



# Diploma in Data Analytics using Python

Duration: 11 weeks, one evening per week  
Delivery: Online, On-campus  
Intakes\*: May/Sep 2023  
Fees\*\*: Online - € 952  
On-campus - € 1,000  
\*Contact us for next availability.  
\*\* Check our website or contact our sales agents for information on our current promotional offers

This introductory-level course is designed for those with little or no previous experience in the area. It helps learners, regardless of their background, to feel confident in their ability to write code. You'll go from a beginner with no prior experience to having a solid understanding of the Python language.

You'll begin by completing basic exercises that focus on the core concepts. As you progress, you'll use variables to store, retrieve and calculate information. Then move conditional execution, iteration and other functions, lists, list processing, objects custom types and, handling exceptions.

With over 12,000 vacancies across the Irish technology industry, Python programming ranked 6<sup>th</sup> among the most 'in demand' skills.



## Course outcome

- A fundamental understanding of programming and the different techniques and languages
- A firm base in procedural programming using Python
- A fundamental understanding of Python Object Orientated Programming
- Practical knowledge on how to import, manipulate and save data to CSV files
- A sound knowledge of the major libraries used for data analysis (NumPy, Pandas, Matplotlib, Seaborn)
- Ability to use relevant tools to output data in tabular and graphical format
- Recognise the power of Jupyter Notebooks to carry out, report and demonstrate sophisticated and complex data analysis



## Academic progression opportunities

Students who complete the Diploma and are interested in furthering their study in the area of programming are eligible to progress onto the more Advanced Diploma in Computer Programming (Advanced Java) or Mobile App Development.

## Career opportunities

Developers with Python skills are in high demand given the speediness with which Python programme can be developed. Reducing project time has a positive benefit to all development projects. Data scientists and analysts also embrace Python as a language. It has an extensive set of libraries and APIs for data analysis and visualisation.

## Entry requirements

This course is aimed at beginner programmers. No previous knowledge of programming is required. However, to ensure sufficient digital literacy students should be familiar with the core applications such as word-processing, and spreadsheets, at ECDL level or equivalent.

## Lecturer profile: Morgan

Morgan currently teaches on a number of programming courses in both DCU and IBAT college which include a number of development languages such as JavaScript, PHP and Python.

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\*More intakes available. Get in touch to find out more.