research Report  
Credits Hours: 1 - 99  
College: College of Community Innovation and Education  
Department: Department of Counselor Education & School Psychology

SDS6918 - Directed Research  
Course Title: Directed Research  
Credits Hours: 1 - 99  
College: College of Community Innovation and Education  
Department: Department of Counselor Education & School Psychology

SDS6938 - Special Topics  
Course Title: Special Topics  
Credits Hours: 3  
College: College of Community Innovation and Education  
Department: Department of Counselor Education & School Psychology
SDS6947 - Internship in Professional School Counseling

Course Title
Internship in Professional School Counseling

Credits Hours
1 - 6

Lab/Studio/Field Work Hours
6-Jan

Prerequisites
- MHS 5005, MHS 6400, MHS 6401, MHS 6500, MHS 6702, MHS 6803, SDS 6620.

Course Description
Supervised fieldwork experience in professional school counseling, emphasizing experiences that support the development of student interns' counseling competencies and delivery of comprehensive services to all students.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Even Fall
Even Spring
Even Summer

SOP - Social Psychology

SOP5059 - Advanced Social Psychology

Course Title
Advanced Social Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SOP 3004C, graduate status or senior standing, or C.I.

Course Description
The major findings and theories in social psychology including an in-depth review of relevant research.

College
College of Sciences

Department
Department of Psychology

Terms of Offering
Occasional
SOP5917 - Directed Research  
**Course Title**  
Directed Research  

**Credits Hours**  
1 - 99  

**College**  
College of Sciences  

**Department**  
Department of Psychology  

SOP5937 - Special Topics  
**Course Title**  
Special Topics  

**Credits Hours**  
3  

**College**  
College of Sciences  

**Department**  
Department of Psychology  

SOP6909 - Research Report  
**Course Title**  
Research Report  

**Credits Hours**  
1 - 99  

**College**  
College of Sciences  

**Department**  
Department of Psychology  

SOP6918 - Directed Research  
**Course Title**  
Directed Research  

**Credits Hours**  
1 - 99  

**College**  
College of Sciences  

**Department**  
Department of Psychology
SOP6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Sciences

**Department**
Department of Psychology

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**SOW - Social Work**

**SOW5107 - Human Behavior in the Social Environment**

**Course Title**
Human Behavior in the Social Environment

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MSW program.

**Course Description**
Study of human development and psychosocial functioning of individuals, groups, families and communities with particular attention to implications of human diversity.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Every Semester
SOW5132 - Diverse Client Populations

Course Title
Diverse Client Populations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Study of human diversity, focusing on the needs, resources, problems, and service issues of several identified minority client populations.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring

SOW5217 - Foundations of Behavioral Health Policy and Social Work Practice

Course Title
Foundations of Behavioral Health Policy and Social Work Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MSW program.

Course Description
This course helps students think critically about mental health services by analyzing the factors that influence global behavioral health policies.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Every Semester
SOW5235 - Social Welfare Policies and Services

**Course Title**
Social Welfare Policies and Services

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Study of societal responses to human needs; forces shaping social welfare systems; introduces frameworks for analyzing social policies and services.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Fall

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SOW5305 - Social Work Practice I: Generalist Practice

**Course Title**
Social Work Practice I: Generalist Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Study of social work functions, knowledge, values, roles and skills; the use of a generalist model of practice.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Fall
SOW5306 - Social Work Practice II: Intervention Approaches

Course Title
Social Work Practice II: Intervention Approaches

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Study of selected social work theories, strategies, and techniques for helping people and improving system responsiveness to human needs.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring

SOW5404 - Social Work Research

Course Title
Social Work Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Study of group research designs in social work; quantitative analyses; and related ethical issues.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall
SOW5538 - Full-Time MSW Generalist Field Integrative Seminar I

**Course Title**
Full-Time MSW Generalist Field Integrative Seminar I

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Social Work program or C.I.

**Corequisites**
- SOW 5305 and SOW 5940

**Course Description**
Field education seminar for full-time MSW generalist students.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Fall

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SOW5539 - Full-Time MSW Generalist Field Integrative Seminar II

**Course Title**
Full-Time MSW Generalist Field Integrative Seminar II

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- SOW 5538

**Corequisites**
- SOW 5306 and SOW 5940

**Course Description**
Field education seminar for full-time Master of Social Work generalist students.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Spring
SOW5565 - Part-Time MSW Generalist Field Integrative Seminar I

Course Title
Part-Time MSW Generalist Field Integrative Seminar I

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 5305

Corequisites
- SOW 5306 and SOW 5940

Course Description
Field education seminar course for part-time MSW generalist students.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall

SOW5566 - Part-Time MSW Generalist Field Integrative Seminar II

Course Title
Part-Time MSW Generalist Field Integrative Seminar II

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 5565

Corequisites
- SOW 5940.

Course Description
Field education seminar for part-time MSW generalist students.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring
SOW5567 - Part-Time MSW Generalist Field Integrative Seminar III

**Course Title**
Part-Time MSW Generalist Field Integrative Seminar III

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- SOW 5566.

**Corequisites**
- SOW 5940

**Course Description**
Field education seminar course for part-time MSW generalist students.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Summer

SOW5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

SOW5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
1 - 99

**College**
College of Health Professions and Sciences

**Department**
School of Social Work
SOW5940 - Generalist Field Education

**Course Title**
Generalist Field Education

**Credits Hours**
1 - 99

**Course Description**
Admission to MSW program. Field education for Master of Social Work generalist students; includes supervised practice of social work in an agency for 200 clock hours.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Every Semester

SOW6109 - Violence Against Women: A Global Perspective

**Course Title**
Violence Against Women: A Global Perspective

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
An introduction to the types of violence imposed on women around the world. Social, political and economic issues related to women and violence are reviewed.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Summer
SOW6123 - Psychosocial Pathology

**Course Title**
Psychosocial Pathology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Completion of all Master of Social Work core courses or advanced standing.

**Course Description**
Study of mental and behavioral health disorders in individuals.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
- Summer
- Fall
- Spring

SOW6149 - Military Culture and Social Work Practice

**Course Title**
Military Culture and Social Work Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Social Work program or C.I.

**Course Description**
Provides a detailed overview of the practice of social work with these military connected clients, families, and communities.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Every Semester
SOW6155 - Human Sexuality in Social Work Practice

**Course Title**
Human Sexuality in Social Work Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Social Work program, Graduate Certificate in Gender Studies or C.I.

**Course Description**
Study of human sexuality with emphasis on assessment and intervention skills for social workers with clients experiencing problems involving sexual issues.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Occasional

SOW6324 - Clinical Practice with Groups

**Course Title**
Clinical Practice with Groups

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- SOW 6123.

**Course Description**
Group work theories, interventions and techniques applied to persons with emotional, social and psychological problems.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Spring
Fall
SOW6348 - Clinical Practice with Individuals

Course Title
Clinical Practice with Individuals

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 6123.

Course Description
Behavioral, crisis, and psychosocial theories applied to persons with emotional, social, and psychological problems.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall

SOW6383 - Social Work Administration

Course Title
Social Work Administration

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Master of Social Work program or C.I. Designed as a general introduction to the multi-faceted nature of social work administration in public and private non-profit settings.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Occasional
SOW6424 - Theories for Evidence-Based Clinical Practice in Social Work

Course Title
Theories for Evidence-Based Clinical Practice in Social Work

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of all Master of Social Work core courses or advanced standing.

Course Description
Students will learn a wide range of theoretical perspectives that support clinical social work practice.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Summer

SOW6433 - Clinical Evaluation in Social Work Practice

Course Title
Clinical Evaluation in Social Work Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 5404 or Advanced Standing.

Course Description
Students will learn to critically analyze and apply specific research designs and analytical methods for systematic evaluation of clinical interventions, services, and programs.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring
Fall
Summer
SOW6531 - Full Time MSW Clinical Field Integrative Seminar I

**Course Title**
Full Time MSW Clinical Field Integrative Seminar I

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- SOW 6123 and SOW 6424.

**Corequisites**
- SOW 6940

**Course Description**
Field education seminar for full-time Master of Social Work students.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Fall

SOW6536 - Full Time MSW Clinical Field Integrative Seminar II

**Course Title**
Full Time MSW Clinical Field Integrative Seminar II

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- SOW 6531.

**Course Description**
Field education for full-time Master of Social Work clinical students; includes seminar and supervised practice of social work in an agency for 300 clock hours.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Spring

2022-2023 Graduate Catalog
SOW6561 - Part-Time MSW Clinical Field Integrative Seminar I

Course Title
Part-Time MSW Clinical Field Integrative Seminar I

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 6123 and SOW 6424.

Corequisites
- SOW 6940

Course Description
Field education seminar for part-time Master of Social Work students.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall

SOW6562 - Part Time MSW Clinical Field Integrative Seminar II

Course Title
Part Time MSW Clinical Field Integrative Seminar II

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 6561.

Corequisites
- SOW 6940

Course Description
Field seminar education for part time Master of Social Work clinical students.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring
SOW6563 - Part-Time MSW Clinical Field Integrative Seminar III

Course Title
Part-Time MSW Clinical Field Integrative Seminar III

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 6562.

Corequisites
- SOW 6563

Course Description
Field education seminar for part-time MSW clinical students.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Summer

SOW6603 - Social Work in Health Settings

Course Title
Social Work in Health Settings

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Master of Social Work program or C.I. Study of social work roles, interventions, and issues related to helping clients in health care settings.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Occasional
SOW6604 - Medications in Social Work Practice

Course Title
Medications in Social Work Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Master of Social Work program and SOW 6123, or C.I.

Course Description
The study of the effects that psychotropic medications can have within the counseling/helping relationship.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Occasional

SOW6608 - Understanding and Managing Combat Related Behavioral and Mental Health Disorders

Course Title
Understanding and Managing Combat Related Behavioral and Mental Health Disorders

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 6149 and admission into the Military Graduate Certificate

Course Description
Advances students’ knowledge regarding identifying and treating mental health conditions with combat and combat-exposed service members.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring
SOW6610 - Clinical Practice with Military and Veteran Families or Groups

Course Title
Clinical Practice with Military and Veteran Families or Groups

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 6149.

Course Description
Theoretical/practical approaches to clinical practice with military families and groups. Examines the demands of military service on family/group dynamic, composition and related issues.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring

SOW6612 - Clinical Practice with Families

Course Title
Clinical Practice with Families

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SOW 6123.

Course Description
Family-focused models of intervention applied to families in transition and to problems such as divorce, single parenting, and blended families.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall
SOW6635 - Social Work Practice in Schools

Course Title
Social Work Practice in Schools

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MSW program or Social Work Graduate Certificate or C.I.

Course Description
Enhance clinical knowledge and skills that are essential to effective school based practice with students, teachers, families, schools and communities.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Summer

SOW6644 - Interventions with Older Adults and Their Families

Course Title
Interventions with Older Adults and Their Families

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Admission to Master of Social Work program or C.I. Study of concepts, skills, models and theories for intervening with the elderly. Special attention is given to minority populations.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Occasional
**SOW6652 - Child Welfare Services**

**Course Title**
Child Welfare Services

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Social Work program or C.I.

**Course Description**
Provides a framework of knowledge, values and skills necessary to work with maltreated children and their families. It also serves to introduce students to the field of Child Welfare (CW).

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Spring

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**SOW6655 - Child Abuse: Treatment and Prevention**

**Course Title**
Child Abuse: Treatment and Prevention

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MSW degree or SW or Criminal Justice Certificate program.

**Course Description**
Study of various forms of child abuse, the social worker's role and interventions with victims of child abuse and their family members.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Occasional
SOW6670 - Clinical Social Work Practice with LGBTQ+

**Course Title**
Clinical Social Work Practice with LGBTQ+

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Master of Social Work and SOW 6123 or C.I.

**Course Description**
Focus on Social Work resources, social policy and clinical assessment, diagnosis and therapeutic interventions of LGBTQ+ individuals, families, groups and communities.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Occasional

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SOW6712 - Clinical Social Work Practice with Substance Addictions

**Course Title**
Clinical Social Work Practice with Substance Addictions

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to Master of Social Work program, Juvenile Justice certificate, or Corrections Leadership certificate, or C.I. The most common substance addictions are identified along with current evidence-based practice strategies.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Occasional
SOW6726 - Social Work Practice with Children from Birth to Age Five and their Families

**Course Title**
Social Work Practice with Children from Birth to Age Five and their Families

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Social Work practice and treatment of children from birth to five years of age and their families.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Spring

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SOW6727 - Core Concepts of Child and Adolescent Trauma

**Course Title**
Core Concepts of Child and Adolescent Trauma

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Trauma informed concepts applied to practice with children and adolescents.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Every Semester
SOW6735 - Documentation Skills for Helping Professionals

Course Title
Documentation Skills for Helping Professionals

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MSW students, C.I.

Course Description
Study of documentation skills and record keeping for helping professionals.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Odd Spring
Even Summer

SOW6756 - Forensic Social Work

Course Title
Forensic Social Work

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MSW program or Social Work Certificate.

Course Description
Course studies theories and practice of forensic social work focusing on roles, ethics, skills and functions.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Occasional
SOW6806 - Behavioral Health Skills for Clinical Social Workers

**Course Title**
Behavioral Health Skills for Clinical Social Workers

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to Master of Social Work and SOW 6123. Provides comprehensive knowledge and skills for providing behavioral health interventions in medical and behavioral health settings.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Odd Summer

SOW6846 - Spirituality in Clinical Social Work Practice

**Course Title**
Spirituality in Clinical Social Work Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**

- Admission to MSW or Social Work Certificate program.

**Course Description**
Faith development theory, study of spirituality in various settings and development of strategies for use in practice designed to heighten sensitivity to spiritual dimensions of life.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Occasional
SOW6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Health Professions and Sciences
Department
School of Social Work

SOW6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Health Professions and Sciences
Department
School of Social Work

SOW6938 - Special Topics
Course Title
Special Topics
Credits Hours
1 - 99
College
College of Health Professions and Sciences
Department
School of Social Work

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SOW6940 - Clinical Field Education

Course Title
Clinical Field Education

Credits Hours
0 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MSW program.

Course Description
Field education for Master of Social Work students; includes supervised practice of social work in an agency for 300 clock hours.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Every Semester

SOW6949 - Cooperative Education in Social Work

Course Title
Cooperative Education in Social Work

Credits Hours
0 - 99

College
College of Health Professions and Sciences

Department
School of Social Work
SOW7215 - Advances in Behavioral Health Policy in the US and Abroad

Course Title
Advances in Behavioral Health Policy in the US and Abroad

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to DSW program or C.I.

Course Description
Critical analysis of the historical foundations and evolution of public policy in the United States and abroad.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall

SOW7339 - Community Partnership and Leadership in Behavioral Health Organizations

Course Title
Community Partnership and Leadership in Behavioral Health Organizations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the DSW Program or C.I.

Course Description
Critical analysis of the field of community behavioral health practice, including community accountability, community behavioral health assessment, organizing, policy advocacy, and social services and social change leadership in behavioral health organizations.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring
SOW7421 - Data Management for Decision Making in Behavioral Health Social

Course Title
Data Management for Decision Making in Behavioral Health Social

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to DSW program or C.I.

Course Description
Evaluates types and uses of primary and secondary data relevant to behavioral health decision making and applications of data management and presentation through the use of innovative computer technology.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Summer

SOW7444 - Program Evaluation in Behavioral Health Organization

Course Title
Program Evaluation in Behavioral Health Organization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to DSW program or C.I.

Course Description
Focuses on concepts, data, methods and dissemination of evaluation outcomes in behavioral health organizations that provide social work services.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall

2022-2023 Graduate Catalog
SOW7450 - Grant Writing for Behavioral Health

**Course Title**
Grant Writing for Behavioral Health

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the DSW Program or C.I.

**Course Description**
Advances knowledge and skills in grant writing for behavioral health program planning, service delivery, and intervention research.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Summer

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SOW7492 - Theory Building in Social Work and Applied Social Science Disciplines

**Course Title**
Theory Building in Social Work and Applied Social Science Disciplines

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Public Affairs Ph.D. program or C.I.

