Higher Diploma in Science in Computing

(With specialisation in Software Development)
(Online Directed E-Learning delivery)

The Software Development stream provides learners detailed knowledge, problem-solving and technical skills in the area of software development using a modern programming language, such as Java, and application development framework(s).

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.

Online Directed E-Learning Delivery (1 Year)

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 five 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 €595 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 will appeal to non-technical professionals or graduates with a level 8 degree from different backgrounds who would like to upgrade their skills in the computing domain, helping them to progress faster in their employment or to apply the gained knowledge in their current role.

The course teaches students the computing fundamentals, complemented with detailed knowledge, problem-solving and specialised technical skills required for designing and developing technical software solutions.

The course offers a specialisation in Software Development, which brings the participants quickly to the graduate standard in this area. This course is designed with flexibility in mind, allowing learners to work through bespoke video content and guided tutorials the week before class, then polishing their knowledge with live online practical classes. Self-paced content is broken into small manageable chunks, and live sessions are designed for live questions and answers based around industry issues and practical problems.

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It will help you to enhance your employability skills and improve your overall career prospects. Students will be assisted in identifying relevant employment or a placement during or within three months of completing their course.

Graduates may avail of many entry-level ICT-related jobs, such as software developer, web development engineer and software engineer. **Note:** The prospective students are required to specify the specialisation they would like to follow when they apply for a place within the Higher Diploma in Science in Computing programme. It is not possible to transfer course streams post registration.

Career Prospects

This course is designed to meet the needs of the IT sector and secure future employment opportunities for graduates. Examples of past graduate employers include: Software Engineer (IBM), Product Owner (Accenture), Information Technology Service Desk (SAP), Software Developer (Citi), Software Engineer (Cubic Telecom), Software Systems Engineer III (Crowdstrike), Software Developer (Department of Social Protection)

Who is the course for?

This course will typically appeal to graduates with a level 8 degree from different backgrounds who would wish to change their non-ICT qualification into the computer science field through a level 8 award in computing. Nonetheless, it is noted that the course is technical in nature and will entail a significant amount of independent study. Given the content and the timescale you will need to have a strong commitment to the course and a willingness to fully engage with the technical content.

Academic Entry Requirements

A level 8 degree or its equivalent in a non-cognate discipline. Non-standard applications will be also considered on an individual basis.

The college operates a Recognition of Prior Experiential Learning (RPEL) scheme - meaning applicants who do not meet the normal academic entry requirements may be considered based on extensive relevant work and other experience. This may be assessed through a portfolio of learning, demonstration of work produced, interview and assessment.

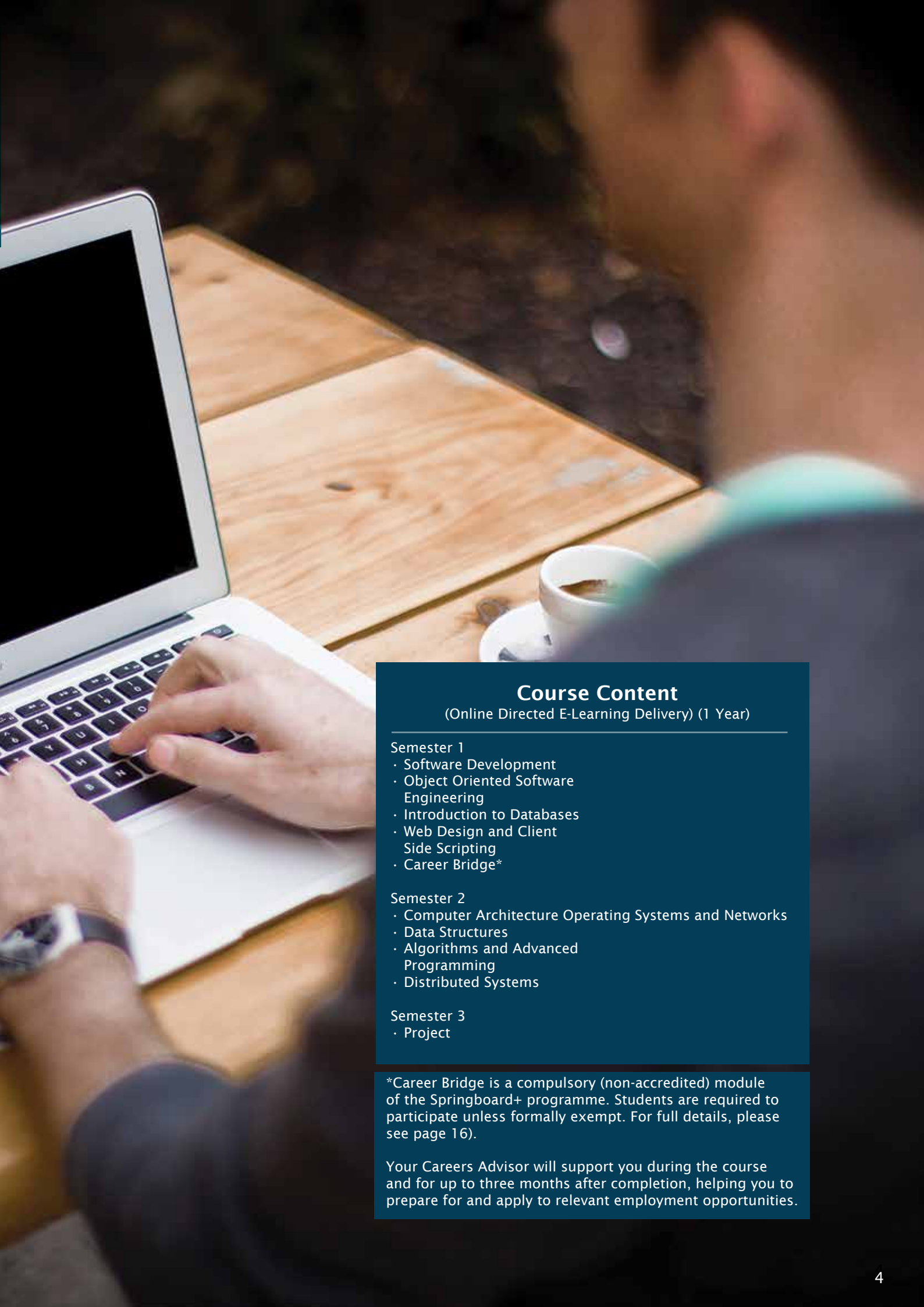
Non-English speaking applicants must demonstrate fluency in the English language as demonstrated by an IELTS academic score of at least 6.0 or equivalent. Visit **https://www.ncirl.ie/English-Language-Requirements-International for more information.**

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.



Course Content

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

Semester 1
- Software Development
- Object Oriented Software Engineering
- Introduction to Databases
- Web Design and Client Side Scripting
- Career Bridge*

Semester 2
- Computer Architecture Operating Systems and Networks
- Data Structures
- Algorithms and Advanced Programming
- Distributed Systems

Semester 3
- Project

*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 opportunities.