

# **EU4Dual Master Class Al**

General Information Session



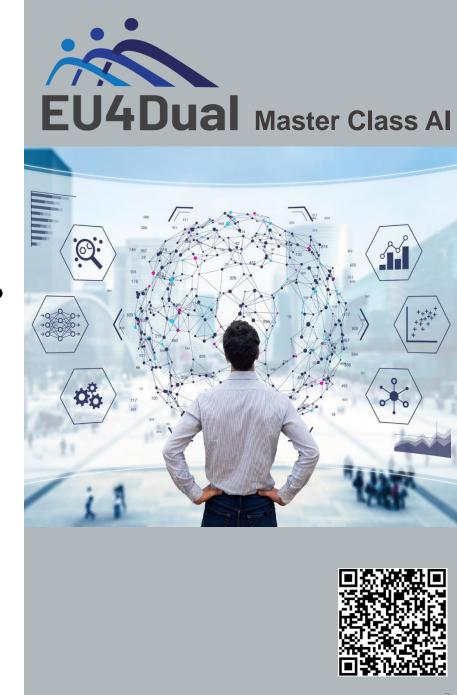
# Agenda of Today's Presentation

What is the **EU4Dual Master Class AI** study programme?

Which are the partner universities in the study programme?

How to apply and participate in the study programme?

Presentation of partner universities and workshop offerings



### What is the EU4Dual Master Class Al?

#### **EU4Dual Master Class Al**

- is an international study programme for students enrolled at a university of the EU4Dual University Alliance in a graduate programme (master level or equivalent) in
  - Data science
  - Machine Learning
  - Artificial intelligence
  - Related fields
- focuses on data science, machine learning, artificial intelligence and intelligent digital transformation
- brings together highly qualified master students for joint
  - training, education
  - cooperation, research
  - networking







# Partner Universities of EU4Dual University Alliance

- DHBW CAS (Germany)
- ESTIA Institute of Technology (France)
- FH JOANNEUM (Austria)
- John von Neumann University (Hungary)
- Mondragon University (Spain)







# Study Programme and Workshops

- Study programme comprises master-level modules in terms of oneweek (Mon-Fri) workshops
- Workshops will be offered by the EU4Dual partner universities
  - On-site lectures on partner university's campus with scientific exchange and practical interdisciplinary work on cutting-edge research in data science, machine learning and artificial intelligence
  - Per workshop preliminary online kick-off session for onboarding
  - 5 ECTS credits for participation in workshop and successfully passing examination or assessment
  - Teaching language: English (at least B2)







# How to apply and participate in a workshop?

- Open for students enrolled at a EU4Dual partner university in a corresponding graduate programme (see slide 3)
  - Students interested in a workshop get in touch with contact person at their home university
    - Further details and contacts: see slides 7-11
  - Each student may attend up to three workshops offered by partner universities, including home university
  - Number of students participating in a workshop restricted to 25
  - Workshop takes place if at least 7 students have been registered
  - Further organizational details will be communicated to registered students by lecturers in online kick-off sessions before workshop starts
  - Tuition and fees
    - No fees at institutions hosting the workshop
    - Standard fees apply at home institution
    - Tuition fees don't cover accommodation, travel, documents, personal expenses, health insurance or medical care





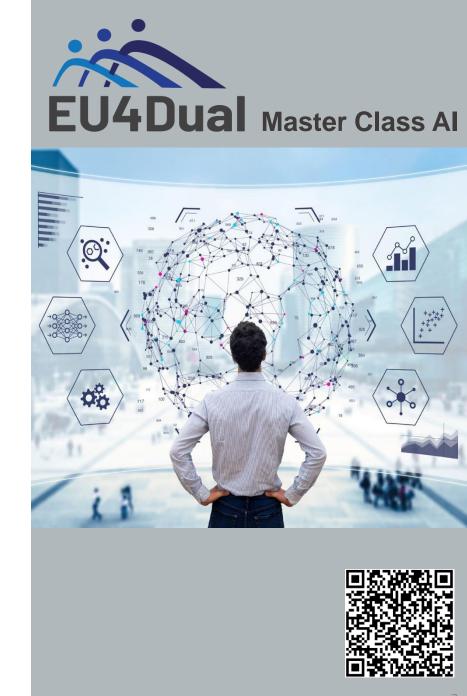


### EU4Dual Master Class AI Certificate

Upon successful completion of three workshops at three different institutions the certificate

