Postgraduate Diploma in Science in Artificial Intelligence

(Online Directed E-Learning delivery)

This is an online learning course that features Directed E-Learning activities such as live online classroom sessions and tutorials/ videos on the College's e-learning system. This allows for online class time to be interactive, practical, and focused, with theory-based content being covered outside of class time with self-paced tutorials/videos, and practical content being covered in live online classes with support from lecturers.

Location: Online

Start Date: This course is expected to start in the week commencing 21st September 2026.

Indicative Schedule: Tuesday and Thursday 18.00 - 22.00.

There will also be on average four hours self-paced learning per week on NCI's Learning Platform weekly. This will not appear on your timetable.

Career Bridge classes will be delivered one day per week in Semester one from 17.00 to 18.00. Day to be confirmed.

Duration: September to December 2026, January to May 2027 and May to August 2027.

Applications: Apply online at https://springboardcourses.ie

Fees: A student contribution fee of €700 is applicable if you are in employment. No fees applicable if you are unemployed.
The scheme does not cover any allowance for books and materials.

If a student contribution fee is applicable this must be paid in full no later than Friday 13th of November 2026.

Course Description

This course aims to produce high-quality, technically competent, innovative graduates that will become leading practitioners in the field of artificial intelligence. The Postgraduate Diploma in Science in Artificial Intelligence contains modules covering fundamental and specialised AI topics, as well as topics related to operationalisation and application of AI to solve real-world problems. All students will gain a deeper understanding of the complete development lifecycle of AI software applications, from requirements elicitation and analysis, implementation, decision making, evaluation, and documentation. The course will be delivered using academic research, industry defined practical problems, and case studies. This approach will naturally provide a deeper knowledge of AI and create skills required in industry such as critical thinking, problem-solving, creative thinking, Communication, teamwork, and research skills.

Upon completion of this course, graduates will be able to:

- Demonstrate expert knowledge of Engineering Artificial Intelligence systems, Machine Learning, Optimisation Techniques, and the tools, techniques and technologies of Artificial Intelligence utilised in real world contexts.
- Formulate, design, implement, and evaluate novel real-world solutions at the forefront of Artificial Intelligence using the latest industry practices and standards.
  • Select, assess, and apply advanced and emerging Artificial Intelligence techniques and tools to enhance decision making.
- Synthesise and communicate technical Artificial Intelligence solutions.
- Critically assess and evaluate ethical, sustainable, and responsible issues associated with the development and deployment of Artificial Intelligence systems.
- Conduct independent research in the field of Artificial Intelligence.

Career Prospects

Graduates of the 2023 Postgraduate Diploma in Science in Artificial Intelligence used the programme to build on their existing skills and transition into roles across the tech industry, including Enterprise Solution Specialist (Microsoft), Enterprise Architecture Support (Primark), Data Analyst (Bank of Ireland), Business Data Analys (DAA), Business Integrity Data Analyst (Google), AI/ML Data Analyst (Apple).

Award and Progression

The Postgraduate Diploma of Science in Artifical Intelligence is awarded by QQI at level 9 on the National Framework for Qualifications. Students who successfully complete this course may top up to the MSc in Artificial Intelligence at National College of Ireland (This is not included under Springboard + - an additional fee would apply).

Entry Requirements

A minimum of a level 8 primary degree in Computing or a cognate area with a 2.2 award or higher or equivalent on the National Qualifications Framework. Candidates are expected to have programming ability. Cognate area means a STEM (Science, Technology, Engineering, and Mathematics) degree that also taught programming/ application development related modules. An assessment and/ or interview may be conducted to ascertain suitability if necessary for candidates who do not meet the normal academic requirements.

The college operates a Recognition of Prior Experiential Learning (RPEL) scheme meaning applicants who do not meet the normal academic requirements may be considered based on relevant work and other experience. This may be assessed using a portfolio of learning, demonstration of work produced, and an interview. The programming ability of the applicant will also be assessed.

Non-English speaking applicants must demonstrate fluency in the English language as demonstrated by an IELTS academic score of at least 6.0 or equivalent. Visit **https://www.ncirl.ie/English-Language-Requirements-International for more information.**

