

# 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)

<b>Location:</b> Online (with limited classroom sessions)	<b>Duration:</b> September to December 2024, January to May 2025, September to December 2025, January to May 2026.
<b>Start Date:</b> The course is expected to start in the week commencing 23rd September.	<b>Applications:</b> Apply online at <a href="http://www.springboardcourses.ie">www.springboardcourses.ie</a>
<b>Indicative Schedule:</b> Online Delivery will take place Monday & Wednesday 18.00 - 22.00.	<b>Fees:</b> 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.
There will also be up to three hours of self-directed e-learning content weekly on NCI's Learning Platform. These will not appear on your timetable.	If a student contribution fee is applicable this must be paid in full no later than Friday, 15th November 2024.
<b>Career Bridge classes will be delivered one day per week in Semester 1 from 17.00 to 18.00. Day to be confirmed.</b>	

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

<b>Location:</b> Online (with limited classroom sessions)	<b>Duration:</b> September to December 2024, January to May 2025 and May to August 2025.
<b>Start Date:</b> The course is expected to start in the week commencing 23rd September	<b>Applications:</b> Apply online at <a href="http://www.springboardcourses.ie">www.springboardcourses.ie</a>
<b>Indicative Schedule:</b> Tuesday and Thursday 18.00 - 22.00	<b>Fees:</b> 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.
Career Bridge classes will be delivered one day per week in Semester 1 from 17.00 to 18.00. Day to be confirmed.	If a student contribution fee is applicable this must be paid in full no later than Friday, 15th November 2024.
There will also be up to 4.5 hours of self-directed e-learning content per week on NCI's Learning Platform weekly. These will not appear on your timetable.	

### Course Description

The overall goal of the Higher Diploma in Science in Data Analytics programme is to provide graduates with essential research and development skills in Data Analytics. It is envisaged that graduates from this programme will be well equipped to perform independent research that enables them to make informed and critical decisions regarding requirements elicitation and analysis, implementation, evaluation, and documentation in Data Analytics. Furthermore, the programme seeks to produce graduates who are able to provide insight, gain value and discover knowledge (at an organisational, societal, or personal level) from data through exercising the skills that are developed through the programmes.

Upon completion of this course, graduates will be able to:

- Conduct substantial and extensive independent research and analysis in the field of Data Analytics.
- Formulate and implement a novel research idea using the latest industry practices.
- Demonstrate expert knowledge and a critical understanding of data

analysis, statistics, and the tools, techniques and technologies of Data Analytics utilised in both technical and business contexts.

- Critically assess, evaluate and communicate business & technical strategies for Data Analytics.
- Formulate, design, assess, and implement effective business & technical solutions for Data Analytics.
- Critically assess and evaluate security, privacy, sustainability, and ethical issues associated with the storage, transfer, and processing of data for analytical purposes.

The course will be delivered using academic research, industry-defined practical problems, and case studies. This approach will naturally foster a deeper knowledge of the subject area and create transferable skills for work such as critical thinking, problem-solving, creative thinking, communication, teamwork, and research skills. The course is completely delivered by faculty and industry practitioners with proven expertise in data analytics.

### 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), Pinerogy (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.

Non-English speaking applicants must demonstrate fluency in the English language as demonstrated by an IELTS academic score of at least 6.0 or equivalent. [English Language Requirements | National College of Ireland \(ncirl.ie\)](#).

### 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

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

#### Semester 1

- Statistics I
- Programming For Data Analytics
- Data Governance
- Career Bridge

#### Semester 2

- Statistics II
- Databases for Analytics
- Business Intelligence

#### Semester 3

- Machine Learning
- Project

Springboard Careers Advisors will proactively support you in finding relevant employment during the course or within 3 months following completion of the course.

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

#### Year 1 Semester 1

- Statistics I
- Programming For Data Analytics
- Career Bridge

#### Year 1 Semester 2

- Statistics II
- Data Governance
- Business Intelligence

#### Year 2 Semester 1

- Database for Analytics
- Machine Learning

#### Year 2 Semester 2

- Project

Your Careers Advisor will support you in identifying relevant employment during the course or within three months following completion of the course.

be offered.

Check <https://www.ncirl.ie/Laptop-Loan-Scheme> for updates on the next opening date for applications.

### Assessment

The course will be assessed with a blend of project work 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.