Breda University of Applied Science Introduction

‘Course Basic AI for ~~Teaching~~ all Staff’

24 July 2024

Visit Our Website

Meaningful AI Endeavours - Home (sharepoint.com)

Breda University OF APPLIED SCIENCES

Tanja Beks

Current position:
policy officer Education Breda University of Applied Sciences

Support for AI Endeavour Team - LEGO® SERIOUS PLAY ® Facilitator

Background, 20 years of lecturer experience in higher education in the Netherlands, special interest in AI in Education & innovative testing

Tanja Beks MSc.
Policy officer Education Breda
University of Applied Science...

Breda University of applied sciences

Breda, the Netherlands

Since **1966**

7,089 students

- **1,822** international students (26%)
- **103** countries of origin

885 employees

- **182** international employees (21%)

177 partner universities

BUas student data October 2023

Breda University OF APPLIED SCIENCES

BUas Domain Expertise

Games

Leisure & Events

Tourism

Media

Data Science & AI

Hotel

Logistics

Built Environment

Facility

Agenda

WHY

HOW

WHAT

WHY

Ambition

Meaningful AI Endeavours

AMBITION

BUas is a frontrunner in leveraging and maintaining AI as a transformative tool in education, operations and research while keeping ethical considerations at the forefront.

FOCUS

- **Education** : Leading in AI in the domains
- **Operations**: Human-centred, balancing efficiency with empathy and accountability
- **Research & Innovation**: Integrating AI in research and innovation focusing on educational goals and industry needs

STRATEGY

- Vision and goals (evaluation and improvement)
- Talent and development
- Curriculum development and assessment
- AI in operations
- Infrastructure and resources
- Data governance and ethics
- Research and Innovation

GOAL

Integrating AI into all parts of the organisation promises to prepare students better for the future job market and also enhances possible cost savings within operations. By strategically leveraging AI, the institute can innovate in new ways that will bring quality, value and operational efficiency

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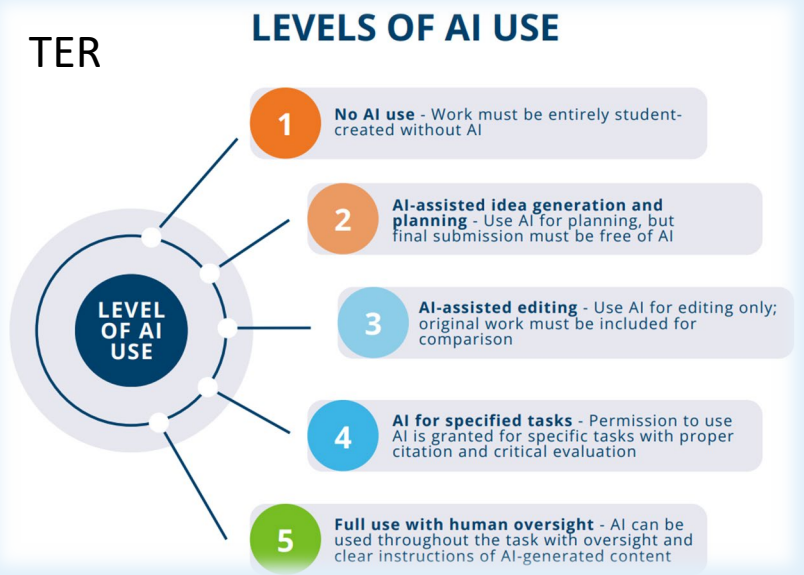


- ILO’s
- Learning activities

Ambition

Integrate

In-House expertise

Copy URL

Part of Chapter I: General Provisions

EU Artificial Intelligence Act

Article 4: AI literacy

Date of entry into force:	According to:	Inherited from:
January 2025	Article 113(a)	Chapter I

Note: This date is an estimate based on the expected date of entry into force. See here for a full implementation timeline.