**Course Description**
This advanced seminar in theory building will teach design, tools and methods used in social theory building.

**College**
College of Health Professions and Sciences

**Department**
School of Social Work

**Terms of Offering**
Odd Fall
SOW7494 - Conducting Evidence-based Practice Research in Social Work and Allied Fields

Course Title
Conducting Evidence-based Practice Research in Social Work and Allied Fields

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Public Affairs Ph.D. program or C.I.

Course Description
This is an advanced seminar in conducting evidence-based practice research. Analytical design and methods used in such research will be applied.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Even Spring

SOW7910 - DSW Capstone II: Behavioral Health Leadership

Course Title
DSW Capstone II: Behavioral Health Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the DSW Program and Completion of DSW Capstone I or C.I.

Course Description
A mentored research experience for students to complete a publishable article based on their completed review of evidence-based literature on a topic from Capstone I.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring
SOW7913 - DSW Capstone I: Behavioral Health Leadership

Course Title
DSW Capstone I: Behavioral Health Leadership

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to DSW Program or C.I.

Course Description
Mentored research experience for students to consolidate the DSW curriculum by developing a systematic review of evidence-based literature applied to an area of behavioral health practice in the student's area of interest.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall

SOW7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
School of Social Work
SOW7920 - Teaching Skills for Social Work Programs

Course Title
Teaching Skills for Social Work Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the DSW Program or C.I.

Course Description
Critically examines theory-based and evidence-based learning theory and employs experiential training using today's media and technology for teaching social work.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Fall

SOW7935 - Innovations in Behavioral Health: Current Topics and Program Development Workshop

Course Title
Innovations in Behavioral Health: Current Topics and Program Development Workshop

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to DSW Program or C.I.

Course Description
Seminar on current topics in the field of behavioral health aimed at developing expertise in the design of programmatic responses to these emergent topics.

College
College of Health Professions and Sciences

Department
School of Social Work

Terms of Offering
Spring
SOW7939 - Special Topics
Course Title
Special Topics
Credits Hours
1 - 99
College
College of Health Professions and Sciences
Department
School of Social Work

SOW7956 - Workshop in Dissemination of Behavioral Health Research and Scholarship
Course Title
Workshop in Dissemination of Behavioral Health Research and Scholarship
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the DSW Program or C.I.
Course Description
Experiential practice in developing presentation and publishable works aimed at extrapolating from the literature state of the art theory informed evidence for advancing best practices in behavioral health management.
College
College of Health Professions and Sciences
Department
School of Social Work
Terms of Offering
Spring

SPA - Speech Pathology and Audiology

SPA5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Health Professions and Sciences
Department
School of Communication Sciences and Disorders
SPA5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

SPA6057 - Methods in School Speech-Language Pathology

Course Title
Methods in School Speech-Language Pathology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.A. in Communication Sciences and Disorders or C.I.

Course Description
The study of essential concepts, methods and procedures used in school-based, speech-language pathology.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Occasional
SPA6204 - Articulation/Phonological Dis

Course Title
Articulation/Phonological Dis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.A. in Communication Sciences and Disorders or C.I.

Course Description
Advanced theory, diagnosis, and treatment of articulation/phonological disorders including developmental apraxia of speech, dysarthria, and cleft palate; communicative differences vs. disorders emphasized.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Every Semester

Current Fee Per Student
$44.65

SPA6211 - Voice and Upper Airway Disorders

Course Title
Voice and Upper Airway Disorders

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.A. in Communication Sciences and Disorders or C.I.

Course Description
Study of the etiology, evaluation, and management of voice disorders in children and adults, with laboratory demonstration and participation.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Spring
Summer

Current Fee Per Student
$15.00
SPA6225C - Fluency Disorders

Course Title
Fluency Disorders

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to M.A. in Communication Sciences and Disorders or C.I.

Course Description
Theories, etiology, symptomatology and development of fluency disorders as well as assessment, differential diagnosis and management of fluency disorders in children and adults.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Spring
Fall

SPA6236 - Motor Speech Disorders in Adults and Children

Course Title
Motor Speech Disorders in Adults and Children

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.A. in Communication Sciences and Disorders and SPA 6204 or C.I.

Course Description

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Every Semester

Current Fee Per Student
$17.00
SPA6245 - Communication Disorders in Cleft Palate-Velopharyngeal Dysfunction

**Course Title**
Communication Disorders in Cleft Palate-Velopharyngeal Dysfunction

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- SPA 6204, SPA 6211C, or C.I.

**Course Description**
Introduction to the management of communication and feeding disorders related to cleft palate and/or velopharyngeal dysfunction.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
Fall

SPA6327 - Aural Habilitation Rehab

**Course Title**
Aural Habilitation Rehab

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Communication Sciences and Disorders master's program or C.I.

**Course Description**
Principles and procedures involved in speech and language acquisition, management, utilization of residual hearing, speech reading, and the use of hearing aids.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
Every Semester

**Current Fee Per Student**
$28.49
SPA6401 - Language Disorders in Infants and Toddlers

Course Title
Language Disorders in Infants and Toddlers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
SPA 6496

Course Description
Assessment and intervention of communication disorders in infants and toddlers incorporating transdisciplinary and family-centered models.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Fall

Current Fee Per Student
$12.00

SPA6410 - Aphasia and Related Disorders

Course Title
Aphasia and Related Disorders

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Admission to M.A. in Communication Sciences and Disorders or C.I.

Course Description
Evaluation and treatment of language disorders in adults with damage to the central nervous system, with an emphasis on etiology and differential diagnosis.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Spring
Fall

Current Fee Per Student
$60.00
SPA6417 - Management of Acquired Cognitive/Communication Disorders Across the Lifespan

Course Title
Management of Acquired Cognitive/Communication Disorders Across the Lifespan

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SPA 6410 or C.I.

Course Description
Evaluative and therapeutic approaches for children and adults with acquired cognitive-communication disorders including impairments, associated behaviors, participation limitations, context barriers, and facilitators.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Spring
Fall

Current Fee Per Student
$60.00

SPA6432 - Issues in Autism

Course Title
Issues in Autism

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SPA 6402 or C.I.

Course Description
Study of the diagnosis, assessment and intervention strategies for autism and related disorders.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Occasional
SPA6437 - Communication Foundations and Assistive/Instruct Technology for Communication

Course Title
Communication Foundations and Assistive/Instruct Technology for Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Classroom approaches involving assistive/instructional technology used to meet communication needs of students with autism spectrum disorders and other communicative disorders.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Occasional

SPA6453 - Management of Cognitive-Communication Disorders in Traumatic Brain Injury

Course Title
Management of Cognitive-Communication Disorders in Traumatic Brain Injury

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SPA 6452 or C.I.

Course Description
Management of cognitive-communication disorders in traumatic brain injury of school-aged and post-secondary students with emphasis on attention, perceptual skills, executive function, learning and social interaction.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Occasional
SPA6474 - Assessment and Management of Culturally and Linguistically Diverse Populations

**Course Title**
Assessment and Management of Culturally and Linguistically Diverse Populations

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MA in Communication Sciences or C.I.

**Course Description**
Role of native and second languages, dialects and culture in the assessment and management of individuals from culturally and linguistically diverse backgrounds.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
- Spring
- Fall

**Current Fee Per Student**
$60.00

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SPA6503 - Foundations of Clinical Practice Level II

**Course Title**
Foundations of Clinical Practice Level II

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- 6551 or C.I.

**Corequisites**
- 6503L.

**Course Description**
Seminar preparing graduate clinicians for practicum with pediatric/adolescents across varied communication disorders: clinical decision-making, generalization, transfer, maintenance, service delivery, ethics, public policy and professional issues.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
- Every Semester

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2022-2023 Graduate Catalog
SPA6503L - Found Clinic Practice-II APP

Course Title

Found Clinic Practice-II APP

Credits Hours

1

Lab/Studio/Field Work Hours

2

Prerequisites

- SPA 6551 or C.I.

Corequisites


Course Description

Supervised practicum across a variety of communication disorders within the pediatric and adolescent population. May be repeated for credit. Minimum of 20 clock hours required.

College

College of Health Professions and Sciences

Department

School of Communication Sciences and Disorders

Terms of Offering

Every Semester

Current Fee Per Student

$20.80

SPA6522 - Foundations of Medical Speech-Language Pathology

Course Title

Foundations of Medical Speech-Language Pathology

Credits Hours

3

Lab/Studio/Field Work Hours

0

Course Description

Foundation topics to prepare students to work as part of an interdisciplinary team with complex patients in various medical settings.

College

College of Health Professions and Sciences

Department

School of Communication Sciences and Disorders

Terms of Offering

Occasional
SPA6541 - Assessment of Language Disorders in Children and Adolescents

**Course Title**
Assessment of Language Disorders in Children and Adolescents

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to M.A. in Communication Sciences and Disorders or C.I.

**Course Description**
The assessment of spoken and written language disorders in children and adolescents.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
Every Semester

SPA6542 - Intervention of Language Disorders in Children and Adolescents

**Course Title**
Intervention of Language Disorders in Children and Adolescents

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to M.A. in Communication Sciences and Disorders or C.I.

**Course Description**
The nature and treatment of spoken and written language disorders in children and adolescents.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
Every Semester
SPA6551 - Foundations of Clinical Practice: Level I

**Course Title**

Foundations of Clinical Practice: Level I

**Credits Hours**

1

**Lab/Studio/Field Work Hours**

0

**Prerequisites**

- Admission to Communication Sciences and Disorders master's program or C.I.

**Course Description**

Strategic application of knowledge in normal communication sciences and development to clinical practice through creating, testing and developing hypotheses about the nature of communication disorders.

**College**

College of Health Professions and Sciences

**Department**

School of Communication Sciences and Disorders

**Terms of Offering**

Every Semester

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SPA6553L - Clinical Practice in Differential Diagnosis in Speech and Language Pathology

**Course Title**

Clinical Practice in Differential Diagnosis in Speech and Language Pathology

**Credits Hours**

1

**Lab/Studio/Field Work Hours**

1

**Prerequisites**

- SPA 6503, SPA 6503L or C.I.

**Course Description**

Clinical application of diagnostic process and assessment procedures for a variety of communication disorders across the life span. May be repeated for credit.

**College**

College of Health Professions and Sciences

**Department**

School of Communication Sciences and Disorders

**Terms of Offering**

Every Semester

**Current Fee Per Student**

$44.00
SPA6559 - Augmentative and Alternative Communication

Course Title
Augmentative and Alternative Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.A. in Communication Sciences and Disorders or C.I.

Course Description
The total integrated network of techniques, aids, strategies, and skills individuals use to supplement or replace inadequate natural speaking ability.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Every Semester

SPA6563L - Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia

Course Title
Clinical Practice and Instrumental Diagnostics in Individuals with Dysphagia

Credits Hours
1

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to Communication Sciences and Disorders MA and SPA 6565 and SPA 6943C.

Course Description
Gain competency diagnosing and planning care in individuals with swallowing disorders across the lifespan. Students learn fluoroscopic interpretation and individualized care planning.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Occasional
SPA6565 - Feeding and Swallowing Disorders

Course Title
Feeding and Swallowing Disorders

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.A. in communication Sciences and Disorders and SPA 6211C or C.I.

Course Description
Evaluation and management of feeding and swallowing disorders in children and adults.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Every Semester

SPA6569 - Management of Upper Airway and Aerodigestive Disorders

Course Title
Management of Upper Airway and Aerodigestive Disorders

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SPA 6211C; SPA 6565.

Course Description
Overview of the presentation, diagnosis, management and potential complications of common upper airway and aerodigestive disorders in adults and children.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Occasional

Current Fee Per Student
$42.00
SPA6805 - Research in Communicative Disorders

Course Title
Research in Communicative Disorders

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.A. in Communication Sciences and Disorders and STA 2014C or STA 2023 or equivalent or C.I.

Course Description
Introduction to empirical research in communicative disorders, with emphasis on hypothesis testing, research design, data analysis, and interpretation of results.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Every Semester

SPA6843 - Severe Language-Based Reading and Writing Disabilities

Course Title
Severe Language-Based Reading and Writing Disabilities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to M.A. in Communication Sciences and Disorders or C.I.

Course Description
Development, assessment, and instruction of reading, writing, and spelling, with emphasis on phonemic awareness, decoding, text comprehension, spelling, and written expression.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Spring
SPA6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

SPA6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

SPA6942 - Foundations of Clinical Practice: Level III

Course Title
Foundations of Clinical Practice: Level III

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- SPA 6503, SPA 6503L or C.I.

Corequisites
- SPA 6942L.

Course Description
Seminar preparing graduate clinicians for practicum with adults who have acquired disorders: clinical decision-making, generalization, transfer, maintenance, service delivery models, ethics, public policy and reimbursement.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Every Semester
SPA6942L - Found Clinic Practice-III APP

Course Title
Found Clinic Practice-III APP

Credits Hours
1

Lab/Studio/Field Work Hours
2

Prerequisites
- SPA 6503, SPA 6503 or C.I.

Corequisites
- SPA 6942.

Course Description
Supervised practicum including acquired disorders with the adult population. May be repeated for credit. Minimum of 20 clock hours required.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Current Fee Per Student
$20.10

SPA6943 - Advanced Clinical Practice Seminar

Course Title
Advanced Clinical Practice Seminar

Credits Hours
1

Lab/Studio/Field Work Hours
0

Prerequisites
- SPA 6942, SPA 6942L.

Course Description
Clinical practice seminar preparing graduate clinicians for practicum addressing the diagnosis, treatment and management of persons with complex communication disorders across the lifespan.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
- Spring
- Fall

Current Fee Per Student
$40.00
SPA6949 - Cooperative Education in Speech Pathology and Audiology

**Course Title**
Cooperative Education in Speech Pathology and Audiology

**Credits Hours**
0 - 99

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

SPA7490 - Advanced Studies in Language Disorders

**Course Title**
Advanced Studies in Language Disorders

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Doctoral standing or C.I.

**Course Description**
Evaluation and management of language impairment and associated disorders in preschool and school-age children.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
Occasional
SPA7495 - Doctoral Seminar II: Spoken and Written Language Disorders

Course Title
Doctoral Seminar II: Spoken and Written Language Disorders

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Research, theory and practice on spoken and written language disorders in upper elementary, secondary and post-secondary students.

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders

Terms of Offering
Spring

SPA7919 - Doctoral Research

Course Title
Doctoral Research

Credits Hours
1 - 99

College
College of Health Professions and Sciences

Department
School of Communication Sciences and Disorders
SPA7948 - Internship in Professional Development

**Course Title**
Internship in Professional Development

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to PhD in Education Communication Sciences and Disorders Track.

**Course Description**
Supervised experience in the design, delivery and evaluation of professional development for educators in the area of communication sciences and disorders.

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

**Terms of Offering**
Fall

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SPA7980 - Dissertation

**Course Title**
Dissertation

**Credits Hours**
1 - 99

**College**
College of Health Professions and Sciences

**Department**
School of Communication Sciences and Disorders

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**SPB - Sports Business**
SPB6406 - Sport Law  
**Course Title**  
Sport Law  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- CBA master's program of study foundation core and admission to the Sport Business Management program.  

**Course Description**  
Legal issues applicable to a sports context, developing familiarity with the legal terminology and broad understanding of key concepts in tort, contract, constitutional and common law. Employment, labor, antitrust, and agency law are also key components of this course.  

**College**  
College of Business Administration  

**Department**  
DeVos Sport Business Management  

**Terms of Offering**  
Fall  

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SPB6506 - Moral and Ethical Issues in Sport  
**Course Title**  
Moral and Ethical Issues in Sport  

**Credits Hours**  
1.5  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- CBA master's program of study foundation core, and acceptance into the Sport Business Management program.  

**Course Description**  
Broad understanding of the moral and ethical issues in sport including a special focus on the responsibility of governing bodies and decision-makers in sport including faculty, coaches, athletic directors, presidents, league commissioners, the NCAA, and the media. Issues will also include equity for women and people of color, academic abuses of student-athletes at the high school and college level, illegal recruitment of student-athletes, use of performance enhancing drugs, agents, and gambling.  