Laptop Requirements

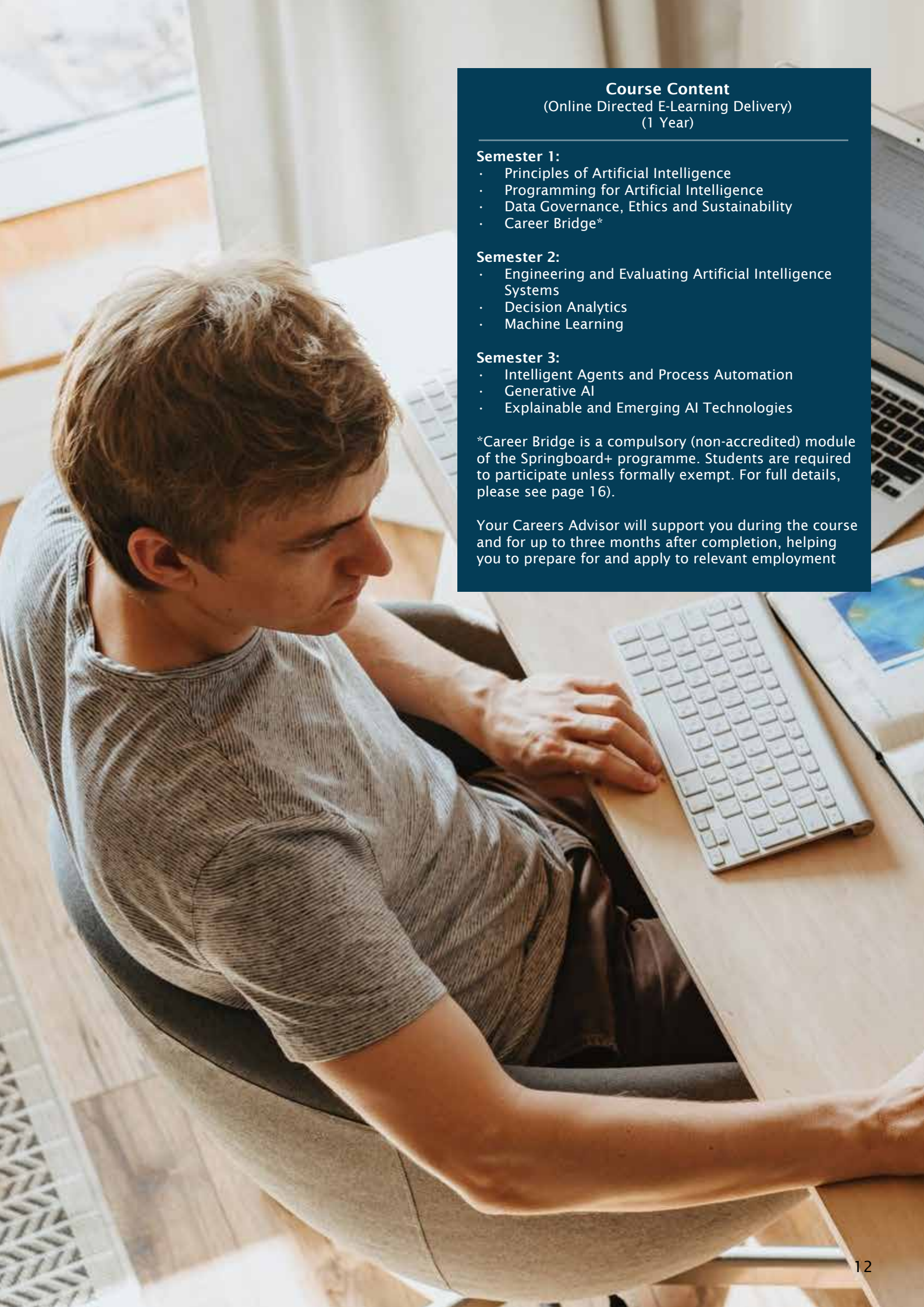
This programme has a BYOD (Bring Your Own Device) policy. Specifically, students are expected to successfully participate in lectures, online lab works and projects using a laptop computer with a substantial hardware configuration.

A suitable minimum specification is 16GB RAM (32GB recommended), a modern Intel i7 /AMD Ryzen 7/ Apple Silicon equivalent processor, at least 256GB SSD storage (512GB recommended), reliable Wi-Fi, and a recent version of Ubuntu, macOS, or Windows. Students must have full administrator rights on their device in order to install and configure required software and development tools. Access to a webcam, microphone, and power supply for extended lab sessions is also expected.

For online examinations, students will require access to both a webcam and a smartphone for online proctoring.

Assessment

The course will be assessed with a blend of continuous assessments and/ or project work and exams. Please note that in some instances exams may take place in the daytime, evenings and at weekends.



Course Content

(Online Directed E-Learning Delivery)
(1 Year)

Semester 1:

- Principles of Artificial Intelligence
- Programming for Artificial Intelligence
- Data Governance, Ethics and Sustainability
- Career Bridge*

Semester 2:

- Engineering and Evaluating Artificial Intelligence Systems
- Decision Analytics
- Machine Learning

Semester 3:

- Intelligent Agents and Process Automation
- Generative AI
- Explainable and Emerging AI Technologies

*Career Bridge is a compulsory (non-accredited) module of the Springboard+ programme. Students are required to participate unless formally exempt. For full details, please see page 16).

Your Careers Advisor will support you during the course and for up to three months after completion, helping you to prepare for and apply to relevant employment