SUMMARY +

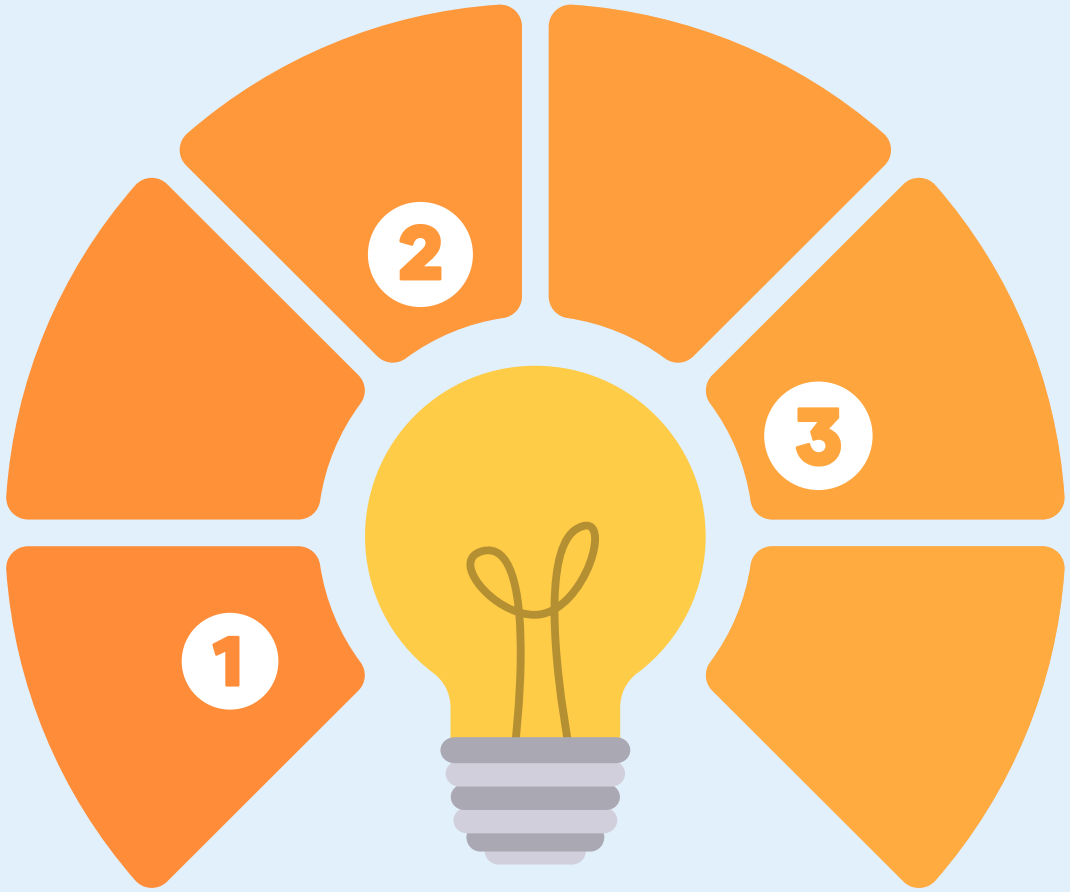
Providers and deployers of AI systems shall take measures to ensure, to their best extent, a sufficient level of AI literacy of their staff and other persons dealing with the operation and use of AI systems on their behalf, taking into account their technical knowledge, experience, education and training and the context the AI systems are to be used in, and considering the persons or groups of persons on whom the AI systems are to be used.