**College**  
College of Business Administration  

**Department**  
DeVos Sport Business Management  

**Terms of Offering**  
Fall
SPB6606 - Diversity and Social Issues in Sport Business Management

Course Title
Diversity and Social Issues in Sport Business Management

Credits Hours
1.5

Lab/Studio/Field Work Hours
0

Prerequisites
- CBA master's foundation core and admission to the Master of Sport Business Management.

Course Description
The impact of diversity and social issues in sport as business imperative to achieve social responsiveness and financial performance in professional, collegiate, and Olympic sport.

College
College of Business Administration

Department
DeVos Sport Business Management

Terms of Offering
Occasional

SPB6706 - Sport Analytics

Course Title
Sport Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Completion of foundation core modules and admission to Master of Sport Business Management program. Analysis and application of statistics, operations research, and economic theory to current business challenges and opportunities within the sport business industry.

College
College of Business Administration

Department
DeVos Sport Business Management

Terms of Offering
Summer
SPB6715C - Professional Selling in Sport

Course Title
Professional Selling in Sport

Credits Hours
1.5

Lab/Studio/Field Work Hours
1

Prerequisites
CBA master’s program of study foundation core and admission to the Sport Business Management program.

Course Description
This course offers a comprehensive understanding of the sales process in the sport area. An overview of sales theory and its applications in sports are examined.

College
College of Business Administration

Department
DeVos Sport Business Management

Terms of Offering
Summer

SPB6716C - Strategic Sport Marketing

Course Title
Strategic Sport Marketing

Credits Hours
3

Lab/Studio/Field Work Hours
1

Prerequisites
CBA Masters Program of Study Foundation Core, and admission to the Sport Business Management program.

Course Description
This course offers a comprehensive understanding of the marketing of sport and marketing through sport. Theoretical and practical applications of sport marketing are examined.

College
College of Business Administration

Department
DeVos Sport Business Management

Terms of Offering
Occasional
SPB6725 - Leadership in Sport

**Course Title**
Leadership in Sport

**Credits Hours**
1.5

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CBA master’s program of study foundation core, and admission to the Sport Business Management program.

**Course Description**
Theory, research, and practice of leadership in sports organizations. Special attention is given to contemporary leadership issues with leaders of sports industry leading many of the discussions. Examines the multiple roles that leaders can help sports organizations play in serving the community, including both traditional and creative philanthropy and case studies of model community service programs of sports teams, leagues, and college athletics departments. Lab Required.

**College**
College of Business Administration

**Department**
DeVos Sport Business Management

**Terms of Offering**
Spring

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SPB6735 - The Global Environment of Sport

**Course Title**
The Global Environment of Sport

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CBA master’s program of study foundation core, and acceptance into the Sport Business Management program.

**Course Description**
With the continuing development of sport as a global enterprise comes the need to understand the global environment. The focus of this course is on the international business environment and how sport may best operate within that environment.

**College**
College of Business Administration

**Department**
DeVos Sport Business Management

**Terms of Offering**
Occasional
SPB6806 - Business of Sport Media

**Course Title**
Business of Sport Media

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- CBA master's program of study foundation core, and acceptance into the Sport Business Management program.

**Course Description**
History of how media has evolved from radio, network television and magazines into the multi-dimensional world of regional and national cable, the internet, the networks, huge rights fees and other new elements. The way sports media provides so much of the revenue for sports as an entertainment industry has made it the anchor for the sports industry.

**College**
College of Business Administration

**Department**
DeVos Sport Business Management

**Terms of Offering**
Odd Spring

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**SPC - Speech Communication**

**SPC5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media

**SPC5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Sciences

**Department**
Nicholson School of Communication and Media
SPC6340 - Teaching Communication
Course Title
Teaching Communication
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Graduate standing or C.I.
Course Description
Develop best practices for teaching public speaking, interpersonal, persuasion, small group, organizational, mass, and intercultural communication concepts and skills.
College
College of Sciences
Department
Nicholson School of Communication and Media
Terms of Offering
Occasional

SPC6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Nicholson School of Communication and Media

SPC6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Nicholson School of Communication and Media
SPC7685 - Rhetorical Criticism of Strategic Communication

Course Title
Rhetorical Criticism of Strategic Communication

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to Strategic Communication Ph.D. program or C.I.

Course Description
Process of rhetorical criticism of strategic communication, employing theory and practice to understand critical approaches to health and risk/crisis communication messages.

College
College of Sciences

Department
Nicholson School of Communication and Media

Terms of Offering
Fall

SPM - Sports Management

SPM6106 - Planning and Operating Facilities for Sports and Fitness Programs

Course Title
Planning and Operating Facilities for Sports and Fitness Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
This course will provide students with an understanding of the factors involved in planning, designing, equipping, and managing of sport facilities and event logistics.

College
College of Health Professions and Sciences

Department
School of Kinesiology and Physical Therapy - Kinesiology

Terms of Offering
Occasional
**SPM6158 - Leadership and Management in Sports and Fitness Programs**

**Course Title**
Leadership and Management in Sports and Fitness Programs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
C.I. Examines leadership, management fundamentals, professional knowledge, sports personnel and evaluation systems, leadership ethics, and communication skills required of leaders in the sports industry.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Occasional

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**SPM6726 - Legal Issues in Sports and Fitness Programs**

**Course Title**
Legal Issues in Sports and Fitness Programs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- C.I.

**Course Description**
This course examines major legal issues in sports leadership. Emphasis is on providing legally sound programs that reduce the risk of litigation.

**College**
College of Health Professions and Sciences

**Department**
School of Kinesiology and Physical Therapy - Kinesiology

**Terms of Offering**
Occasional

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**SPN - Spanish Language**
SPN5502 - Hispanic Culture of the United States

Course Title
Hispanic Culture of the United States

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
An analysis of the Hispanic culture of the United States, past and present.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional

SPN5505 - Spanish Peninsular Culture and Civilization

Course Title
Spanish Peninsular Culture and Civilization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
An analysis of the salient characteristics of Spanish culture and civilization.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional
SPN5506 - Spanish American Culture and Civilization

Course Title
Spanish American Culture and Civilization

Credits Hours
3

Prerequisites
- Graduate status or senior standing or C.I.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional

SPN5705 - Bilingualism in the US

Course Title
Bilingualism in the US

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
Explores issues of Spanish and English bilingualism in the US to understand sociolinguistic and sociopolitical issues in developing the Hispanic/Latinx experience.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional
SPN5825 - Spanish Dialectology

Course Title
Spanish Dialectology

Credits Hours
3

Prerequisites
- Graduate status or senior standing or C.I.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional

SPN5845 - History of the Spanish Language

Course Title
History of the Spanish Language

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
An overview of linguistic characteristics of Latin and its evolution into Spanish with historical development of phonetic, morphological, and syntactic properties.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional
SPN5848 - Romance Linguistics

**Course Title**
Romance Linguistics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Evolution of Classical Latin into other modern Romance languages from the perspective of (1) phonology, (2) morphology, (3) syntax and (4) lexis.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional

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SPN5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

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SPN5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures
**SPN6805 - Spanish Morphosyntax**  
**Course Title**  
Spanish Morphosyntax  
**Credits Hours**  
3  
**Lab/Studio/Field Work Hours**  
0  
**Prerequisites**  
- Graduate status or senior standing or C.I.  
**Course Description**  
Introduction to generative grammar, concentrating on X’ theory, phrase structure, theta-roles, binding theory, A’-movement, clitics and functional projections, applied to Spanish morphology and syntax.  
**College**  
College of Arts and Humanities  
**Department**  
Department of Modern Languages and Literatures  
**Terms of Offering**  
Odd Fall

**SPN6908 - Independent Study**  
**Course Title**  
Independent Study  
**Credits Hours**  
1 - 99  
**College**  
College of Arts and Humanities  
**Department**  
Department of Modern Languages and Literatures

**SPN6909 - Research Report**  
**Course Title**  
Research Report  
**Credits Hours**  
1 - 99  
**College**  
College of Arts and Humanities  
**Department**  
Department of Modern Languages and Literatures
SPN6918 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

SPN6940 - Teaching Methods for the Spanish Classroom
Course Title
Teaching Methods for the Spanish Classroom

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Practical training for educators and future educators who teach Spanish, including strategies, methodologies, and design approaches to promote a culturally diverse teaching and learning environment.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional

SPS - School Psychology
SPS5605 - Building and Improving Relationship and Emotional Intelligence

Course Title
Building and Improving Relationship and Emotional Intelligence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Students will learn to develop and improve relational and emotional intelligence and demonstrate an understanding of social emotional learning and how it enhances psychosocial wellbeing.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Odd Spring
Odd Summer

SPS5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

SPS5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology
SPS6125 - Preschool Psychoeducational Assessment

Course Title
Preschool Psychoeducational Assessment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and C.I.

Course Description
Analysis of test theory and practice in administration, scoring, and interpretation of instruments assessing cognitive, visual-motor ability and adaptive behavior with preschool children.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring

Current Fee Per Student
$25.00

SPS6175 - Cultural Diversity and Nonbiased Assessment

Course Title
Cultural Diversity and Nonbiased Assessment

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
An investigation of some of the major multicultural issues with emphasis on administration, scoring, and interpretation of instruments related to this population.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Occasional
SPS6191 - Individual Psychoeducational Diagnosis I

Course Title
Individual Psychoeducational Diagnosis I

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and C.I.

Corequisites
- SPS 6946L.

Course Description
Measurement of students' achievement and cognitive functioning. Administration, scoring, and interpretation of contemporary iterations of achievement and processing measures used in school psychology.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring

Current Fee Per Student
$20.00
SPS6192 - Individual Psychoeducational Diagnosis II

Course Title
Individual Psychoeducational Diagnosis II

Credits Hours
4

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate admission and C.I.

Corequisites
- SPS 6946L.

Course Description
Measurement of students' intellectual and cognitive functioning. Administration, scoring, and interpretation of contemporary iterations of IQ measures used in school psychology.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall

Current Fee Per Student
$70.00

SPS6194 - Assessment of Special Needs

Course Title
Assessment of Special Needs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SPS 6191, SPS 6192.

Course Description
Measurement of social, behavioral, and emotional functioning in children and adolescents.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Occasional

Current Fee Per Student
$25.00
**SPS6206 - Psychoeducational Interventions**

**Course Title**
Psychoeducational Interventions

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate admission and C.I.

**Course Description**
This course will enable school psychology students to link psychoeducational assessment results to systematic, evidence-based psychoeducational interventions to improve student functioning.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Spring

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**SPS6225 - Behavioral and Observational Analysis of Classroom Interactions in Schools**

**Course Title**
Behavioral and Observational Analysis of Classroom Interactions in Schools

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate admission.

**Course Description**
An intensive review of the principles and procedures of applied behavioral and observational analysis and assessment as they relate to changing behavior in schools.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Summer
SPS6402 - Applied Prevention and Intervention in Schools I

Course Title
Applied Prevention and Intervention in Schools I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Students will understand and apply behavioral prevention and intervention strategies in school and school-related settings.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall

SPS6403 - Applied Prevention and Intervention in Schools II

Course Title
Applied Prevention and Intervention in Schools II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing and C.I. Students will understand and apply academic prevention and intervention strategies in school and school-related settings.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring
Fall
SPS6601 - Introduction to Psychological Services in Schools

**Course Title**
Introduction to Psychological Services in Schools

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Graduate admission and C.I.

**Course Description**
A course presenting an overview of the philosophy, organization, programs, and operation of school psychological services.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Fall

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SPS6606 - Consultation in School Psychology

**Course Title**
Consultation in School Psychology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing and C.I.

**Course Description**
School Psychology theories and models of school consultation and clinical practice in the consultative role.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Summer
SPS6608 - Seminar in School Psychology

Course Title
Seminar in School Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Diagnostic, instructional, and prescriptive intervention techniques.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring

SPS6700 - Advanced Psychoeducation and Data-Based Decision Making

Course Title
Advanced Psychoeducation and Data-Based Decision Making

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and C.I.

Course Description
Principles of advanced psychoeducation for teaching, response to intervention, and data-based decision making in schools.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Fall
SPS6801 - Developmental Bases of Diverse Behaviors

Course Title
Developmental Bases of Diverse Behaviors

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate admission and C.I.

Course Description
The major social and educational policy concerns posed by developmental and cultural diversity in our society, with implications for teaching, learning and intervention.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Spring

SPS6815 - Legal and Ethical Issues in Professional School Counseling

Course Title
Legal and Ethical Issues in Professional School Counseling

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MHS 5005 and MHS 6400.

Course Description
Ethical and legal standards, their evolution, and application specific to professional school counseling will be presented in the form of case studies and ethical dilemmas.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Summer
SPS6909 - Research Report
Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

SPS6918 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

SPS6931 - Ethical and Legal Issues in School Psychological Services
Course Title
Ethical and Legal Issues in School Psychological Services

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Graduate standing and C.I.

Course Description
Introduction to ethical codes, professional standards, ethical-legal decision-making models and case studies impacting the delivery of school psychological services.

College
College of Community Innovation and Education

Department
Department of Counselor Education & School Psychology

Terms of Offering
Summer

2022-2023 Graduate Catalog
**SPS6946L - Practicum in School Psychology**

**Course Title**
Practicum in School Psychology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Graduate admission and C.I.

**Course Description**
Provides each student with an orientation to public schools and experiences which broadly sample the spectrum of psychoeducational assessment and interventions for practicing school psychologists.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

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**SPS6948 - School Psychology Internship**

**Course Title**
School Psychology Internship

**Credits Hours**
6

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Graduate standing and C.I.

**Course Description**
Supervised placement in school setting. Graded S/U. May be used in the degree program a maximum of 6 times.

**College**
College of Community Innovation and Education

**Department**
Department of Counselor Education & School Psychology

**Terms of Offering**
Every Semester

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**SPW - Spanish Literature (Writings)**
SPW5741 - Contemporary Spanish American Southern Cone Literature

Course Title
Contemporary Spanish American Southern Cone Literature

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Enrolled in Spanish M.A. Program or C.I.

Course Description
Regional as well as international literary cultures and disciplines in southern cone literature.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

SPW5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

SPW5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures
SPW6216 - Spanish Golden Age Prose and Poetry

**Course Title**
Spanish Golden Age Prose and Poetry

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission into Spanish M.A. program.

**Course Description**
Outstanding authors of the Spanish Renaissance and Spanish Baroque periods.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional

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SPW6217 - Spanish American Prose I

**Course Title**
Spanish American Prose I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
A study of the principal characteristics of Spanish American prose from Colonial times to post-independence.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional
SPW6218 - Spanish American Prose II

**Course Title**
Spanish American Prose II

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A study of the principal characteristics of Spanish American prose from modernism to the present.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional

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SPW6269 - Nineteenth Century Spanish Novel

**Course Title**
Nineteenth Century Spanish Novel

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A study of the major writers and literary movements of the 19th century with emphasis on the novels of Valera, Perez Galdos, Clarin and Pardo Bazan.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional
SPW6306 - Spanish American Drama

Course Title
Spanish American Drama

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission into Spanish M.A. program.

