NATIONAL COLLEGE OF IRELAND

HIGHER CERTIFICATE IN COMPUTING

FACTFILE

Application: Apply online at www.ncirl.ie

Spread the cost with our direct debit plan

Part Time Schedule

Start Date
Sept 2025

Duration
2 years; 3 semesters per year.
Use of blended learning.

Delivery
Blended - Livestream with some on-campus stream classes, scheduled in advance.

Indicative Timetable
Two evenings per week, 18.00 - 22.00 and Saturdays 09.00 - 18.00.

Fees
€4,350 per annum
(Fees revised annually)

Course Description

This Higher Certificate in Computing is an excellent start for those looking to build a career in the world of computing. This course will give you expertise in hardware, software applications, software development, operating systems and data communications. It will give you the skills to pursue a career in the information and communications technology industry.

You will learn how to install new hardware and software, and to configure networks, software and hardware to user requirements. The course will also give you a detailed knowledge of the theory and practice of application development and support including the essentials of multimedia, hardware, software, operating systems and networking.

Who is the course for?

This computing course is ideal for those wishing to develop a career in the information technology sector. You will have the ability to act as a technical support person capable of independent problem-solving and teamwork approaches. It is also an ideal start for further studies.

Award and Progression

The Higher Certificate in Science in Computing is awarded by QQI at level 6 on the National Framework of Qualifications.

Upon successful completion students have a number of options open to them. They can progress to year 3 of the BSc (Hons) in Computing (level 8). The course also prepares students for industry-recognised certificates in leading technologies.

Entry Requirements

There are no specific academic requirements as applicants are considered based on relevant work and other experience. Applicants under 21 will be assessed based on Leaving Certificate or equivalent.

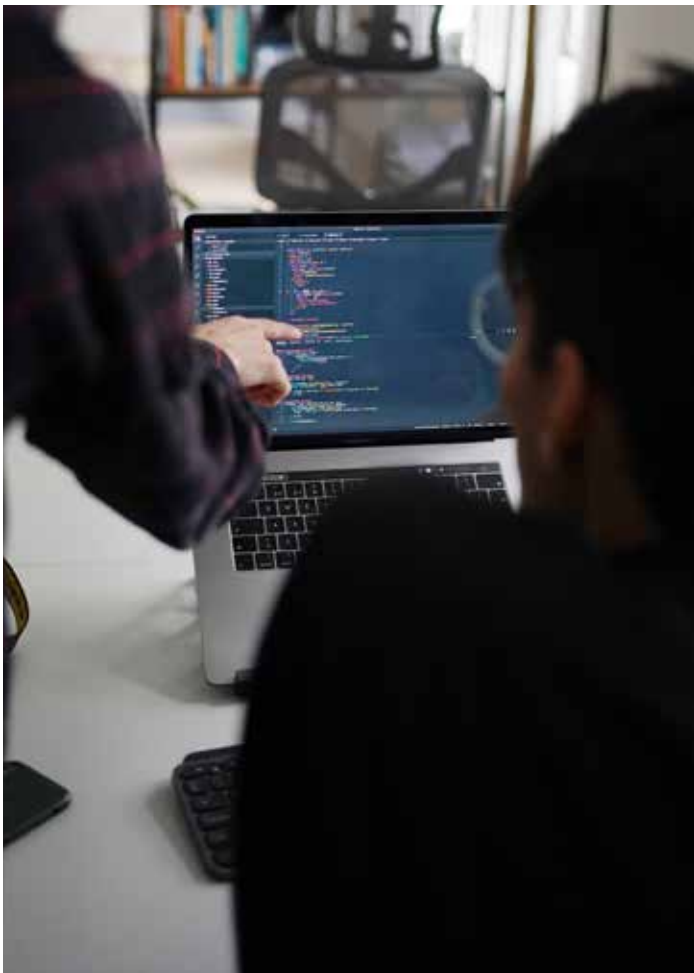
Laptop Requirement

This programme has a BYOD (Bring Your Own Device) policy. Specifically, students are expected to successfully participate in lectures, laboratories and projects using a laptop computer with a substantial hardware configuration. A suitable configuration is 8GB of RAM (16GB are recommended); a modern 64-bit x86 processor (Intel i5 or superior); 250+ GB of available space in hard disk; WiFi card; and a recent version of Ubuntu, macOS or Windows. It is the responsibility of the student to ensure their laptop is functioning correctly and that they have full administrator rights to the machine.

NCI IT does not provide support for personal devices. Some students may be able to avail of the Student Laptop Loan Scheme, subject to eligibility. See page 87 for more information.

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

Year 1

Semester 1
- Discrete Mathematics
- Operating Systems
- Computational Thinking
- Programming Concepts

Semester 2
- Computer Architecture
- Introduction to Programming
- Introduction to Data Modelling and Databases

Semester 3
- Web Design and Development
- The Computing Industry
- Introduction to Data Science & AI

Year 2

Semester 1
- Web Application Development
- Object Oriented Programming
- Data Communications & Networking

Semester 2
- Data Structures and Algorithms
- Advanced Databases
- Data Programming

Semester 3
- Software Engineering
- Software Quality & Testing
- Innovation and Business Entrepreneurship
- Team Project