



MCAST

MASTERS IN AI for INDUSTRY 4.0

CODE: R17-06-21

Launching: October 2021

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Entry Requisite: A relevant first degree in the sciences, technological or social sciences domains. Candidates must also have 2-years full-time industry work experience.

Delivery Mode: Part-Time Blended Learning over 5 semesters (2½ years). 10 study units delivered across on campus and online. Friday evenings and Saturday mornings.

Programme Summary: This Master's degree programme in Artificial intelligence for Industry 4.0 presents the non-computer scientist / business leader with a fundamental and thorough understanding of AI technologies and applies this acquired knowledge toward the strategic deployment of business to bring about competitive advantage. It is aimed at business leaders, executives and professionals involved in strategic road-mapping roles who are responsible for determining direction and equip the organization with the cutting-edge advancements in AI. The design of the programme allows for a technological understanding of AI in the first year, followed up with the business and industry application of AI in the second year.

This programme allows the learner to:

1. Have a broad understanding of the technologies that constitute AI.
2. Have the ability to analyse industry processes in detail.
3. Be able to identify and implement appropriate AI technology to address specific industry challenges.
4. Be able to evaluate proposals involving AI technologies.
5. Be able to bring about increased operational efficiency, lower costs, improved customer experience and enhance competitive advantage.

This masters programme consists of 10 blended learning study units with electives during the 2nd year of study and a dissertation in the final year. It has three exit points relating to 30, 60 and 90 ECTS accumulated totals, entitling the student to a Post-Graduate Certificate for those who successfully pass the first year of studies, a Post-Graduate Diploma for those who choose to complete and pass the first and second year of this programme or a Master in AI for Industry 4.0 degree award for those who successfully submit a dissertation that meets the necessary academic level.

First Year (Semesters 1 & 2: EQF/MQF Level 7 - 30 ECTS)

Exit Option: PgCert in AI

- Principles of AI 6 ECTS
- Machine Learning 6 ECTS
- Neural networks & Classifiers 6 ECTS
- Robotics & Computer Vision (IET) 6 ECTS
- Deep Learning & Predictive Analytics 6 ECTS

Second Year (Semesters 3 & 4: EQF/MQF Level 7 - 30 ECTS)

Exit Option: PgDip in AI

- AI driven Business Analytics 6 ECTS
- The ethical, regulatory, legal and social aspects of AI 6 ECTS

A choice of any three of the following elective study units:

- Leveraging AI for Manufacturing 6 ECTS
- Enhancing the Creative Industries with AI 6 ECTS
- AI in Research and the Applied Sciences 6 ECTS
- Intelligent Community Services 6 ECTS
- Smart Information Systems 6 ECTS

Third Year (Semester 5: EQF/MQF Level 7 - 30 ECTS)

Exit Option: Masters in AI for Industry 4.0

- Research Project/Dissertation 30 ECTS