Course Description
Critically recognized Spanish American Theater texts and pre-Hispanic theatrical works.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional

SPW6315 - Early Modern Spanish Theatre

Course Title
Early Modern Spanish Theatre

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Intensive reading and analysis of selected theatrical works of Early Modern Spain.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional
SPW6356 - Spanish American Poetry

Course Title
Spanish American Poetry

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
A study of the different movements and their contribution to Spanish American poetry.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional

SPW6405 - Medieval Spanish Literature

Course Title
Medieval Spanish Literature

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
An intensive study of the major genres of the period. Emphasis on selected works by major writers.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional
SPW6485 - Contemporary Peninsular Literature

**Course Title**
Contemporary Peninsular Literature

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
A study of the major writers and literary movements from the Generation of 1927 to the present.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional

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SPW6725 - The Generation of 1898

**Course Title**
The Generation of 1898

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
An analysis of the major works of writers of the Generation of 1898 such as Ganivet, Unamuno, Baroja, Azorin, and Machado.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional
SPW6775 - Spanish Caribbean Prose
Course Title
Spanish Caribbean Prose
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
SPW 6919.
Course Description
Spanish Caribbean writers from Colonial times to the present.
College
College of Arts and Humanities
Department
Department of Modern Languages and Literatures
Terms of Offering
Fall

SPW6825 - Colloquium in Don Quixote & Cervantes in the 21st Century
Course Title
Colloquium in Don Quixote & Cervantes in the 21st Century
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
Graduate Standing or C.I.
Course Description
Intensive reading and analysis of the first modern novel Don Quixote and a selection of works by the author Miguel de Cervantes.
College
College of Arts and Humanities
Department
Department of Modern Languages and Literatures
Terms of Offering
Occasional
SPW6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

SPW6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

SPW6919 - Advanced Spanish Graduate Research

Course Title
Advanced Spanish Graduate Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Graduate student in Spanish MA program.

Course Description
Introduce historical and literary criticism at the graduate level. Teach methods for independent study and provide students with tools needed for research in Spanish linguistics, literary criticism and culture.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional
**SPW6971 - Thesis**

**Course Title**
Thesis

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

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**SSE - Social Studies Education**

**SSE5391 - Global Education: Theory and Practice**

**Course Title**
Global Education: Theory and Practice

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Examines the theoretical underpinnings of teaching about the world along with a variety of theoretically grounded teaching strategies for engaging students in global education.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring
SSE5776 - Democracy and Education  
**Course Title**  
Democracy and Education  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- Graduate standing or C.I.  

**Course Description**  
Explores the intersection of theory and practice with regard to promoting democratic life in schools. Will examine competing theories of democracy and education, investigate problem areas in schools related to democracy, and consider examples of practice.  

**College**  
College of Community Innovation and Education  

**Department**  
School of Teacher Education  

**Terms of Offering**  
Fall  

SSE5790 - Inquiry and Instructional Analysis in Social Science Education  
**Course Title**  
Inquiry and Instructional Analysis in Social Science Education  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- EDG 6415 or admission to Teacher Leadership MEd program or Initial Teacher Professional Preparation certificate.  

**Course Description**  
Study of instructional programs in social science education and related scholarship; development of an inquiry about the intersection of theory and practice in social science teaching.  

**College**  
College of Community Innovation and Education  

**Department**  
School of Teacher Education  

**Terms of Offering**  
Summer
SSE5917 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

SSE5937 - Special Topics
Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education

SSE6115 - Methods in Elementary School Social Science
Course Title
Methods in Elementary School Social Science

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Study of instructional programs in social sciences; objectives; materials; techniques; current research; and their application in elementary school setting.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall
SSE6348 - Foundations and Fundamentals of Teaching History in the K-12 Classroom

Course Title
Foundations and Fundamentals of Teaching History in the K-12 Classroom

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course examines empirical research and pedagogical approaches related to the teaching of history in the K-12 classroom environment.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Odd Fall

SSE6387 - Teaching with Film

Course Title
Teaching with Film

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Selected strategies, trends, methods, materials, and legal issues for effectively incorporating film in the K-12 classroom. Selected topics include media literacy, film research, and making movies appropriate to educational settings.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
SSE6388 - Digital History in the K-12 Classroom

**Course Title**
Digital History in the K-12 Classroom

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
This course looks at the concept of digital history and how this pedagogical approach can and should be applied in the K-12 social studies classroom environment.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Fall

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SSE6396 - Teaching with Primary Sources in the History Classroom

**Course Title**
Teaching with Primary Sources in the History Classroom

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
This course focuses on the creation, teaching, and evaluation of history-specific, content-informed and effective instructional practices that integrate primary sources.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education
SSE6636 - Contemporary Social Science Education

Course Title
Contemporary Social Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Basic Teacher Certificate of C.I.

Course Description
A survey of recent developments and contemporary programs in all areas of the social sciences.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Occasional

SSE6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

SSE6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education
SSE6938 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Community Innovation and Education

Department
School of Teacher Education

SSE7700 - Critical Issues in Social Studies Teacher Education

Course Title
Critical Issues in Social Studies Teacher Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing.

Course Description
An examination of the relevant literature surrounding the research and practice of social studies teacher education. The course examines the major themes, ideas, perspectives, and programs.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Even Fall
SSE7740 - History of Social Studies Education

**Course Title**
History of Social Studies Education

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Doctoral standing.

**Course Description**
Major themes, ideas, and personalities in the historical development of curriculum and instruction in social studies in the United States since 1880.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Odd Fall

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SSE7796 - Research in Social Science Education Seminar

**Course Title**
Research in Social Science Education Seminar

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Doctoral standing.

**Course Description**
Analysis and evaluation of scholarly research in social studies education.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Odd Spring
SSE7797 - Content and Program Analysis in Social Science Education

Course Title
Content and Program Analysis in Social Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing.

Course Description
Analysis of social science instructional programs including development of content, materials, processes, and assessment procedures in light of current research and practice.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Even Fall

SSE7947 - Internship in Social Science Education

Course Title
Internship in Social Science Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing.

Course Description
Student teaching in a classroom under supervision of a certified classroom teacher. May be used in the degree program a maximum of 3 times.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Every Semester

STA - Statistics
STA5104 - Advanced Computer Processing of Statistical Data

**Course Title**
Advanced Computer Processing of Statistical Data

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 4163 and knowledge of a programming language, graduate status or senior standing, or C.I.

**Course Description**
Use of SAS and other statistical software packages; data manipulation; graphical data presentation; data analysis; creating analytical reports.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Fall

STA5176 - Introduction to Biostatistics

**Course Title**
Introduction to Biostatistics

**Credits Hours**
0

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 4163 or STA 4173, graduate status or senior standing, or C.I.

**Course Description**
Repeated measures design, logistic regression, survival analysis, proportional hazards model. fundamentals in study design, contingency table analysis, non-parametric methods, sample size, power analysis.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Occasional
STA5205 - Experimental Design

**Course Title**
Experimental Design

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 4164, STA 5206 or ESI 5219, and graduate status or senior standing, or C.I.

**Course Description**
Construction and analysis of designs for experimental investigations. Blocking, randomization, replication; Incomplete block designs; factorial and fractional designs; design resolution.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Spring

STA5206 - Statistical Analysis

**Course Title**
Statistical Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 2023; not open to students who have completed STA 4164. Graduate status or senior standing or C.I.

**Course Description**
Data analysis; statistical models; estimation; tests or hypotheses; analysis of variance, covariance, and multiple comparisons; regression and nonparametric methods.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Fall
STA5505 - Categorical Data Methods

Course Title
Categorical Data Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 4163 or STA 5206, and graduate status or senior standing or C.I.

Course Description
Considers discrete probability distributions, contingency tables, measures of association, and advanced methods, including loglinear modeling, logistic regression, McNemar's Test, Mantel-Haenszel test.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional

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STA5703 - Data Mining Methodology I

Course Title
Data Mining Methodology I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 5104 and STA 5206, graduate status or senior standing, or C.I.

Course Description
Supervised data mining tools including boosting trees, SV machine, regression, and neural network will be covered. The Enterprise Miner (R or Python) will be used.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Fall
STA5735 - Fundamental Data Analytical Methodology with Business Applications
Course Title
Fundamental Data Analytical Methodology with Business Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 5104 An Analytical Programming Language PYTHON or R, or C.I.

Course Description
Introduce methods to prepare structured and unstructured data that will then be used with modeling techniques, for the purpose of uncovering hidden knowledge and information in the data.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Fall

STA5736 - Advanced Data Analytical Methodology with Business Applications
Course Title
Advanced Data Analytical Methodology with Business Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing and A Programming Language such as PYTHON and R, or C.I.

Course Description
Learn to apply advanced analytical techniques to build models of real-world data collected from a variety of sources. These models are used to uncover data patterns and behaviors that can be used to support decision-making and to predict new business opportunities.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Spring
STA5737 - Fundamental and Advanced Data Analytical Methodology with Business Applications

Course Title
Fundamental and Advanced Data Analytical Methodology with Business Applications

Credits Hours
6

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 5104 or C.I.

Course Description
The applications of data analytics for business. Emphasis is made on students being able to use the techniques in a variety of situations.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Spring

STA5738 - Data and Analytical Methodology for Metropolitan and Regional Areas

Course Title
Data and Analytical Methodology for Metropolitan and Regional Areas

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- COP 4020, or STA 4102, or C.I.

Course Description
Examining tools and methodologies for analyzing urban data collections. This information can assist in the emergence of smart cities. Practice and theory will be covered.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Fall
STA5825 - Stochastic Processes and Applied Probability Theory

Course Title
Stochastic Processes and Applied Probability Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 4321, and graduate status or senior standing or C.I.

Course Description
Conditional probability and conditional expectations, sequences of random variables, branching processes, random walks, Markov chains, recurrent events, renewal theory, queueing theory, and simple stochastic processes.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Spring

STA5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Statistics

STA5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Statistics
STA6106 - Statistical Computing I

Course Title
Statistical Computing I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 6327, or CI.

Course Description
Introduction to programming with R and Python, loops, functions, control flow in R and Python, Numpy, Scipy, Matplotlib, Pandas, Monte Carlo integration, random variable generation, Newton-Raphson method, IRWLS, steepest descent, golden section search

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Fall

STA6107 - Statistical Computing II

Course Title
Statistical Computing II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 6106 (or Knowledge of programming with R and Python) and STA 6329 (or knowledge of Matrix Algebra).

Course Description
Monte Carlo for inferential statistics, bootstrap, Jackknife, cross-validation, Karush-Kuhn-Tucker (KKT) optimality conditions, Strong duality, SVM, least squares SVM, MCMC, Metropolis Hastings algorithm, Gibbs sampling, Ridge regression (Tikhonov regularization), lasso, EM algorithm, kernel methods, QR decomposition, updating methods.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Spring
STA6136 - Probability and Statistics for Business Analytics

Course Title
Probability and Statistics for Business Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the MSM Business Analytics program.

Course Description
Introduction to the main tools of probability and statistics used in business analytics.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional

STA6223 - Conventional Survey Methods

Course Title
Conventional Survey Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 5206 and graduate student standing, or C.I.

Course Description
Design of conventional finite population sample surveys; Stratified, systematic, and multistage cluster sampling designs, ratio and regression estimators, non-response bias.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional
STA6224 - Bayesian Survey Methods

**Course Title**
Bayesian Survey Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 5206, STA 6222, or C.I.

**Course Description**
Bayesian methods for survey design and analysis of survey data.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Occasional

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STA6226 - Sampling Theory and Applications

**Course Title**
Sampling Theory and Applications

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 4321.

**Course Description**
Different techniques of sampling, sampling for proportions, choosing sample size, ratio estimates, effects of sampling and non-sampling errors.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Occasional
STA6236 - Regression Analysis

Course Title
Regression Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAS 3105 and STA 4164.

Course Description
General linear model, model aptness and remedial measures, regression through the origin, independent and dependent indicator variables, multicollinearity, outliers, biased regression.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Fall

STA6237 - Nonlinear Regression

Course Title
Nonlinear Regression

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 6236 (or knowledge of linear regression).

Course Description

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional
STA6238 - Logistic Regression

**Course Title**
Logistic Regression

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 6236.

**Course Description**
Studies of logistic regression models: estimation, interpretation, model building strategies and assessments, and polytomous regression, SAS programming in the application of logistic regression modeling.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Spring

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STA6246 - Linear Models

**Course Title**
Linear Models

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 6329, STA 4164, and STA 4322.

**Course Description**
Theoretical development of full rank linear statistical models, least squares and maximum likelihood estimation, interval estimation, hypothesis testing, and introduction to less than full rank models.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Spring

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2022-2023 Graduate Catalog
STA6326 - Theoretical Statistics I

Course Title
Theoretical Statistics I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MAC 2313.

Course Description
Distribution of random variables, conditional probability and independence, some special distributions, distributions of functions of random variables, limiting distributions.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Fall

STA6327 - Theoretical Statistics II

Course Title
Theoretical Statistics II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 6326.

Course Description
Point estimation, sufficient statistics, completeness, exponential family, maximum likelihood estimators, statistical hypotheses, best tests, likelihood ratio tests, noncentral distributions.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Spring
STA6329 - Statistical Applications of Matrix Algebra

**Course Title**
Statistical Applications of Matrix Algebra

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAC 2313 and STA 4164 or STA 5206.

**Course Description**
Basic theory of determinants, inverses, generalized inverses, eigenvalues and eigenvectors, partitioned matrices. Diagonalization and decomposition theorems, least squares and statistical applications.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Fall

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STA6346 - Advanced Statistical Inference I

**Course Title**
Advanced Statistical Inference I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- STA 6327.

**Course Description**
Decision rules, risk functions, utility theory, the loss function, prior information and subjective probability, Bayesian analysis.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Occasional
STA6347 - Advanced Statistical Inference II

Course Title
Advanced Statistical Inference II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 6346, or C.I..

Course Description
Minimax analysis, invariance, admissibility, maximal invariants, sequential analysis.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional

STA6507 - Nonparametric Statistics

Course Title
Nonparametric Statistics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 4321.

Course Description
Theory and methods for one and two sample problems; one and two way layouts; independence problems; regression problems.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional
STA6662 - Statistical Methods for Industrial Practice

Course Title
Statistical Methods for Industrial Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 4164 or C.I.

Course Description
Variance components, PCRs, autocorrelation structures, charting, EVOP, design strategies, calibration, standards, and associated awards.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional

STA6704 - Data Mining Methodology II

Course Title
Data Mining Methodology II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 5703.

Course Description
Unsupervised learning methods such as cluster analysis, association analysis and newly developed tools will be covered. The Enterprise Miner (R or Python) will be used.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Spring
STA6705 - Data Mining Methodology III

**Course Title**
Data Mining Methodology III

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing and STA 5703, or C.I.

**Course Description**
Many newly developed data mining methods that are not covered in other courses. This course is designed to cover these newly developed methods.

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Occasional

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STA6707 - Multivariate Statistical Methods

**Course Title**
Multivariate Statistical Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- MAS 3105, STA 4163, and STA 4322.

**Course Description**

**College**
College of Sciences

**Department**
Department of Statistics

**Terms of Offering**
Occasional
STA6709 - Spatial Statistics

Course Title
Spatial Statistics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 4163 or STA 4164, or C.I.

Course Description
Statistical models and methods for analyzing data that are collected at different spatial locations and/or at different times, spatial or spatio-temporal data.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Even Spring

STA6714 - Data Preparation

Course Title
Data Preparation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 5104.

Course Description
Variable selections, missing value imputation, text, time series, and new data preparation method will be covered. The Enterprise Miner (R or Python) will be used.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Spring
STA6857 - Applied Time Series Analysis

Course Title
Applied Time Series Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
STA 4322, MAS 3105.

Course Description

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional

STA6908 - Directed Independent Studies

Course Title
Directed Independent Studies

Credits Hours
1 - 99

Lab/Studio/Field Work Hours
0

Prerequisites
C.I.

Course Description
Directed Independent Studies

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Every Semester
STA6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Statistics

STA6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Statistics

STA6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Statistics

STA6949 - Cooperative Education in Statistics
Course Title
Cooperative Education in Statistics
Credits Hours
0 - 99
College
College of Sciences
Department
Department of Statistics
STA6971 - Thesis

Course Title
Thesis

Credits Hours
1-99

Lab/Studio/Field Work Hours
0

Course Description
Thesis

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Every Semester

STA7239 - Dimension Reduction in Regression

Course Title
Dimension Reduction in Regression

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• STA 6236 or STA 5206.

Course Description
Reducing the number of random variables/features in regression, feature selection and extraction, kernel principal component analysis, locally linear embedding.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional
STA7348 - Bayesian Modeling and Computation

Course Title
Bayesian Modeling and Computation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 5703 and STA 6704.

