

# HIGHER CERTIFICATE IN COMPUTING

**Duration:**Two Years  
Full-Time**NFQ Level:**

Level 6

**CAO Points Guide:\***

225

**CAO Code:**

NC102



\*For each course we have given a guideline based on our points over the past three years. This is a guide only, points vary each year.

Note: This course is currently being reviewed and may change slightly before it starts in September 2025. Every effort has been made to ensure the accuracy of the information provided at this time. Any changes will be approved and validated by QQI before the course commences.

## About the Course

NCI's Higher Certificate in Computing is an ideal starting point to your studies as it offers a clear path into the computing degrees at NCI and other institutions. This full-time course will provide you with all the skills you need to pursue a career in the Information and Communications Technology industry.

Graduates of this course understand the essentials of information technology and software development, can design and create fully functioning websites as well as multimedia applications, are able to install and configure software and hardware, have a detailed knowledge of the theory and practice of application development and support including the essentials of hardware, software, operating systems and databases.

## Who is the course for?

This course will be particularly appealing to students who are unsure about enrolling in a degree programme initially and see the higher certificate as a progression route to a degree at a later stage. The course is for school leavers, mature students and graduates of QQI level 5/6 programmes.

## Course Structure and Award

This two-year higher certificate course is run over four semesters with continuous assessment held throughout the course and examinations at the end of each semester. On completion, you will receive a QQI Higher Certificate in Computing at level 6 on the National Framework of Qualifications. The course also prepares students for industry-recognised certificates in leading technologies.

## Career Prospects

There has been significant growth in information technology in Ireland and there is a current shortage of IT graduates. This course will equip you with the technical knowledge to build a successful career in information technology, specifically in a technical support role.

## Further Study Options

Upon successful completion of the Higher Certificate in Computing, graduates can gain entry into year three of the BSc (Honours) in Computing at NCI (subject to availability of places).

## Admission Requirements and Policies

Minimum entry requirements are a grade O6/H7 or above in five subjects. A minimum of grade O6/H7 must be obtained in English or Irish. A grade O6/H7 must be obtained in Mathematics. Applicants from a PLC/further education course must have a full level 5/6 award and meet the CAO points requirement. Mature applicants, applicants with a disability or those applying through the DARE or HEAR access schemes should refer to our Admissions section on p62, which also includes our admission policies, including laptop requirements.

## Course Fees

This course qualifies under the Free Fees Initiative and Student Grant Scheme.



## COURSE CONTENT

### Year 1

#### Semester 1

- Discrete Mathematics
- Programming Concepts
- Web Design and Development
- Introduction to Data Science & Artificial Intelligence
- Computational Thinking

#### Semester 2

- Computer Architecture
- The Computing Industry
- Introduction to Programming
- Introduction to Data Modelling and Databases
- Operating Systems

### Year 2

#### Semester 1

- Data Communications and Networking
- Object Oriented Programming
- Web Application Development
- Advanced Databases
- Data Programming

#### Semester 2

- Innovation and Business Entrepreneurship
- Software Engineering
- Software Quality and Testing
- Data Structures and Algorithms
- Team Project