Higher Diploma in Science in Data Analytics

(Blended/Online Directed E-Learning Delivery) Students can choose a 2 year or 1 year Delivery options.

This is a blended/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 and lab assistants. At certain limited and pre-scheduled times there will be opportunities for on-campus sessions. These on-campus sessions will also be dual delivered so students who do not wish to attend campus for these sessions will have the option of attending them online.

Blended/Online Directed E-Learning Delivery (2 Years)

Location: Online (with limited classroom sessions)

Start Date: The course is expected to start in the week commencing 25th September 2023.

Indicative Schedule: Online Delivery will take place Monday & Wednesday 18.00 - 22.00.

There will also be two to three hours of self-directed e-learning content weekly on NCI's Learning Platform. These will not appear on your timetable.

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

Duration: September to December 2023, January to May 2024, September to December 2024 and January to May 2025

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 17th of November 2023.

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

Location: Online (with limited classroom sessions)

Start Date: The course is expected to start in the week commencing 25th September 2023.

Indicative Schedule Tuesday and Thursday 18.00 - 22.00

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

There will also be 4.5 hours of self-directed e-learning content per week on NCI's Learning Platform. These will not appear on your timetable.

Duration: September to December 2023, January to May 2024, and May to August 2024

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 17th of November 2023.

Course Description

Overall, data analytics has a significant impact on business performance and success. By leveraging the power of data, organizations can make better decisions, improve efficiency, and gain a competitive advantage in their respective markets. Many diverse areas such as insurance, retail, sports, finance, pharmaceutical and government are all looking for skilled professionals who can analyze and interpret large amounts of data to help businesses make more informed decisions. This is an area experiencing massive growth due to the increase of data generation, advancements in technologies and business competitiveness. The high demand for data analysts is expected to continue in the coming years.

The course will furnish students with the necessary skills to enter the world of data analytics through building a foundation of strong statistical knowledge, developing problem-solving skills for business analysis that will help you to manipulate complex data sets into actionable and informed decisions. Students undertaking this course will be exposed to a variety of programming languages and tools that may include Python, R, SPSS, Excel, Tableau, Power BI and SQL.

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
- Assess and evaluate different data governance frameworks to ensure best practices in managing data are applied consistently throughout the organization
- Apply machine learning techniques to a wide range of tasks such as to make predictions, identify trends and patterns, group your data and identify target audiences.

Career Prospects

2021 Graduates used the course to upskill or gain employment in roles such as Collection & Payable Analyst, Data Analyst, Business Process & Data Analyst, Junior Data Specialist, Scalability Analyst, OSM Planner, Trading Analyst, Market Specialist, Business Analyst.

Companies who hired from 2022 graduates of the Higher Diploma in Data Analytics include: Central Bank of Ireland (Statistics Analyst), Intel (Optimization Engineer), Commission for Communications Regulation (Business Analyst), Netscout (Principal Service Engineer), Pfizer (Data Scientist),Coinbase (Compliance Analyst), TikTok (Quality Analyst), Global Shares (Business Reporting Analyst), Citi (Digital Client Support), Enterprise Ireland (Senior Technologist), VHI (Data Analyst), Pinergy (Data Analyst).

Who is the course for?

This course will appeal to non-technical professionals and college graduates from non-technical disciplines who wish to upgrade their skills or simply advance their career in the domain of Data Analytics. The programme is particularly suitable for those with numeracy and analytical skills. You do not need to have previously studied programming. However, given the content and the timeframe you will need to have a strong commitment to the course and willingness to fully engage with the technical content.

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 are required to hold a level 8 honours degree or equivalent in any discipline. Candidates with level 7 degree in a cognate area (STEM) are also considered for direct access into the programme. The college operates a Recognition of Prior Experiential Learning (RPEL) scheme meaning applicants who do not meet the normal academic 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 (e.g. logic test)

Students apply for either a 1 year or 2 year delivery. 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 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.

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

Free Laptop loan for eligible students on this course: Students who are eligible for HEA funding for this course may also be eligible for a free laptop provided on a loan basis for the duration of the programme.

This will be a suitable specification machine for completion of the programme but must be returned once you have finished your course. Overall numbers of laptops available are subject to maximum numbers and no other alternatives can be offered.

Course Content
(Blended/Online Delivery)
(1 Year)

Semester 1
- Statistics I
- Programming For Data Analytics
- Data Governance

Semester 2
- Statistics II
- Databases for Analytics
- Business Intelligence
- Career Bridge

Semester 3
- Machine Learning
- Project

Springboard Careers Advisors will proactively support you to find relevant employment during the course or following completion of the course.

Course Content
(Blended/Online Delivery)
(2 Years)

Year 1 Semester 1
- Statistics I
- Programming For Data Analytics

Year 1 Semester 2
- Statistics II
- Data Governance
- Business Intelligence
- Career Bridge

Year 2 Semester 1
- Database for Analytics
- Machine Learning

Year 2 Semester 2
- Project

Springboard Careers Advisors will proactively support you to find relevant employment during the course or following completion of the course.

Check *https://www.ncirl.ie/Students/Student-Services/Support-Services/Student-Laptop-Fund* for updates on the next opening date for applications.

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.