Course Description
Bayesian model, prior specification, basics of decision theory, Markov chain Monte Carlo, Bayes factor, empirical Bayes, Bayesian linear regression and generalized linear models, hierarchical models.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional

STA7719 - Survival Analysis

Course Title
Survival Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 6326 and STA 6327, or C.I.

Course Description
Censoring, hazard and survival functions, Kaplan-Meier estimator, lifetime table, partial likelihood, Cox proportional hazards model, accelerated failure time model.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Even Spring
STA7722 - Statistical Learning Theory

Course Title
Statistical Learning Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 6329, STA 6327, and STA 6106.

Course Description
Discuss when statistical learning algorithms work and why by focusing on developing a theoretical understanding of the statistical properties of learning algorithms.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Even Fall

STA7734 - Statistical Asymptotic Theory in Big Data

Course Title
Statistical Asymptotic Theory in Big Data

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- STA 6327 and STA 6704.

Course Description
Asymptotic theory of statistics, with an array of applications to motivate as well as demonstrate its utility in addressing problems in Big Data research.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Even Fall

2022-2023 Graduate Catalog
STA7920 - Statistical Colloquium

Course Title
Statistical Colloquium

Credits Hours
0

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the PhD program in the Department of Statistics and Data Science, or C.I.

Course Description
Introduces students to new variety of topics in statistics and big data analytics.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Spring
Fall

STA7935 - Current Topics in Big Data Analytics

Course Title
Current Topics in Big Data Analytics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
STA 5703 and STA 6704. Discussion of new and current techniques developed to solve big data problems that are not covered in current big data analytic courses.

College
College of Sciences

Department
Department of Statistics

Terms of Offering
Occasional

SYA - Sociology Analysis

2022-2023 Graduate Catalog
SYA5625 - ProSeminar

**Course Title**
ProSeminar

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Survey of conceptual issues, methodological concerns, and findings in substantive sociological areas that currently dominate scholarly inquiry, including such topics as crime, deviance, community, alcoholism, education.

**College**
College of Sciences

**Department**
Department of Sociology

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SYA5917 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Sociology

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SYA5941 - Participatory Geographic Information Systems in Belize

**Course Title**
Participatory Geographic Information Systems in Belize

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
The conceptual frameworks, methodologies, and applications of Participatory Geographic Information Systems and related geospatial technologies for use in the field.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Summer
SYA6126 - Social Theory

Course Title: Social Theory

Credits Hours: 3

Lab/Studio/Field Work Hours: 0

Prerequisites: Regular graduate standing or C.I.

Course Description: The study of selected sociological theories in terms of relevance, usefulness, and adequacy for applied sociology.

College: College of Sciences

Department: Department of Sociology

Terms of Offering: Spring

SYA6128 - Theoretical Criminology

Course Title: Theoretical Criminology

Credits Hours: 3

Lab/Studio/Field Work Hours: 0

Prerequisites: Graduate standing or C.I.

Course Description: The study of selected sociological theories to develop student understanding of each theory and its application to the analysis of crime and criminal events.

College: College of Sciences

Department: Department of Sociology

Terms of Offering: Even Spring
SYA6305 - Quantitative Social Research Methods

**Course Title**
Quantitative Social Research Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Regular graduate standing or C.I.

**Course Description**
Study of the purpose of research, the logic of scientific inquiry, and quantitative research techniques in the field of sociology.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Spring

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SYA6315 - Qualitative Research Methods

**Course Title**
Qualitative Research Methods

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing.

**Course Description**
Examination of qualitative research methods, how and when they are employed, and processes of analyzing field observation, oral histories, and in depth interviews.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional
SYA6356 - Geographic Information Systems in Society

**Course Title**
Geographic Information Systems in Society

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. The art and science of GIS and related geospatial technologies across the social and environmental sciences.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Spring

SYA6358 - Advanced Spatial Sociology: Geographic Information Systems with Communities

**Course Title**
Advanced Spatial Sociology: Geographic Information Systems with Communities

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
Theoretical, conceptual, methodological, and practical approaches to spatial sociology/community GIS.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Even Fall
SYA6359 - GIS and Health in Society

Course Title
GIS and Health in Society

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Theories, methodologies, and applications of GIS in health and sociological studies.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Odd Spring

SYA6425 - Design and Conduct of Social Surveys

Course Title
Design and Conduct of Social Surveys

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Advanced social survey research methods, including sampling theory and applications, measurement, data collection modalities, questionnaire construction, and data reduction strategies.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYA6452 - GIS Applications

Course Title
GIS Applications

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
SYA 6455 or C.I. The concepts and implementations of the geographic information analysis and integrate GIS with real-world applications.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Spring

SYA6455 - Research Analysis

Course Title
Research Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- SYA 6305, undergraduate statistics, regular graduate standing, or C.I.

Course Description
Data management, selection of statistics, data analysis, evaluation, data presentation, and computer skills.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Spring
SYA6458 - Advanced Topics in Geographic Information Systems in Society

**Course Title**
Advanced Topics in Geographic Information Systems in Society

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Focuses on advanced special topics in Geographic Information Systems related to the technology's use in and impact on society.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Odd Spring

SYA6657 - Program Design and Evaluation

**Course Title**
Program Design and Evaluation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- SYA 6305 and SYA 6455 or C.I.

**Course Description**
Techniques of system and policy assessment, evaluation, and design. Determination of consequences and implications of policies and practices in applied settings.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Spring
SYA6660 - Seminar in Teaching Sociology

Course Title
Seminar in Teaching Sociology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Pedagogical theories and Practices for sociologists.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYA6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology

SYA6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology
SYA6933 - Topics in Sociological Theory

**Course Title**
Topics in Sociological Theory

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. In-depth examination of a particular area of sociological theory, emphasizing major developments, current uses, implications for research, and overall impact on the field.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional

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SYA6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Sciences

**Department**
Department of Sociology
SYA7019 - Advanced Sociological Theory

Course Title
Advanced Sociological Theory

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SYA 6126 and doctoral standing or C.I.

Course Description
Research seminar in sociological theory.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Fall

SYA7309 - Advanced Sociological Research Methods

Course Title
Advanced Sociological Research Methods

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SYA 6305 and doctoral standing or C.I.

Course Description
Applied research, incorporating aspects of project design, budgeting, grants and contracts, methodological techniques, report writing, and ethical issues.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Fall
SYA7318 - Advanced Qualitative Data Analysis

Course Title
Advanced Qualitative Data Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SYA 6315 and Graduate Standing or CI.

Course Description
Major theories and techniques that motivate qualitative research in sociology with emphasis on ways in which qualitative research is designed, executed, and written.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Fall

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SYA7407 - Advanced Quantitative Data Analysis

Course Title
Advanced Quantitative Data Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SYA 6305 and SYA 6455 and doctoral standing or C.I.

Course Description
Techniques for data management and analysis commonly used to conduct quantitative data analysis in sociology.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Fall
SYA7457 - Topics in Data Analysis

Course Title
Topics in Data Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- SYA 7407 and doctoral standing or C.I.

Course Description
Application of multivariate statistical techniques.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYA7625 - Advanced Proseminar

Course Title
Advanced Proseminar

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - SYA5625 - ProSeminar (3)

Course Description
Current and future trends in professional development, dissemination, scientific communication and public scholarship for sociologists.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Fall
SYA7658 - Social Policy and Research Analysis

Course Title
Social Policy and Research Analysis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Doctoral standing or C.I.

Course Description
Sociological perspectives on creation, development, implementation, and consequences of social policy.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Fall

SYA7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology
SYA7979 - Advanced Readings in Sociology

**Course Title**
Advanced Readings in Sociology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing, or CI.

**Course Description**
Advanced readings course synthesizing knowledge related to program learning objectives in preparation for the doctoral qualifying exam and thematic research area interests.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Fall
Spring

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SYD - Sociology of Demography

**SYDS917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Sociology

**SYDS937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Sciences

**Department**
Department of Sociology
SYD6363 - Social Inequalities and Reproductive Health

Course Title
Social Inequalities and Reproductive Health

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Sociological investigation of inequalities in reproductive health. Focuses on how inequalities (race, class, gender, sexuality), institutions and ideologies shape reproductive options, experiences and outcomes.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYD6405 - Space, Place, and Inequalities: Sociological Perspectives of Space and Place

Course Title
Space, Place, and Inequalities: Sociological Perspectives of Space and Place

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examination of multiple and emerging sociological perspectives of space and place with a focus on inequalities.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Even Spring
SYD6417 - Contemporary Urban Sociology

Course Title
Contemporary Urban Sociology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Graduate standing or C.I.

Course Description
Contemporary issues in urban sociology.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYD6428 - Poverty, Homelessness and the Cities

Course Title
Poverty, Homelessness and the Cities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
• Graduate standing in sociology or related discipline or C.I.

Course Description
Poverty, homelessness and their impact on American cities in the 21st century.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYD6516 - Environment, Health, and Society

Course Title
Environment, Health, and Society

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Approaches, methods, empirical facts, and exemplary studies related to the socio-environmental context of health and illness with emphasis on social inequality.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Even Fall

SYD6538 - Topics in Social Inequalities

Course Title
Topics in Social Inequalities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examines cutting-edge research in an area of social inequalities, with an emphasis on how social inequalities are created and maintained in contemporary society. May be used in the degree program a maximum of 3 times.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYD6705 - Seminar in Race and Ethnicity

**Course Title**
Seminar in Race and Ethnicity

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in Sociology or C.I.

**Course Description**
A sociological examination of the experiences of racial and ethnic groups in the United States.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional

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SYD6795 - Class, Race, and Gender in American Society

**Course Title**
Class, Race, and Gender in American Society

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Applies a sociological perspective to analyze how individuals, groups and institutions are shaped by privilege and disadvantaged based on gender, race and class.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Odd Spring
SYD6809 - Seminar in Gender Issues

Course Title
Seminar in Gender Issues

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing in Sociology or C.I.

Course Description
Using theoretical and empirical studies, this course will provide a sociological examination of gender issues that influence relationships between women and men.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYD6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology

SYD6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology
SYD6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Sociology

SYD7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Sociology

SYG - Sociology, General

SYG7980 - Doctoral Dissertation
Course Title
Doctoral Dissertation
Credits Hours
1 - 99
Lab/Studio/Field Work Hours
Jan-99
Prerequisites
- Candidacy status.
Course Description
Doctoral dissertation. May be repeated for credit.
College
College of Sciences
Department
Department of Sociology
Terms of Offering
Every Semester

SYO - Sociology--Social Organizations
SYO5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology

SYO5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Sociology

SYO6175 - Social Research in the Family

Course Title
Social Research in the Family

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
To offer an overview of current research in the family. The family will be viewed from the institutional level, individual social system, and individual level.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYO6256 - Inequality and Education
Course Title
Inequality and Education

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Use sociological theories to explore the role of the educational system in reproducing inequality with regard to race, class, gender, language, health and disability.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYO6404 - Food Insecurity and Health
Course Title
Food Insecurity and Health

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing, or C.I.

Course Description
Seminar examining food insecurity and its impact on health outcomes using a sociological theoretical framework.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYO6405 - Sociology of Health and Illness

**Course Title**
Sociology of Health and Illness

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Sociological models of health and illness.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional

SYO6406 - Medical Sociology

**Course Title**
Medical Sociology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Graduate standing or C.I. Theory and research in medical sociology; systematic overview of salient sociological issues in health and medicine.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional
SYO6409 - Social Inequalities in Health
Course Title
Social Inequalities in Health

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing, or C.I.

Course Description
Sociological approach to understanding how social inequalities leads to inequalities in health outcomes.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYO6515 - Issues in Social Disorganization
Course Title
Issues in Social Disorganization

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Sociological study and analysis of the manner in which American society is organized and the consequences of the way in which its cultural premises are arranged.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYO6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Sociology

SYO6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Sociology

SYO6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Sciences
Department
Department of Sociology

SYO7919 - Research
Course Title
Research
Credits Hours
1 - 99
College
College of Sciences
Department
Department of Sociology

SYP - Sociology-Social Processes
SYP5005 - Sociological Social Psychology

Course Title
Sociological Social Psychology

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
An exploration of sociological social psychological theories and their application in understanding the effects of society and groups on the individual.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYP5566 - Seminar on Domestic Violence: Theory, Research and Social Policy

Course Title
Seminar on Domestic Violence: Theory, Research and Social Policy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate status or senior standing or C.I.

Course Description
A sociological examination and evaluation of theories, empirical research and social policy related to the study of domestic violence.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYP5917 - Directed Research  
Course Title  
Directed Research  
Credits Hours  
1 - 99  
College  
College of Sciences  
Department  
Department of Sociology

SYP5937 - Special Topics  
Course Title  
Special Topics  
Credits Hours  
3  
College  
College of Sciences  
Department  
Department of Sociology

SYP6515 - Deviant Behavior Issues  
Course Title  
Deviant Behavior Issues  
Credits Hours  
3  
Lab/Studio/Field Work Hours  
0  
Prerequisites  
- Graduate standing or C.I.  
Course Description  
An examination and evaluation of the forms of social deviance, and the organizations designed to respond to them.  
College  
College of Sciences  
Department  
Department of Sociology  
Terms of Offering  
Occasional
SYP6517 - Topics in Crime and Deviance

Course Title
Topics in Crime and Deviance

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Seminar involving an in-depth examination of current topics relating to crime and deviance.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYP6518 - Guns, Crime and Violence

Course Title
Guns, Crime and Violence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
Graduate standing in sociology or related discipline or C.I.

Course Description
Role of firearms in America: Guns in history; civilian gun ownership; guns, crime and criminals; and guns and public policy.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYP6522 - Sociological Perspectives on Victims

**Course Title**
Sociological Perspectives on Victims

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
An analytical examination of crime victims and victimology from a sociological perspective.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional

SYP6524 - Social Organization of Homicide

**Course Title**
Social Organization of Homicide

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
An in-depth analysis of the social and cultural context of homicide and of intervention strategies. The primary emphasis is on the contemporary U.S.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional
SYP6525 - Sexual Violence in Society

**Course Title**
Sexual Violence in Society

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or CI.

**Course Description**
Social causes and consequences of sexual violence; methods in sociological research on sexual violence; social policy and programs to prevent and intervene in sexual violence.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Even Spring

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SYP6546 - Crime, Law, Inequality

**Course Title**
Crime, Law, Inequality

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing.

**Course Description**
The consequences of social stratification on criminality and treatment/protection by the legal system. This course examines literature concerning inequality and the sociology of law.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional
SYP6555 - Sociology of Alcohol and Drugs

**Course Title**
Sociology of Alcohol and Drugs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing in sociology or related fields or C.I.

**Course Description**
Themes and research literatures in the sociology of alcohol and drug use, misuse and abuse and the social policy response.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional

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SYP6560 - Topics in Domestic Violence

**Course Title**
Topics in Domestic Violence

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Seminar involving an in-depth examination of current topics relating to domestic violence.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional
SYP6561 - Child Abuse in Society

Course Title
Child Abuse in Society

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
A sociological examination of literature and current research pertaining to child abuse and neglect.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional

SYP6563 - Reactions to Domestic Violence

Course Title
Reactions to Domestic Violence

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
The reactions by communities, victims, and professionals to domestic violence. Topics include examination of policies on domestic violence, and issues relating to race, class, and gender.

College
College of Sciences

Department
Department of Sociology

Terms of Offering
Occasional
SYP6735 - Sociology of Health and Aging

**Course Title**
Sociology of Health and Aging

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Research-oriented seminar covering historical, present and future sociocultural perspectives of aging.

**College**
College of Sciences

**Department**
Department of Sociology

**Terms of Offering**
Occasional

SYP6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Sociology

SYP6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Sciences

**Department**
Department of Sociology
SYP6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Sociology

SYP7919 - Research

Course Title
Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology

SYP7939 - Special Topics

Course Title
Special Topics

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology

SYP7980 - Dissertation

Course Title
Dissertation

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Sociology

TAX - Taxation
**TAX5015 - Advanced Tax Topics**

**Course Title**
Advanced Tax Topics

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the Master of Accounting, completion of all business and accounting foundation core courses, and a "C" (2.0) or better in TAX 4001.