### "EU4Dual Certificate in Advanced AI Studies"

is awarded by the EU4Dual Master Class Al Alliance



## Schedule of Workshops 2026

9 Feb 2026 - 13 Feb 2026: DHBW CAS

> 7 Apr 2026 - 11 Apr 2026: ESTIA

> 13 Jul 2026 - 17 Jul 2026: Mondragon University

> 20 Jul 2026 - 24 Jul 2026: John von Neumann University

7 Sep 2026 - 11 Sep 2026: FH JOANNEUM







#### **DHBW CAS**



- Coorporative State University Baden-Württemberg (DHBW)
- Located in Heilbronn, Germany
- Link: https://www.cas.dhbw.de/
- Contact for students (enrolled at DHBW CAS):
  - Heiner Pfefferle (Study Program Manager, heiner.pfefferle@cas.dhbw.de)
- Workshop on Data Science and Artificial Intelligence (W3M50022)
  - Content
    - Current research topics in the area data science, machine learning and artificial intelligence
    - Topics
      - Transformers
      - Machine Learning on Unstructured Data
      - Multimodal Machine Learning
  - Further information:
    - https://www.cas.dhbw.de/en/master-class-ai/









### **ESTIA Institute of Technology**



- École supérieure des technologies industrielles avancées
- Located in Bidart, France
- Link: <a href="https://www.estia.fr/">https://www.estia.fr/</a>
- Contact for students (enrolled at ESTIA):
  - Evgenia Ishkina (<u>e.ishkina@estia.fr</u>)
  - David Gomez (<u>d.gomez@estia.fr</u>)

### Workshop on computer vision based on industrial use case

- Introduction and basic concepts
- Image and video preprocessing techniques
- Convolutional Neural Networks, object detection (YOLO), advanced methods
- Model evaluation and validation in industrial contexts
- End-to-end project work on a real dataset







# FH JOANNEUM Graz FH JOANNEUM University of Applied Sciences

- Department for Applied Computer Sciences
- Located in Graz, Austria
- Link: <a href="https://www.fh-joanneum.at/">https://www.fh-joanneum.at/</a>
- Contact for students (enrolled at FH JOANNEUM):
  - Alexandra Gößlbauer (<u>alexandra.goesslbauer@fh-joanneum.at</u>)
- Workshop: Solving Practical Challenges in Data Science and Al
  - Content
    - Students will gain a deep understanding and practical knowledge of selected topics in data science and AI, which they can use and apply in their professional environment as an IT-, data- or AI-specialist.
  - Further information: <a href="https://www.fh-joanneum.at/microcredential/solving-practical-challenges-in-data-science-and-ai/">https://www.fh-joanneum.at/microcredential/solving-practical-challenges-in-data-science-and-ai/</a>







# John von Neumann University



- Located in Kecskemét, Hungary
- Link: <a href="https://john-von-neumann-university.dreamapply.com/">https://john-von-neumann-university.dreamapply.com/</a>
- Contact for students (enrolled at JvN University):
  - Akos Toth (Study Program Lead, <u>toth.akos@nje.hu</u>)
  - <u>EU4DUAL AI Master Class Application form (Neumann</u>
    <u>János Egyetem Hungary) 2026 summer Űrlap kitöltése</u>
- Workshops with Topics/Courses (each 5 ECTS)
  - Odoo ERP system
  - Industrial Robotics
  - Visual Components







### **Mondragon University**



- Located in Bilbao, Spain
- Link: <a href="https://www.mondragon.edu/en/home">https://www.mondragon.edu/en/home</a>
- Contact for students (enrolled at Mondragon Univ.):
  - Daniel Reguera (<u>dreguera@mondragon.edu</u>)
- Workshop on Reinforcement Learning in Multidisciplinary Contexts
  - Content:
    - Introduction: Basic concepts
    - Classical RL: Dynamic programming, MDP, Temporal difference, Sarsa, Q-learning
    - Deep RL: DQN, A2C, PPO
    - Hyperparameter optimisation in complex environments









Thank you.