In-House expertise

HOW

Set up training team

- Expert Trainer/content
- Educational design + teamlead
- Educational design + training
- LMS programmer + training
- 3 trainers
- Organizational support



1. Design high quality AI training on different levels and for different stakeholders + keep up to date
2. Design and maintain LMS system for e-learning and organization
3. Take care of the organizational part

WHAT

Intended Learning Outcomes for staff

1. Knowledge in AI
2. Impact of AI
3. Process of AI
4. Flexibility:
5. Student Relevance
6. Teacher-Student Communication
7. AI Developer and Researcher
8. AI User
9. AI Ethical Designer

Intended Learning Outcomes for staff

1. **Knowledge in AI:** Educators understand fundamental AI concepts, including definitions, development processes, and technical understanding. They recognize the impact of AI on society, consider social implications, and address ethical biases.
2. **Impact of AI:** Teachers analyse how AI affects teaching and learning. They foster critical thinking about AI's ethical consequences and adapt their teaching methods accordingly.
3. **Process of AI:** Educators comprehend AI algorithms, machine learning, and neural networks. Encouraging students to engage in AI-related projects and problem-solving enhances their understanding.

Intended Learning Outcomes for staff

4. **Flexibility:** Teachers embrace adaptability. Integrating AI tools into the learning environment and adjusting strategies based on student needs.
5. **Student Relevance:** Connect AI concepts to real-world contexts relevant to students' lives. Promoting digital literacy and responsible AI to students.
6. **Teacher-Student Communication:** Facilitate open dialogues about AI's impact and ethical considerations to encourage student engagement. Creating a supportive environment for discussing AI.

Intended Learning Outcomes for staff

7**. AI Developer and Researcher**: Introduce students to coding, programming, and AI development. Collaboration with experts in the AI field to enriche learning experiences.

8**. AI User**: Equipping students with practical AI literacy skills to enables them to interact with AI tools effectively. Critical evaluation of AI-generated content.

9**. AI Ethical Designer**: Teachers discuss bias, fairness, human agency and transparency in AI. Encouraging students to design or become a user of ethically sound AI systems to prepare them for responsible AI use.

	Fundamentals
Technical	1. Understand how to choose relevant AI tools based on specific tasks. (understand) 2. Apply AI tools in a controlled and responsible manner within the domain. (Apply) 3. Recall fundamental AI principles, including safe usage and ethical considerations. (analyze)
Pedagogical	1. Recognize the impact of AI on education. (Remember) 2. Understand how AI enhances personal and professional practices. 3. Understand how to instruct students on AI usage in referencing AI in academic work. (Apply)
Content	1. Recall fundamental AI principles, including safe usage and ethical considerations. (analyze) 2. Recall ethical problems related to AI and remember Concepts of theories of LLM's. 3. Assess ethical implications of AI in practice. (Apply)

BUas-wide fundamental course for all staff

E-learning 1,5 hour

Workshop 2 hours

Topics of the E-learning

- Introduction into AI
- Why AI matters
- Ethics & AI
- Machine Learning
- Chatbots & LLM
- Creativity & Imagination
- Neural Networks
- Training data & bias
- Computer Vision
- Equal access & algorithmic bias