**Course Description**
Advanced tax issues affecting business entities and their owners, with a primary focus on corporations and partnerships.

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

**Terms of Offering**
Fall
Spring

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**TAX5917 - Directed Research**

**Course Title**
Directed Research

**Credits Hours**
1 - 99

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting

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**TAX5937 - Special Topics**

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Business Administration

**Department**
Kenneth G Dixon School of Accounting
TAX6065 - Tax Research

Course Title
Tax Research

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master of Accounting, completion of all business and accounting foundation core courses, and a "C" (2.0) or better in TAX 5015.

Course Description
Legal and ethical guidelines governing tax practice.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
- Spring
- Fall

TAX6317 - Taxation of Flow-thru Entities

Course Title
Taxation of Flow-thru Entities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to the Master of Accounting, completion of all business and accounting foundation core courses, and a "C" (2.0) or better in TAX 5015.

Course Description
Federal taxation relating to operations, formation, distribution, retirements and liquidations of flow-thru entities such as partnerships, limited liability companies, and S corporations.

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

Terms of Offering
- Occasional
TAX6527 - Multi-jurisdictional Taxation
Course Title
Multi-jurisdictional Taxation
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the Master of Accounting, completion of all business and accounting foundation core courses, and a "C" (2.0) or better in TAX 4001.
Course Description
Study of tax issues involved when business enterprises operate in multiple taxing jurisdictions. Principles of both multi-state and international income taxation.
College
College of Business Administration
Department
Kenneth G Dixon School of Accounting
Terms of Offering
Occasional

TAX6845 - Tax Planning and Consulting
Course Title
Tax Planning and Consulting
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to the Master of Accounting, completion of all business and accounting foundation core courses, and a "C" (2.0) or better in TAX 5015.
Course Description
Individual and business tax planning.
College
College of Business Administration
Department
Kenneth G Dixon School of Accounting
Terms of Offering
Occasional
TAX6909 - Research Report
Course Title
Research Report

Credits Hours
1 - 99

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

TAX6918 - Directed Research
Course Title
Directed Research

Credits Hours
1 - 99

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

TAX6938 - Special Topics
Course Title
Special Topics

Credits Hours
3

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting

TAX6971 - Thesis
Course Title
Thesis

Credits Hours
1 - 99

College
College of Business Administration

Department
Kenneth G Dixon School of Accounting
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits Hours</th>
<th>College</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAX7919 - Research</td>
<td>1 - 99</td>
<td>College of Business Administration</td>
<td>Kenneth G Dixon School of Accounting</td>
</tr>
<tr>
<td>TAX7939 - Special Topics</td>
<td>3</td>
<td>College of Business Administration</td>
<td>Kenneth G Dixon School of Accounting</td>
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</tbody>
</table>

**THE - Theatre**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits Hours</th>
<th>Laboratory/Studio/Field Work Hours</th>
<th>Prerequisites</th>
<th>Course Description</th>
<th>College</th>
<th>Department</th>
<th>Terms of Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE5205 - American Theatre</td>
<td>3</td>
<td>0</td>
<td>THE 5910, and MA or MFA Theatre Graduate.</td>
<td>Examination of performance and historical perspectives of American drama.</td>
<td>College of Arts and Humanities</td>
<td>School of Performing Arts</td>
<td>Spring</td>
</tr>
</tbody>
</table>
THE5215 - Global Theatre

Course Title
Global Theatre

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Admission into the MFA/MA Theatre programs or C.I.

Course Description

Theatrical arts and traditions of various countries with an emphasis on non-western countries.

College

College of Arts and Humanities

Department

School of Performing Arts

Terms of Offering

Occasional

THE5237 - Cultural Diversity in Theatre

Course Title
Cultural Diversity in Theatre

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Admission into the MFA/MA Theatre programs or C.I.

Course Description

Commonality of human experience among various groups through the study of dramatic literature.

College

College of Arts and Humanities

Department

School of Performing Arts

Terms of Offering

Occasional
THE5248 - Musical Theatre in History

Course Title
Musical Theatre in History

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Admission to MFA Musical Theatre Program.

Course Description
A chronological study of musical theatre from early Viennese operetta to the musicals of the modern age. Course will emphasize the work of composers, librettists, and lyricists as well as representative masterworks of a variety of genre. Emphasis will be placed upon historical trends and theatrical viability.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Fall

THE5288 - Period Costumes, Architecture and Decor I

Course Title
Period Costumes, Architecture and Decor I

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites

- Admission into Theatre MFA Design track.

Course Description
Costumes, architecture and decor from antiquity to the renaissance.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Fall
THE5289 - Period Costumes, Architecture and Decor II

Course Title
Period Costumes, Architecture and Decor II

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- THE 5288.

Course Description
Costumes, architecture and decor from the Renaissance to present.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

THE5307 - Contemporary Theatre Practice

Course Title
Contemporary Theatre Practice

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- THE 3311, THE 3312, THE 3313, Restricted to Theatre majors or departmental consent.

Course Description
Contemporary trends in plays and theatre production in the late 20th century.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
THE5385 - Dramatic Literature for Children

**Course Title**
Dramatic Literature for Children

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MFA graduate program or C.I.

**Course Description**
An in-depth study of the growth and development of dramatic literature for children.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Even Fall

THE5425 - Women in Theatre

**Course Title**
Women in Theatre

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission into the MFA/MA Theatre programs or C.I.

**Course Description**
An overview of women's contributions to theatre.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Occasional
THE5545 - Theatre for Social Change

**Course Title**
Theatre for Social Change

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission into the MFA/MA Theatre programs or C.I.

**Course Description**
Theatre activists' impact on theatrical art forms.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Occasional

THE5677 - Health and Wellness for the Performing Artist

**Course Title**
Health and Wellness for the Performing Artist

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Theatre graduate programs or C.I.

**Course Description**
Focus on performing artists' health and related topics.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Spring
THE5910 - Research Methods in Theatre

Course Title
Research Methods in Theatre

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- MFA and MA in Theatre.

Course Description
Practice knowledge, skills and techniques needed by students to conduct research to include organization, styles, footnotes, and bibliographic forms.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Fall

THE5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

THE5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts
THE5945L - Theatre Practicum I

Course Title
Theatre Practicum I

Credits Hours
1

Lab/Studio/Field Work Hours
20

Prerequisites
• Graduate status or C.I.

Course Description
A laboratory course designed to develop students' practical working knowledge in Theatre.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional

THE5946L - Theatre Practicum II

Course Title
Theatre Practicum II

Credits Hours
1

Lab/Studio/Field Work Hours
20

Prerequisites
• Admission into the graduate program, Theatre Practicum I.

Course Description
A laboratory course designed to develop students' practical working knowledge in theatre.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional
THE5949 - Cooperative Education in Theatre
Course Title
Cooperative Education in Theatre
Credits Hours
0 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

THE5957 - Study Abroad
Course Title
Study Abroad
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

THE6086C - Careers in Professional Theatre
Course Title
Careers in Professional Theatre
Credits Hours
3
Lab/Studio/Field Work Hours
2
Prerequisites
- Admission to the graduate program in Theatre or C.I.
Course Description
Practical courses focusing on job search skills and other aspects of marketing yourself.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Spring
THE6308 - Script and Score Analysis
Course Title
Script and Score Analysis
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to MFA Musical Theatre program.
Course Description
Representative works from the musical theatre repertoire analyzed as dramatic and musical literature.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Fall

THE6507 - Dramatic Theory and Criticism
Course Title
Dramatic Theory and Criticism
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission into Theatre graduate program and research methods course.
Course Description
Examination of principles of dramatic criticism from Aristotle to the present day.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Fall
THE6726 - Advanced TYA Seminar
Course Title
Advanced TYA Seminar
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- THE 5910 and THE 6756.
Course Description
Historical, theoretical, and international contexts shaping the field of Theatre for Young Audiences.
College
College of Arts and Humanities
Department
School of Performing Arts

THE6756 - Methods of Teaching Drama
Course Title
Methods of Teaching Drama
Credits Hours
3
Lab/Studio/Field Work Hours
0
Prerequisites
- Admission to Theatre graduate program or C.I.
Course Description
Methods of teaching drama in contained classroom settings to youth.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Fall

THE6908 - Independent Study
Course Title
Independent Study
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts
THE6909 - Research Report
Course Title
Research Report
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

THE6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

THE6938C - ST: Themed Experience Show Writing
Course Title
ST: Themed Experience Show Writing
Credits Hours
3
Lab/Studio/Field Work Hours
3
Prerequisites
- TPA 6187 or C.I.
Course Description
Students learn to become versatile storytellers by exploring the process and methodology of show writing for theme parks, attractions, entertainment, immersive experiences, and exhibits.
College
College of Arts and Humanities
Department
School of Performing Arts
THE6946 - Internship

**Course Title**
Internship

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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THE6947L - Theatre Practicum III

**Course Title**
Theatre Practicum III

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
20

**Prerequisites**
- Admission into the graduate program, Theatre Practicum II.

**Course Description**
A laboratory course designed to develop students' practical working knowledge in theatre.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Occasional
THE6948 - Professional Internship

**Course Title**
Professional Internship

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to the MFA Acting program.

**Course Description**
Field work as company members of the Orlando Shakespeare Theatre.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Even Fall
Odd Spring

THE6949 - Cooperative Education in Theatre

**Course Title**
Cooperative Education in Theatre

**Credits Hours**
0 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

THE6958 - Study Abroad

**Course Title**
Study Abroad

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts
THE6971 - Thesis
Course Title
Thesis
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

THE6973 - Thesis-Specialist
Course Title
Thesis-Specialist
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

TPA - Theatre Production and Administration

TPA5029C - Lighting Design Studio
Course Title
Lighting Design Studio
Credits Hours
3
Lab/Studio/Field Work Hours
2
Prerequisites
- TPA 5042C and TPA 5062C.
Course Description
Advanced work in the process of designing light for the stage with an emphasis on the use of light as artistic expression.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Occasional
TPA5042C - Costume Design Studio

Course Title
Costume Design Studio

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to the graduate program in Theatre or C.I.

Course Description
Project oriented course in the advance study of Costume Design.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional

TPA5062C - Scene Design Studio

Course Title
Scene Design Studio

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- Graduate status or C.I.

Course Description
Advanced work in the conceptualization and communication of scenic designs for the theatre.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
TPA5081C - Design Concepts for Youth Theatre

**Course Title**
Design Concepts for Youth Theatre

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Admission to the graduate program in Theatre or C.I.

**Course Description**
A study of design elements (lighting, costume, set) as they apply to youth theatre.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Odd Spring

TPA5085C - Design Seminar for Theatre

**Course Title**
Design Seminar for Theatre

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission into Theatre MFA Design track.

**Course Description**
Scenic, costume, lighting and sound design for theatre.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Occasional
TPA5095C - Rendering for Theatre I

**Course Title**
Rendering for Theatre I

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to the graduate program in Theatre or C.I.

**Course Description**
Traditional visual communication skills necessary for scenic, costume, and lighting design.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Fall

TPA5175C - Rendering for Theatre II

**Course Title**
Rendering for Theatre II

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- TPA 5095C.

**Course Description**
Software and technology available for visual communication and documentation.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Spring
TPA5345C - 2D Computer Assisted Design for Theatre

**Course Title**

2D Computer Assisted Design for Theatre

**Credits Hours**

2

**Lab/Studio/Field Work Hours**

2

**Prerequisites**

- Admission into the Theatre MFA Design track.

**Course Description**

Two-Dimensional computer drafting and editing techniques applicable to theatre design.

**College**

College of Arts and Humanities

**Department**

School of Performing Arts

**Terms of Offering**

Occasional

TPA5346C - 3D Modeling for Theatre

**Course Title**

3D Modeling for Theatre

**Credits Hours**

2

**Lab/Studio/Field Work Hours**

2

**Prerequisites**

- TPA 5345C.

**Course Description**

Three-dimensional computer modeling and editing techniques applicable for theatre design.

**College**

College of Arts and Humanities

**Department**

School of Performing Arts

**Terms of Offering**

Occasional
TPA5405 - Theatre Management

**Course Title**
Theatre Management

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Study of university, community and professional theatre management with special attention to the principles of management to include management skills/function and organizational systems/performance as they relate to theatre organizations/institutions.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Even Fall

TPA5885C - Puppetry

**Course Title**
Puppetry

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to MFA graduate program or C.I.

**Course Description**
Puppetry as an art form in design and performance.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Odd Spring

**Current Fee Per Student**
$30.00
TPA5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

TPA5937C - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
School of Performing Arts

TPA5946C - Design Practicum I

Course Title
Design Practicum I

Credits Hours
1

Lab/Studio/Field Work Hours
20

Prerequisites
- Admission into the MFA Design program.

Course Description
Practical experience as a member of the production team as a prop master or assistant scenic, costume, lighting, or sound designer.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Occasional
TPA5949 - Cooperative Education in Theatre Production and Administration  
**Course Title**  
Cooperative Education in Theatre Production and Administration  

**Credits Hours**  
0 - 99  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

TPA5949C - Design Practicum II  
**Course Title**  
Design Practicum II  

**Credits Hours**  
1  

**Lab/Studio/Field Work Hours**  
20  

**Prerequisites**  
- Admission into the graduate program and TPA 5946C or C.I.  

**Course Description**  
Advanced work in the practical application of Properties and/or Design for the Theatre.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Occasional  

TPA5957 - Study Abroad  
**Course Title**  
Study Abroad  

**Credits Hours**  
1 - 99  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

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TPA6087C - Advanced Design Seminar for Theatre

**Course Title**
Advanced Design Seminar for Theatre

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- TPA 5085C.

**Course Description**
Continuation of Design Seminar for Theatre.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Spring

TPA6096C - Advanced Rendering and Modeling for Theatre I

**Course Title**
Advanced Rendering and Modeling for Theatre I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- TPA 5095C.

**Course Description**
Technology relating to visual communication as well as 3 dimensional communication tools. May be used in the degree program a maximum of 3 times.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Fall
TPA6158 - Small Project Studio

Course Title
Small Project Studio

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TPA 6187: Themed Experience Seminar or C.I.

Course Description
Concept and design of small capacity themed projects such as kiosks, food carts, counter sales and queue engagement.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

TPA6186 - Immersive Experience Studio

Course Title
Immersive Experience Studio

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TPA 6158: Small Project Studio or C.I.

Course Description
Mid-sized themed experiences designed to engage guests for 1-4 hours. Students will design space, guest flow, timing, and themed interaction.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
Fall
TPA6187 - Themed Experience Seminar

**Course Title**
Themed Experience Seminar

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
In-depth study of the creation, concepts and practices that drive the themed experience and an overview of the industry and art form. Work will culminate in a collaborative studio project.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Fall

TPA6188 - Visualizing Themed Environments

**Course Title**
Visualizing Themed Environments

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- TPA 6187: Themed Experience Seminar or C.I.

**Course Description**
Fundamentals of virtual placemaking and creating 3-D interactive environments through the utilization of 3-D software and virtual reality tools.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Fall
TPA6437 - Careers in Themed Experience

Course Title
Careers in Themed Experience

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TPA 6186: Immersive Experience Studio or C.I.

