

# Master of Science in Artificial Intelligence

## Programme Overview

The Masters of Science (MSc) in Artificial Intelligence is an exciting two-year part-time programme to give current and potential AI engineers the skills, theory and recognition they need to develop in their role.

Candidates can gain a full MSc degree in this specialist area through a mixed learning process with an emphasis on practical application in the workplace.

The programme is aimed at existing information technology professionals and those migrating from associated disciplines with the necessary computing and mathematics competencies.

2 years part-time  
(Online)

## Certificate in Artificial Intelligence

Participants must complete the preparatory Certificate course to the equivalent of a 2nd class honours level to be eligible for entry to the Masters, regardless of their prior qualifications or experience.

Successful completion of the preparatory course will lead to the award of a Certificate in Artificial Intelligence (Special Purpose Award, Level 8, 12 ECT credits).

For more information visit the [Certificate in Artificial Intelligence webpage](#).

## Programme Content

Delivered fully online, including all exams and assessments, assessment is largely based on assignments and project work with a practical rather than theoretical focus.

In Year 2, students can choose to follow the Modern Machine Learning stream, Natural Language Processing stream or Computer Vision stream. A major dissertation project will be selected and specified within the first year and completed throughout the second year.

### Year 1

Autumn/Cert in AI	Spring	Summer
<ul style="list-style-type: none"><li>• Introduction to Scientific Computing for AI</li><li>• Introduction to Deep Learning and Frameworks</li></ul>	<ul style="list-style-type: none"><li>• Artificial Intelligence and Machine Learning</li><li>• Data Analytics</li></ul>	<ul style="list-style-type: none"><li>• Advanced Topics Seminars and Project Specification</li><li>• Risk, Ethics, Governance and Artificial Intelligence</li></ul>

### Year 2: Modern Machine Learning stream

Autumn	Spring	Summer
<ul style="list-style-type: none"><li>• Machine Learning Applications</li><li>• Machine Vision</li></ul>	<ul style="list-style-type: none"><li>• Deep Learning</li><li>• Artificial Intelligence and Data Science Ecosystems: Theory and Practice</li></ul>	<ul style="list-style-type: none"><li>• Project/Dissertation</li></ul>

### Year 2: Natural Language Processing stream

Autumn	Spring	Summer
<ul style="list-style-type: none"><li>• Natural Language Processing: An Introduction</li><li>• Information Retrieval</li></ul>	<ul style="list-style-type: none"><li>• Advanced Natural Language Processing</li><li>• Natural Language Understanding Theory and Practice</li></ul>	<ul style="list-style-type: none"><li>• Project/Dissertation</li></ul>

### Year 2: Computer Vision stream

Autumn	Spring	Summer
<ul style="list-style-type: none"><li>• Deep Learning for Computer Vision</li><li>• Machine Vision and Image Processing</li></ul>	<ul style="list-style-type: none"><li>• Geometric Computer Vision</li><li>• Intelligent Visual Computing and Applications</li></ul>	<ul style="list-style-type: none"><li>• Project/Dissertation</li></ul>

## Further Information

Candidates meeting Technology Ireland ICT Skillnet criteria may qualify for grant-aid subject to places. To learn more about the MSc in Artificial Intelligence, the entry requirements and how to apply: scan the QR code.

## Contact Us

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