Higher Diploma in Science in Computing

(With specialisation in Software Development)

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 course comes in two delivery options. You can decide to do the blended option delivered in the IFSC over 1 year or the other option is an online version delivered over 2 years. All classes in Semester 1 due to Covid 19 Restrictions will be delivered online.

Career Bridge will be delivered one day per week in Semester 2 from 17.00 to 18.00. Day to be confirmed.

Blended Delivery Option (1 Year)

Location: IFSC and Online

Start Date: The course is expected to start in the week commencing 28th September 2020.

Indicative Schedule: Blended Delivery will take place Monday, Wednesday & Friday 18.00 - 22.00 and a number of Saturdays 09.00 - 18.00.

Career Bridge will be delivered one day per week in Semester 2 from 17.00 to 18.00. Day to be confirmed.

Duration: 1 year, 3 semesters. September to December 2020, Jan to May 2021 and late May to August 2021

Applications: Apply online at www.springboardcourses.ie

Fees: A student contribution fee of €540 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 20th November 2020.

Online Delivery Option (2 Year)

Location: Online Version.

Start Date: The course is expected to start in the week commencing 28th September 2020.

Indicative Schedule: Blended Delivery will take place Monday and Wednesday 18.00 - 22.00

Career Bridge will be delivered one day per week in Semester 2 from 17.00 to 18.00. Day to be confirmed.

Duration: 2 year, 4 semesters. September to December 2020, Jan to May 2021, September to December 2021 & Jan to May 2022

Applications: Apply online at www.springboardcourses.ie

Fees: A student contribution fee of €540 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 20th November 2020.

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, developing and deploying software.

The course offers a specialisation in Software Development, which brings the participants quickly to the graduate standard in this area.

The Software Development specialisation provides learners detailed knowledge, problem-solving and technical skills in the area of software development using, for example, the Java programming language and the Ruby on Rails framework.

Depending on your delivery choice you will take Career Bridge as either blended or online. 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 jobs, such as Software Developer, Web Development Engineer and Software Engineer

Career Prospects

This course is designed to meet the needs of the IT sector and secure future employment for graduates. Companies who have hired 2018/2019 graduates include: SOLAS (Software Developer), Jaguar Land Rover (Senior Cloud DevOps Engineer), Version 1 (Java Developer), Ergo (Technical Account Manager), Dell (Graduate Programme, Enterprise Support), Civil Service (Software Developer), Fenergo (Java Developer), Openet (Graduate Software Engineer), Ding (Junior QA Engineer), Global Payments (Operations Analyst), Oracle (Senior Cloud Customer Operations Engineer).

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

Students apply for either blended 1 year or online 2 year options. It is not possible to transfer options post registration.



Laptop Requirements

Students are expected to successfully participate in lectures, laboratories and projects using a laptop computer with a substantial hardware configuration. A suitable configuration is 6GB of RAM (8GB or more are recommended); a 64-bit x86 processor (Intel i5 or superior); 250+ GB of hard disk; wifi card; and a recent installed release of Windows operating system. 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 cannot provide support to personal devices.

This course requires internet access you will be required to ensure you have sufficient broadband speed and reliable connectivity from your place of study.

Assessment

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

Award and Progression

For all streams regardless of specialisation your final award will be a Higher Diploma in Science in Computing as awarded by QQI at level 8 on the National Framework of Qualifications (NFQ). Students who successfully complete this course may be eligible to progress to a major award at level 9 on the NFQ.

Software Development specialisation (Blended - 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
- · Career Bridge

Semester 3

- Project
- · Career Bridge

Relevant Employment / Placement can be undertaken within the course timeline or commenced within 3 months of course completion.

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.

Note: Elective streams/ specialisations will run subject to student numbers.

Software Development specialisation (Online - 2 Year)

Year 1 Semester 1

- · Software Development
- Web Design and Client Side Scripting

Year 1 Semester 2

- Object Oriented Software Engineering
- · Data Structures
- · Introduction to Databases
- · Career Bridge

Year 2 Semester 1

- Computer Architecture
 Operating Systems and Networks
- Algorithms and Advanced Programming
- · Distributed Systems

Year 2 Semester 2

- Project
- · Work Placement

Relevant Employment / Placement can be undertaken within the course timeline or commenced within 3 months of course completion.