Course Description
Development of professional goals, knowledge, marketing materials, and skills for the active themed experience industry professional.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

TPA6908 - Independent Study

Course Title
Independent Study

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

TPA6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts
TPA6918 - Directed Research  
**Course Title**  
Directed Research  

**Credits Hours**  
1 - 99  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts

TPA6921 - Collaborative Project Studio  
**Course Title**  
Collaborative Project Studio  

**Credits Hours**  
3  

**Lab/Studio/Field Work Hours**  
0  

**Prerequisites**  
- TPA 6186: Immersive Experience Studio or C.I.  

**Course Description**  
Students work collaboratively on a large scale themed experience concept and design. Coursework will emulate a professional production environment.  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts  

**Terms of Offering**  
Spring

TPA6938 - Special Topics  
**Course Title**  
Special Topics  

**Credits Hours**  
3  

**College**  
College of Arts and Humanities  

**Department**  
School of Performing Arts
TPA6946 - Internship

**Course Title**
Internship

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

TPA6947 - Design Practicum III

**Course Title**
Design Practicum III

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
20

**Prerequisites**
- TPA 5949C.

**Course Description**
Practical experience as a member of the production team as a scenic, costume, lighting, or sound designer in an area not previously designed.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Occasional
TPA6948L - Design Practicum IV

**Course Title**
Design Practicum IV

**Credits Hours**
1

**Lab/Studio/Field Work Hours**
20

**Prerequisites**
- MFA Design Candidate, Design Practicum III.

**Course Description**
Practical experience as a member of the production team as a scenic, costume, lighting, or sound designer in an area not previously designed.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Occasional

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TPA6958 - Study Abroad

**Course Title**
Study Abroad

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

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TPA6971 - Treatise (Thesis or Research Report)

**Course Title**
Treatise (Thesis or Research Report)

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
School of Performing Arts
TPA6973 - Thesis-Specialist

Course Title
Thesis-Specialist

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

TPP - Theatre Performance and Performance Training

TPP5087C - Theatre Careers in Performance

Course Title
Theatre Careers in Performance

Credits Hours
3

Lab/Studio/Field Work Hours
2

Course Description
Admission to the MFA and MA programs in Theatre. Techniques needed to secure employment in performance or related fields.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Even Spring
TPP5125C - Improvisation Studio

**Course Title**
Improvisation Studio

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Acting for Youth Theatre.

**Course Description**
A study of spontaneous dramatic play and theatre exercises designed to develop self-discipline, creative freedom and resources for the stage and classroom.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Odd Fall

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TPP5156C - Acting Studio I

**Course Title**
Acting Studio I

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- Admission to the MFA Acting program.

**Course Description**
An advanced scene study course using Shakespeare's canon to explore scene analysis, character development, and application of acting techniques.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Even Fall
TPP5157C - Acting Studio II

Course Title
Acting Studio II

Credits Hours
3

Lab/Studio/Field Work Hours
2

Prerequisites
- TPP 5156C.

Course Description
Advanced scene study course applying acting methodologies to the works of modern playwrights.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Spring

TPP5246C - Circus Arts

Course Title
Circus Arts

Credits Hours
2

Lab/Studio/Field Work Hours
2

Prerequisites
- Admission to Theatre graduate program or C.I

Course Description
Circus skills and history.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Even Spring
TPP5248C - Storytelling as a Theatrical Art Form

Course Title

Storytelling as a Theatrical Art Form

Credits Hours

2

Lab/Studio/Field Work Hours

2

Prerequisites

- Admission to Theatre graduate program or C.I.

Course Description

Application of storytelling as an art form.

College

College of Arts and Humanities

Department

School of Performing Arts

Terms of Offering

Spring

TPP5273 - Musical Theatre Acting I

Course Title

Musical Theatre Acting I

Credits Hours

2

Lab/Studio/Field Work Hours

0

Prerequisites

- TPP 5157C.

Course Description

Integrated study in musical theatre acting, singing and movement applied to musical theatre performance, direction and choreography; emphasizing developing skills in textual and musical interpretation.

College

College of Arts and Humanities

Department

School of Performing Arts

Terms of Offering

Occasional
TPP5278C - Musical Theatre Lab

Course Title
Musical Theatre Lab

Credits Hours
1

Lab/Studio/Field Work Hours
1

Prerequisites
• TPP 5157C.

Course Description
Practical course in developing musical theatre skills for the actor.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

TPP5289C - Acting Methodologies

Course Title
Acting Methodologies

Credits Hours
2

Lab/Studio/Field Work Hours
3

Prerequisites
• Admission to the graduate program in Theatre or C.I.

Course Description
Approaches to acting.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Even Fall
TPP5386C - Directing for Young Audiences

**Course Title**
Directing for Young Audiences

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- THE 5910 and THE 5385.

**Course Description**
Study of the principles, procedures, and practices of stage direction as it applies to theatre for young audiences.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Odd Spring

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TPP5515 - Movement Studio I

**Course Title**
Movement Studio I

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MFA Performance Program.

**Course Description**
Graduate level course in principles and methods of movement for the stage focusing on relaxation, centering, increased physical control, and physical development of a character.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Fall
TPP5516C - Movement Studio II

Course Title
Movement Studio II

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- TPP 5515 or C.I.

Course Description
Principles and methods of movement for the stage focusing on gaining specific knowledge and skills in period styles of movement and basic unarmed combat.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

TPP5554C - Musical Theatre Dance I

Course Title
Musical Theatre Dance I

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to MA or MFA Musical Theatre program

Course Description
Advanced dance study with particular emphasis on the development of principles of alignment, coordination, isolation, and sequencing.

College
College of Arts and Humanities

Department
School of Performing Arts
TPP5555C - Musical Theatre Dance II

Course Title
Musical Theatre Dance II

Credits Hours
2

Lab/Studio/Field Work Hours
4

Prerequisites
- TPP 5554C.

Course Description
Advanced dance study with particular emphasis on the development and expression of characterization in dance.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

TPP5715C - Stage Voice I

Course Title
Stage Voice I

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to the MFA Acting program.

Course Description
Fundamentals of breathing and vocal production. Combination of various voice methodologies, focusing on the relaxation of physical tension and articulation.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Even Fall
TPP5716C - Stage Voice II

Course Title
Stage Voice II

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to MFA Acting program.

Course Description
Continuation of Stage Voice I, including Skinner's IPA and application of physical vocal techniques to longer texts.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Spring

TPP5754 - Musical Theatre Voice I

Course Title
Musical Theatre Voice I

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to MA or MFA Musical Theatre program or C.I.

Course Description
Voice study devoted to the diagnosis and development of the singing voice and its application to musical theatre performance placing particular emphasis upon vocal technique.

College
College of Arts and Humanities

Department
School of Performing Arts
TPP5917 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

TPP5937 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts

TPP5949 - Cooperative Education in Theatre Performance and Train
Course Title
Cooperative Education in Theatre Performance and Train
Credits Hours
0 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

TPP5957 - Study Abroad
Course Title
Study Abroad
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts
TPP6146C - Acting Studio III

**Course Title**
Acting Studio III

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
2

**Prerequisites**
- TPP 5157C Acting Studio II.

**Course Description**
An advanced acting course applying acting methodologies to the works of classical playwrights and a variety of styles.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Odd Fall

TPP6186C - Advanced Scene Study

**Course Title**
Advanced Scene Study

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
1

**Prerequisites**
- Admission to MFA Acting program.

**Course Description**
Acting techniques related to all forms of theatre including TYA, commercial, and new play development.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Even Fall
TPP6216C - Theatre for Young Audiences Tour

**Course Title**
Theatre for Young Audiences Tour

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Admission to the graduate program in Theatre or C.I.

**Course Description**
Performance, administration and technical work on a touring production for young audiences.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Even Spring

**Current Fee Per Student**
$45.00

TPP6247 - Theatre for Social Change

**Course Title**
Theatre for Social Change

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Methods of Teaching Drama.

**Course Description**
The study and application of interactive theatre techniques to effect change related to social, cultural, interpersonal and personal issues.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Even Spring
TPP6267 - Acting Studio IV

Course Title
Acting Studio IV

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- TPP 6146.

Course Description
An advanced acting class that focuses on the technical and practical aspects of acting for film and television.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Even Spring

TPP6274 - Musical Theatre Acting II

Course Title
Musical Theatre Acting II

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- TPP 5273.

Course Description
Advanced and integrated study with emphasis on the development of skills in musical theatre characterization.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
TPP6279 - Musical Theatre Master Class

**Course Title**
Musical Theatre Master Class

**Credits Hours**
2

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to Theatre MFA Musical Theatre Track.

**Course Description**
Master classes conducted by permanent staff members and guest artists of the Seaside Music Theatre Company.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Fall

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TPP6344 - Musical Theatre Directing

**Course Title**
Musical Theatre Directing

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to MFA Musical Theatre program.

**Course Description**
A comprehensive study and practical application of the unique problems of directing for the musical stage.

**College**
College of Arts and Humanities

**Department**
School of Performing Arts

**Terms of Offering**
Spring
TPP6517 - Movement Studio III
Course Title
Movement Studio III
Credits Hours
2
Lab/Studio/Field Work Hours
1
Prerequisites
- TPP 5516C
Course Description
Continuation of principles/methods of movement for the stage covered in Movement Studio II with focus on gaining specific skills in dance for musical theatre/period plays.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Fall

TPP6518C - Movement Studio IV
Course Title
Movement Studio IV
Credits Hours
2
Lab/Studio/Field Work Hours
3
Prerequisites
- Movement Studio III.
Course Description
Covers the principles/methods of armed/unarmed combat for the stage, including hand to hand, foil, epee, broadsword, sabre, rapier, dagger, and quarter staff combat.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Spring
TPP6556C - Musical Theatre Dance III

Course Title
Musical Theatre Dance III

Credits Hours
2

Lab/Studio/Field Work Hours
4

Prerequisites
- TPP 5555C.

Course Description
Advanced dance study with particular emphasis on the development of jazz and tap technique.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Fall

TPP6557C - Musical Theatre Dance IV

Course Title
Musical Theatre Dance IV

Credits Hours
2

Lab/Studio/Field Work Hours
4

Prerequisites
- TPP 6556C.

Course Description
Advanced dance study with particular emphasis on the development of musical theater dance style and choreography.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
TPP6635 - Themed Experience Show Writing

Course Title
Themed Experience Show Writing

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Complete the following:
  - TPA6187 - Themed Experience Seminar (3)

Course Description
Focus on show writing for themed experiences. Students will learn writing for theme parks, attractions, entertainment, immersive experiences through lectures, workshops and collaboration.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

TPP6686 - Playwriting for Young Audiences

Course Title
Playwriting for Young Audiences

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Dramatic Literature for Children.

Course Description
Practical experience in the creative process of playwriting for young audiences.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall
TPP6717C - Stage Voice III

Course Title
Stage Voice III

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to MFA Acting program.

Course Description
Continuation of Stage Voice I and II, focusing on Shakespeare's use of language.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Odd Fall

TPP6718C - Stage Voice IV

Course Title
Stage Voice IV

Credits Hours
2

Lab/Studio/Field Work Hours
3

Prerequisites
- Stage Voice III.

Course Description
A practical study of American and European dialects with application of Skinner and Lessac transcription.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring
TPP6755 - Musical Theatre Voice II

Course Title
Musical Theatre Voice II

Credits Hours
2

Lab/Studio/Field Work Hours
1

Prerequisites
- Admission to MA or MFA Musical Theatre program or C.I.

Course Description
Advanced voice study placing particular emphasis upon textual analysis and characterization.

College
College of Arts and Humanities

Department
School of Performing Arts

TPP6756 - Musical Theatre Voice III

Course Title
Musical Theatre Voice III

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MFA Musical Theatre program.

Course Description
Continuation of Musical Theatre Voice II placing particular emphasis upon knowledge of musical theatre repertoire and its application to the history of the art form.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Fall
TPP6757 - Musical Theatre Voice IV

Course Title
Musical Theatre Voice IV

Credits Hours
2

Lab/Studio/Field Work Hours
0

Prerequisites
- Admission to MFA Musical Theatre program.

Course Description
Continuation of Musical Theatre Voice III placing particular emphasis on synthesizing scene-to-song vocal production.

College
College of Arts and Humanities

Department
School of Performing Arts

Terms of Offering
Spring

TPP6908 - Independent Study

Course Title
Independent Study

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts

TPP6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
School of Performing Arts
TPP6918 - Directed Research
Course Title
Directed Research
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

TPP6933 - Acting Studio V
Course Title
Acting Studio V
Credits Hours
2
Lab/Studio/Field Work Hours
1
Course Description
TPP 6267. An advanced acting course that will explore and develop specialty areas of actor training.
College
College of Arts and Humanities
Department
School of Performing Arts
Terms of Offering
Odd Spring

TPP6938 - Special Topics
Course Title
Special Topics
Credits Hours
3
College
College of Arts and Humanities
Department
School of Performing Arts
TPP6946 - Internship
Course Title
Internship
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

TPP6958 - Study Abroad
Course Title
Study Abroad
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

TPP6971 - Treatise (Thesis or Research Report).
Course Title
Treatise (Thesis or Research Report).
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

TPP6973 - Thesis-Specialist
Course Title
Thesis-Specialist
Credits Hours
1 - 99
College
College of Arts and Humanities
Department
School of Performing Arts

TSL - Teaching Second Language
TSL5085 - Teaching Language Minority Students in K-12 Classrooms

**Course Title**
Teaching Language Minority Students in K-12 Classrooms

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to College of Education Master of Arts Program or C.I.

**Course Description**
Teaching K-12 limited English proficient (LEP) students. Florida standards regarding cross-cultural communication, ESOL curriculum, and materials, ESOL methodology, testing and evaluation of ESOL students, applied linguistics.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**

TSL5325 - ESOL Strategies

**Course Title**
ESOL Strategies

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or senior standing or C.I.

**Course Description**
This course will survey cross-cultural communication and understanding, testing and evaluation, curriculum and methods of teaching ESOL to meet the needs of limited English proficient students.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional
TSL5345 - Methods of ESOL Teaching

Course Title
Methods of ESOL Teaching

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
This course is designed to develop understanding, knowledge and skills of the current methods used in the teaching of ESOL.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Spring
Fall

TSL5376 - Reading and Writing in a Second Language

Course Title
Reading and Writing in a Second Language

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Theoretical and pedagogical approaches to ESOL reading and writing.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional
TSL5380 - Computers and Technology for ESOL

**Course Title**
Computers and Technology for ESOL

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Emphasizes research in computer assisted language learning, as well as design and evaluation of software and websites for learning English as a second language.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Even Summer

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TSL5525 - ESOL Cultural Diversity

**Course Title**
ESOL Cultural Diversity

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
This course is designed to identify major cultural groups represented by the LEP population in Florida schools and to understand their special needs.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Summer
TSL5601 - Second Language Vocabulary Learning

Course Title
Second Language Vocabulary Learning

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Considers lexical issues encountered by second language learners; explores best practices for learners and their teachers and examines current research for pedagogical application.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional

TSL5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

TSL5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Community Innovation and Education

Department
School of Teacher Education
TSL5940 - Issues in TEFL

**Course Title**
Issues in TEFL

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate status or senior standing or C.I.

**Course Description**
Address issues specifically related to TEFL, such as materials adaptation, teaching in multi-level classrooms, learning styles, cultural issues, and curriculum syllabus design.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Spring

TSL6142 - Critical Approaches to ESOL

**Course Title**
Critical Approaches to ESOL

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Emphasis placed on current research in second language acquisition as it relates to the development of ESOL curriculum and materials.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Fall
TSL6143 - Curriculum and Instruction in Dual Language Programs

**Course Title**
Curriculum and Instruction in Dual Language Programs

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate Standing or C.I.

**Course Description**
This course is an introduction to methods and research in teaching of literacy to all bilingual learners, using the home language and new language.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring

TSL6250 - Applied Linguistics in ESOL

**Course Title**
Applied Linguistics in ESOL

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Applying linguistics, psycholinguistics, and sociolinguistics to teaching English as a second language with emphasis on pronunciation, intonation, structural analysis, morphophonemics, and decoding from print to sound.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Spring
TSL6252 - Sociolinguistics for ESOL

Course Title
Sociolinguistics for ESOL

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Core concepts in the field of sociolinguistics as it relates to the teaching of English as a second language.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Fall

TSL6350 - Grammar for ESOL Teachers

Course Title
Grammar for ESOL Teachers

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Emphasis on English grammar for English as a Second Language teachers. Includes analytical and theoretical background, but primarily examines problematic grammar points for ESOL learners.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Occasional
TSL6374 - TESOL Listening, Speaking and Pronunciation
Course Title
TESOL Listening, Speaking and Pronunciation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. Applications of second language acquisition theories, principles, and current research as they relate to the teaching of ESL listening, speaking and pronunciation.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Even Fall

TSL6377 - Bilingualism, Multiculturalism, and Biliteracy in the Dual Language Classroom
Course Title
Bilingualism, Multiculturalism, and Biliteracy in the Dual Language Classroom

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course is an introduction to methods and research in teaching of literacy to all bilingual learners, using the home language and new language.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Fall
TSL6379 - Second Language Literacy

Course Title
Second Language Literacy

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TSL 5085 or TSL 5345 AND TSL 6250.

