

Higher Diploma in Science in Data Analytics

This course comes in two delivery options. You can decide to do the blended option delivered in the IFSC over 1 year OR you can do the online version of the course over 1 or 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 Campus and Online

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

Indicative Schedule Evening:

Group 1 (Blended Delivery) will be scheduled Monday, Wednesday & Friday 18.00 - 22.00 and a number of Saturdays 09.00 - 18.00.

Group 2 (Blended Delivery) will be scheduled Tuesday, Thursday & 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 from September to December 2020, January 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 Years)

Location: Online Version

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

Indicative Schedule Evening: Monday and Wednesday 18.00 - 22.00 and a number of Saturdays per semester.

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, late May to August 2021 & September to December 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.

Course Description

The analysis and interpretation of data to address the problems of business and society is an area experiencing massive growth. Diverse areas such as insurance, retail, sports, finance, pharmaceutical and government are all looking for people with skills in analysing 'big data' to help them make more informed decisions.

The course will furnish students with skills to enter the world of data analytics through building a foundation of strong statistical knowledge, developing problem-solving skills for business analysis, and helping you understand and use business data to deliver better decision making. This higher diploma will give you technical skills in statistics, programming, database management and web mining in addition to business skills such as business analysis that will help you make an impact in a wide range of roles. Students undertaking this course will be exposed to a variety of programming languages/tools that may include R, Python, SPSS, Excel, Weka and RapidMiner.

As a graduate of this course you will be able to:

- Develop statistical skills to carry out effective data analyses using descriptive and inferential statistics within a business context
- Solve real business problems using generally accepted practices in the field of business analysis supported by the choice and application of appropriate data analysis tools
- Develop technical skills to process multiple datasets using relevant modelling, programming, data storage, and computational techniques
- Communicate effectively the results of data analysis to both technical and non-technical audiences
- Apply analytical thinking techniques, communication, and interaction skills to support decision making and address business requirements

- Apply data-mining and knowledge discovery techniques to process datasets from multiple diverse data sources

Career Prospects

2019 Graduates used the course to upskill or gain employment in roles such as Data Analyst, BI/Data Specialist, Data Scientist, Business Operations Analyst, Data and Reporting Analyst, Match Analyst, Web Insights Analyst, Risk Analyst, Project Manager, Financial Reporting Supervisor, Associate BI and Analytics Consultant, Digital Audience Analyst, Global Sales Operations Director. 47% of graduates who were in employment successfully transitioned during or following the course. 3 graduates who were unemployed attained graduate level employment. 4 graduates went on to do the Postgraduate Diploma in Data Analytics.

Companies who hired NCI 2019 graduates included: Bank of Ireland (Data Analyst), Permanent TSB (Data Analyst), Gannon Homes (BI/Data Specialist), Irish Life (Data Scientist and Project Manager),

Intesa Sanpaolo Life (Business Operations Analyst), VHI (Data and Reporting Analyst), IRFU (Match Analyst), Ryanair (Web Insights Analyst and Digital Audience Analyst), Facebook (Risk Analyst), SEI (Financial Reporting Supervisor), Accenture (Associate BI and Analytics Consultant), AMCS (Global Sales Operations Director).

Who is the course for?

The programme is particularly suitable for those with numeracy skills. You do not need to have previously studied programming. However, given the timeframe and the amount of technical and statistical content applicants should be prepared to fully commit to the programme.

Award and Progression

The Higher Diploma in Science in Data Analytics is awarded by QQI at level 8 on the National Framework of Qualifications. Students who successfully complete this course may progress to a major award at level 9 such as the Masters of Science in Data Analytics.

Academic Entry Requirements

Applicants holding an honours degree (level 8 or equivalent) in any discipline will be considered. Candidates will be able to demonstrate technical or mathematical skills as part of previous learning. Typically holders of more numerate degrees in areas like maths, engineering, architecture, physics or economics are likely to gain higher ranking in selection for the programme. Candidates with other level 8 honours degrees will also be considered and will need to be able to demonstrate technical or mathematical skills in addition to their level 8 qualification. For candidates who do not have a level 8 qualification, 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 relevant work or other experience.

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

Laptop Requirements

This programme has a BYOD (Bring Your Own Device) policy. Specifically, students are expected to successfully participate in lectures, laboratories and projects using a portable computer (laptop/notebook) with a substantial hardware configuration. Its minimal suitable configuration is 8GB of RAM (16GB are recommended); a modern 64-bit x86 multi-core 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 each student to ensure her/his computer is functioning correctly and that she/he has full administrator rights. NCI IT cannot provide support for these personal devices

Course Content (Classroom or Online Delivery - 1 Year)

Semester 1

- Introduction to Data Analytics
- Business Analysis and Communication
- Business Data Analysis
- Programming for Big Data

Semester 2

- Data and Web Mining
- Advanced Business Data Analysis
- Data Visualisation
- Career Bridge

Semester 3

- Project

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

Course Content (Online Delivery - 2 Years)

Year 1 / Semester 1

- Introduction to Data Analytics
- Business Data Analysis
- Programming for Big Data

Year 1 / Semester 2

- Business Analysis and Communication
- Advanced Business Data Analysis
- Career Bridge

Year 2 / Semester 1

- Data and Web Mining
- Data Visualisation

Year 2 / Semester 2

- Project
- Career Bridge

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

The online version of 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 exams. This varies between modules but typically assessment is 50% continuous assessment and 50% exam. Please note that in some instances exams may take place in the daytime, evenings and at weekends.