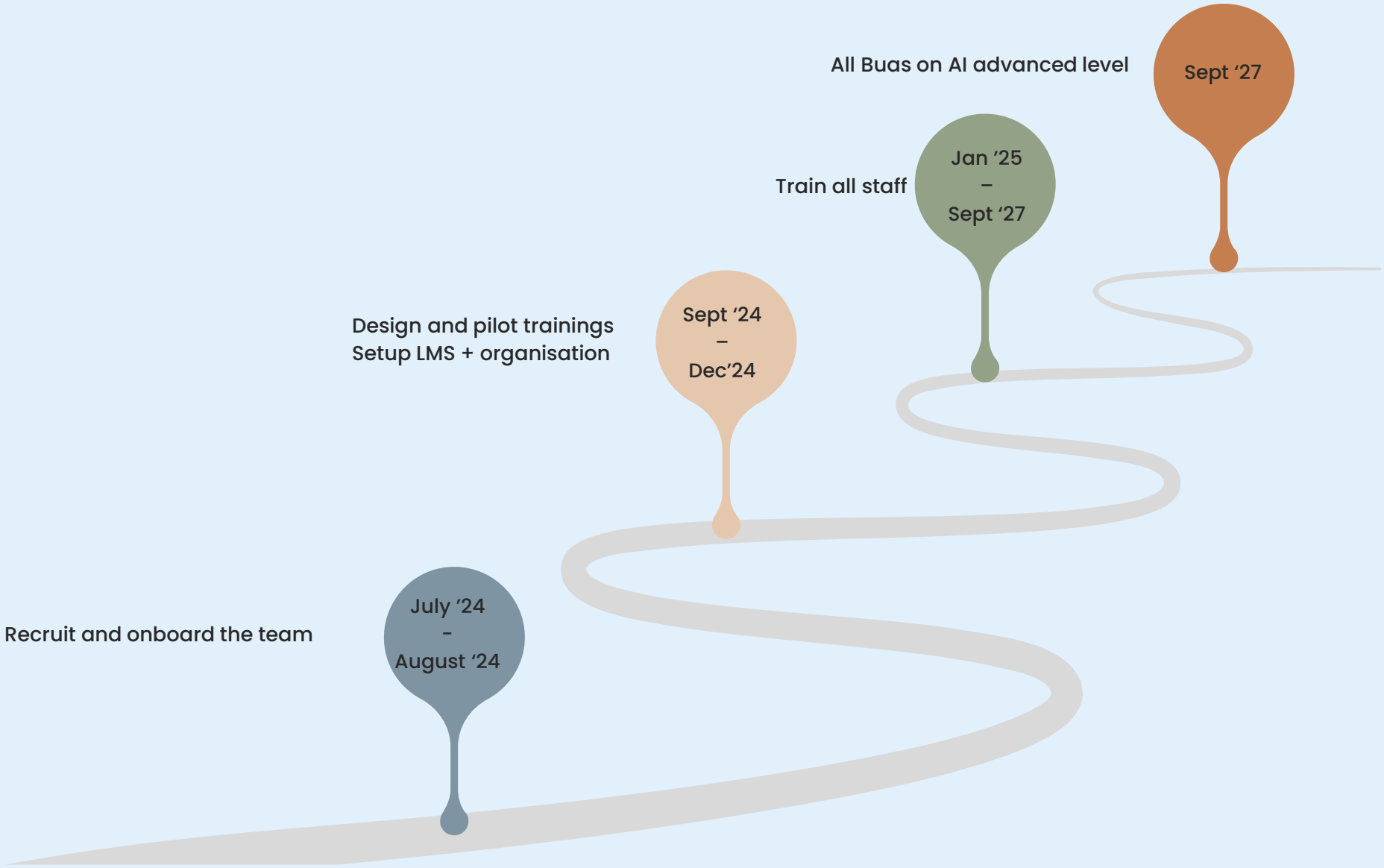
Example of a CLiP

After finishing the video and questions, you can press escape to return to the course overview.

Escape will always minimize full-screen video if you selected full-screen video.
A message will pop up to inform you that a new component is unlocked.
You can navigate on the left side, or you can click the message to access the unlocked content.

Topics of the workshop

- Difference between traditional education without AI and education with AI
- How AI affects education into a teacher centered approach
- Opportunities and challenges in the daily use
- Explanation about Copilot and exercises with Copilot
- Prompt engineering exercises
- Image building examples and exercises
- Ethical consequences



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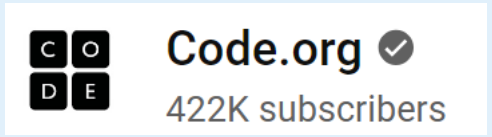
E-learning videos all made by



How AI works 1.29 min
Why AI matters 2.02 min
Ethics & AI 3.27 min
Machine Learning 2.52 min
Chatbots & LLM 7.20 min
Creativity & Imagination 5.17 min
Neural Networks 5.04 min
Training data & bias 2.40 min
Computer vision 6.24 min
Equal access and algorithmic bias 3.23 min

Thank You

For Your Attention

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