Course Description
An overview of literacy issues and literacy instruction for second language learners.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Even Fall

TSL6440 - Assessment Issues in TESOL

Course Title
Assessment Issues in TESOL

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course provides for the development of sound assessment knowledge necessary to prepare students to apply second language assessment theories, principles, and current research.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Even Fall
Even Spring
TSL6442 - Fundamentals of Standardized Assessment in TESOL

Course Title
Fundamentals of Standardized Assessment in TESOL

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
Graduate standing or C.I. This course will address the standardized assessment practices in TESOL as well as the instructional and research implications.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Fall

TSL6443 - Assessment in Dual Language Programs

Course Title
Assessment in Dual Language Programs

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
This course provides a foundation for assessing language and academic proficiency in dual language programs.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Spring
TSL6526 - Interdependencies of Language, Culture, and Education for Dual Language Learners

Course Title
Interdependencies of Language, Culture, and Education for Dual Language Learners

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
This course focuses on the interdependencies of language, culture, and education as they relate to dual language learners.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Summer

TSL6600 - Second Language Vocabulary Acquisition

Course Title
Second Language Vocabulary Acquisition

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I. and one of the following graduate research courses: TSL 6640, EDF 6481, EDF 7475, EDF 7403.

Course Description
Research on how learners acquire new vocabulary in a second language. Course requires extensive reading as well as original field research.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Even Spring
TSL6640 - Research in Second Language

Course Title
Research in Second Language

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
This course focuses on research into language learning processes which serves as a knowledge base for effective teaching of language-minority students.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Fall

TSL6642 - Issues in Second Language Acquisition

Course Title
Issues in Second Language Acquisition

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TSL 6250, TSL 6640.

Course Description
Focuses on second language acquisition theories, principles, and current research as they relate to language-minority students acquiring English as a Second Foreign Language.

College
College of Arts and Humanities

Department
Department of Modern Languages and Literatures

Terms of Offering
Even Spring
TSL6643 - Diachronic Analysis of Second Language Acquisition Processes

**Course Title**
Diachronic Analysis of Second Language Acquisition Processes

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Analysis of current research on second language acquisition (SLA) processes across the life span.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Odd Fall

TSL6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1 - 99

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

TSL6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures
TSL6940 - ESOL Practicum

**Course Title**
ESOL Practicum

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Techniques and strategies for creating effective lesson plans for ESOL classroom activities.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Every Semester

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TSL6971 - Thesis

**Course Title**
Thesis

**Credits Hours**
1 - 99

**Course Description**
This course is intended for graduate students in the TESOL MA program who wish to exercise the option of writing a thesis. May be repeated for credit.

**College**
College of Arts and Humanities

**Department**
Department of Modern Languages and Literatures

**Terms of Offering**
Occasional
TSL7006 - Second Language Teacher Preparation

**Course Title**
Second Language Teacher Preparation

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Admission to TESOL Ph.D. track or C.I.

**Course Description**
Examines the history of general and second language teacher preparation and provides a theoretical and practical rationale for the development of knowledge, skills, and dispositions necessary to prepare ESL and other teachers of English learners.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Even Spring

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TSL7948 - Doctoral Internship

**Course Title**
Doctoral Internship

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- Graduate standing or C.I.

**Course Description**
Students work with faculty members to develop teaching competency and research focus through a professional teaching experience. May be used in the degree program a maximum of 2 times.

**College**
College of Community Innovation and Education

**Department**
School of Teacher Education

**Terms of Offering**
Spring
Fall
TSL7980 - Dissertation Research

Course Title
Dissertation Research

Credits Hours
1 - 99

Prerequisites
- Student must be in candidacy.

Course Description
This is a dissertation research course. May be repeated for credit.

College
College of Community Innovation and Education

Department
School of Teacher Education

Terms of Offering
Every Semester

TTE - Transportation and Traffic Engineering

TTE5204 - Traffic Engineering

Course Title
Traffic Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TTE 3810 or C.I.

Course Description
Study of operator and vehicle characteristics, and design for street capacity, signals, signs, and markings.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
TTE5531 - Active Mobility and Technologies: Synergy and Challenges

Course Title
Active Mobility and Technologies: Synergy and Challenges

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CGN 5555 or C.I.

Course Description
The course explores the impact of information technologies on sustainable mobility and the transformation towards complete streets.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Fall

TTE5532 - Policy Aspects of Smart City Transportation

Course Title
Policy Aspects of Smart City Transportation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- CGN 5555 or C.I.

Course Description
Provide an overview of the policy aspects of transportation in Smart Cities. Introduce policy implications of Big Data and Analytics in a Smart Cities.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring
TTE5805 - Geometric Design of Transportation Systems

Course Title
Geometric Design of Transportation Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TTE 3810 or C.I.

Course Description
Study of highway geometric design in the engineering of transportation systems.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

TTE5835 - Pavement Engineering

Course Title
Pavement Engineering

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
EGN 3331C, CGN 3501C, CEG 4011C. Materials, analysis, evaluation, and management of pavement and pavement systems.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Even Fall

TTE5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering
TTE5937 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

TTE6205 - Highway Capacity

**Course Title**
Highway Capacity

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- TTE 6256 or TTE 5204 or C.I.

**Course Description**
Highway capacity for all functional classes of highway. Traffic signalization including traffic studies, warrants, cycle length, timing, phasing and coordination.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Fall
TTE6256 - Traffic Operations

Course Title
Traffic Operations

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TTE 4274 or C.I.

Course Description
Fundamentals of traffic flow theory and applications to traffic operations on highways and streets. Work on real life traffic operations project and report results.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Fall

TTE6270 - Intelligent Transportation Systems

Course Title
Intelligent Transportation Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TTE 6256 or TTE 5204 or C.I.

Course Description
Theories and applications of intelligent vehicle highway systems in transportation engineering.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Odd Spring
TTE6275 - Connected and Autonomous Vehicles

**Course Title**
Connected and Autonomous Vehicles

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- TTE 3810 or C.I.

**Course Description**
Explain Connected, Automated and Autonomous vehicles' technologies and current and future applications, their expected benefits for transportation safety, operation, social and economic, and potential impact.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Spring

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TTE6315 - Traffic Safety Analysis

**Course Title**
Traffic Safety Analysis

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Prerequisites**
- TTE 5805 or TTE 5204 or C.I.

**Course Description**
Understanding crash research concepts, and identifying factors contributing to traffic crash occurrence.

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

**Terms of Offering**
Spring
TTE6526 - Planning and Design of Airports

Course Title
Planning and Design of Airports

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
C.I.

Course Description
Background of aviation and airport development, aircraft characteristics. Planning and design of airport components. Heliport and STOL ports and pavement and drainage design.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional

TTE6533 - Mobility in Smart Cities: Technologies and Application Areas

Course Title
Mobility in Smart Cities: Technologies and Application Areas

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
CGN 5555 or C.I.

Course Description
The course introduces students to research developments in intelligent transportation systems infrastructure with a focus on video-based data collection and networks connectivity.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring
TTE6608 - Algorithms and Models for Smart Cities

Course Title
Algorithms and Models for Smart Cities

Credits Hours
3

Lab/Studio/Field Work Hours
0

Course Description
STA 5206 or C.I. Cities as complex systems, urban geo-location data collection and processing, data exploration and geo-visualization, classification techniques, urban mobility models, and urban networks.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Odd Fall

TTE6625 - Mass Transportation Systems

Course Title
Mass Transportation Systems

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- C.I.

Course Description
Planning, design, construction, operation, and administration of mass transportation systems.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Occasional
TTE6667 - Discrete Choice Modeling in Transportation

Course Title
Discrete Choice Modeling in Transportation

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- TTE 4274 or STA 5206(or equivalent) or C.I.

Course Description
Multivariate regression analysis, individual choice theory, random utility frameworks, ordered and unordered response models, maximum likelihood approaches, and recent advances in the field.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Odd Fall

TTE6668 - Transportation Networks

Course Title
Transportation Networks

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
All of Calculus & Linear Algebra
- Must have completed the following:
  - Experience Not Found
  - Experience Not Found

Course Description
Introduces transportation network analysis and applications. Transportation network analysis aims to answer questions in a "big-picture" view of traffic patterns in city/metropolitan areas.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Even Fall
Even Spring
TTE6909 - Research Report

Course Title
Research Report

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

TTE6910 - Travel Technology and Analytics Capstone Course

Course Title
Travel Technology and Analytics Capstone Course

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Completion of TTA core courses (HMG 6710, HMG 6449, ESI 6251, TTE 6667, TTE 6608) or C.I. permission.

Course Description
Identification of problems and design, implementation, and evaluation of appropriate technological and analytical solutions to meet current and future needs in the global travel industry.

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering

Terms of Offering
Spring

TTE6918 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Engineering and Computer Science

Department
Department of Civil, Environmental, and Construction Engineering
TTE6938 - Special Topics

**Course Title**
Special Topics

**Credits Hours**
3

**College**
College of Engineering and Computer Science

**Department**
Department of Civil, Environmental, and Construction Engineering

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**URP - Urban and Regional Planning**

**URP6711 - Sustainable Transportation Planning**

**Course Title**
Sustainable Transportation Planning

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
0

**Course Description**
Admission to Master of Urban and Regional Planning program or C.I. Planning for multimodal transportation, including highway/automobile, public transit, pedestrian, bicycling and rail systems, to explore the social, economic and health implications to communities.

**College**
College of Community Innovation and Education

**Department**
School of Public Administration

**Terms of Offering**
Occasional

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**WST - Women's Studies**
WST5108 - Global Women in Crisis

Course Title
Global Women in Crisis

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or C.I.

Course Description
Examines how crisis shapes women's lives around the world through the lens of Feminist Theory from a global, multi-cultural perspective, combined with global feminist activism.

College
College of Arts and Humanities

Department
Program in Women's and Gender Studies

Terms of Offering
Fall

WST5347 - Research in Women and Gender Studies

Course Title
Research in Women and Gender Studies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing or senior standing, or C.I.

Course Description
To explore feminist research methodologies and investigate relationships among feminist theory, research, social change, and gender equality as experienced at the workforce in private, public and non-profit spheres.

College
College of Arts and Humanities

Department
Program in Women's and Gender Studies

Terms of Offering
Even Fall
WST5601 - Theories in Gender Studies

Course Title
Theories in Gender Studies

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate standing, Gender Studies graduate certificate standing, or C.I.

Course Description
Foundational scholarship in gender studies, with emphasis on theoretical and interdisciplinary approaches to gender and sexuality.

College
College of Arts and Humanities

Department
Program in Women's and Gender Studies

Terms of Offering
Even Fall

WST5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Program in Women's and Gender Studies
WST5920 - Colloquium on Gender Topics

Course Title
Colloquium on Gender Topics

Credits Hours
3

Lab/Studio/Field Work Hours
0

Prerequisites
- Graduate Standing or C.I.

Course Description
Critical analysis of specific gender issue(s), employing feminist, intersectional, and queer theories. Synthesize understanding of
gender through intensive reading, writing, discussion, and praxis.

College
College of Arts and Humanities

Department
Program in Women's and Gender Studies

Terms of Offering
Spring

WST5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Arts and Humanities

Department
Program in Women's and Gender Studies

WST5957 - Study Abroad

Course Title
Study Abroad

Credits Hours
1 - 99

College
College of Arts and Humanities

Department
Program in Women's and Gender Studies

ZOO - Zoology
ZOO5456C - Ichthyology

Course Title
Ichthyology

Credits Hours
4

Lab/Studio/Field Work Hours
6

Prerequisites

• Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I.

Course Description
Introduction to the biology of the fishes, their classification, evolution, and life histories.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Even Fall

ZOO5463C - Herpetology

Course Title
Herpetology

Credits Hours
4

Lab/Studio/Field Work Hours
4

Prerequisites

• Admission to the M.S. in Biology, Ph.D. in Conservation Biology, Certificate in Conservation Biology, PSM in Conservation Biology, or C.I.

Course Description
Introduction to the biology of the amphibians and reptiles, their classification, evolution, and life histories.

College
College of Sciences

Department
Department of Biology

Terms of Offering
Odd Spring

Current Fee Per Student
$60.00
ZOO5475L - Field Ornithology

**Course Title**
Field Ornithology

**Credits Hours**
3

**Lab/Studio/Field Work Hours**
1

**Course Description**
A comprehensive introduction and appreciation for the evolutionary history, diversity, ecology, biology, and behavior of birds such as disciplines, evolutionary biology and psychology.

**College**
College of Sciences

**Department**
Department of Biology

**Terms of Offering**
Odd Fall

**Current Fee Per Student**
$30.00

ZOO5745C - Neuroanatomical Pathways and their Neurotransmitters

**Course Title**
Neuroanatomical Pathways and their Neurotransmitters

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
3

**Prerequisites**
- Human/Comparative Anatomy, or Human/Animal Physiology or C.I.

**Course Description**
Fundamental concepts of both morphological and functional organization of the nervous system. Primary emphasis on human structure.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Occasional

**Current Fee Per Student**
$15.00
ZOO5748C - Clinical Neuroanatomy

Course Title
Clinical Neuroanatomy

Credits Hours
5

Lab/Studio/Field Work Hours
2

Prerequisites
- ZOO 3733C Human Anatomy.

Course Description
Provides the necessary knowledge to understanding the complexities of human nervous system, its normal and pathologic functions, relevant to practice of general medicine and/or neuroscientists.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Fall

ZOO5749C - Clinical Neuroscience

Course Title
Clinical Neuroscience

Credits Hours
5

Lab/Studio/Field Work Hours
2

Prerequisites
- ZOO 3733C and ZOO 3744, or ZOO 3733C and ZOO 4743C or ZOO 5748C, or equivalents.

Course Description
Clinically oriented teachings of neuroscience areas including selected topics in neuropathology, neuro-oncology, neuroimmunology, neuropharmacology, and neurodiagnostics.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Spring
ZOO5758C - Vertebrate Histology

Course Title
Vertebrate Histology

Credits Hours
4

Lab/Studio/Field Work Hours
3

Prerequisites
- Graduate standing and college-level Human Anatomy, Human Physiology or Introduction to Histology.

Course Description
Microanatomical detail plus appropriate developmental and functional considerations of major cell types, primary tissues, organs, and organ systems. Survey of modern animal-tissue microtechnique.

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

Terms of Offering
Spring

ZOO5917 - Directed Research

Course Title
Directed Research

Credits Hours
1 - 99

College
College of Sciences

Department
Department of Biology

Terms of Offering
Fall

ZOO5937 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Medicine

Department
College of Medicine Burnett School of Biomedical Sciences

2022-2023 Graduate Catalog
ZOO6737 - Clinically Oriented Human Anatomy

**Course Title**
Clinically Oriented Human Anatomy

**Credits Hours**
4

**Lab/Studio/Field Work Hours**
6

**Prerequisites**
- Human Anatomy ZOO 3733 or equivalent.

**Course Description**
Clinically Orientated Human Anatomy (COHA) is an advanced course focusing on integrated functional anatomy by means of problem-based learning and project-based learning.

**College**
College of Medicine

**Department**
College of Medicine Burnett School of Biomedical Sciences

**Terms of Offering**
Summer

ZOO6909 - Research Report

**Course Title**
Research Report

**Credits Hours**
1

**College**
College of Sciences

**Department**
Department of Biology

ZOO6918 - Directed Research

**Course Title**
Directed Research

**Credits Hours**
1

**College**
College of Sciences

**Department**
Department of Biology
ZOO6938 - Special Topics

Course Title
Special Topics

Credits Hours
3

College
College of Sciences

Department
Department of Biology