



NUI Galway
OÉ Gaillimh

Thinking about
applying?

www.pac.ie/nuigalway



Computer Science (Data Analytics) MSc or Postgraduate Diploma

FULL-TIME or 2 YEAR PART-TIME or 1 YEAR PART-TIME DIPLOMA
College of Engineering & Informatics

Almost everything we do results in data being created and stored somewhere. Individuals, communities, business and governments face major challenges in harnessing all this data to create knowledge that will underpin a healthier, safer, more productive world. There is a global shortage of talent and expertise in Data Analytics and Data Science. This MSc and Diploma programme will provide graduates of Computing or related degrees with the deep technical knowledge and analytical skills to succeed in this growth area.

The following programme options are available:

- 1-year MSc full-time (GYE06)
- 1-year Diploma part-time (GYE27)
- 2-year MSc part-time (GYE07)

Course Content

The MSc option is an 90-ECTS course with three main elements: foundational modules (20 ECTS), advanced modules (40 ECTS), and a substantial capstone project (30 ECTS).

Students taking the 2-year part-time option will undertake a larger capstone project (40 ECTS) and take 10 ECTS less in taught module.

The 1-year part-time Diploma in Computer Science Data Analytics is a 30 ECTS programme. Diploma students will be eligible to progress to the 2nd year of the part-time MSc if they achieve a minimum of a 2.1 in the diploma year.

Foundational modules include: Statistics & Probability; Machine Learning and Data Mining; Programming for Data Analytics; Tools and Techniques for Large Scale Data Analytics; Applied Regression Modelling; Digital Signal Processing.

Advanced modules include: Advanced Topics in Machine Learning and Information Retrieval; Natural Language Processing; Web and Network Science; Linked-Data Analytics; Modern Information Management; System Modelling & Simulation; Embedded Image Processing; Data Visualisation and Case Studies in Data Analytics.

From semester II onwards, students work on individual projects and submit them in August. Projects may have a research or applied focus.

Special Features

- This is a distinctive programme that is closely aligned to the research and teaching expertise of the Information Technology discipline and NUI Galway's Insight Centre for Data Analytics.

Course Facts

Programme(s) Available: MSc (Level 9); Postgraduate Diploma (Level 9)

Minimum Entry Requirements: This MSc is targeted at high-performing graduates of level 8 computer science programmes or level 8 science or engineering programmes that offer sufficient training in computing. Eligibility will be determined by the programme director.

The minimum requirement for entry to the full-time and part-time programme is normally a 2.1 degree. Additionally, part-time applicants should have 3+ years of industry experience and availability to attend lectures in NUI Galway.

On an exceptional basis, candidates who do not meet these requirements but are deemed by the programme director to have reached an equivalent standard may also be considered..

Duration: Full-time MSc: 1 year; Part-time Diploma: 1 year; Part-time MSc: 2 years.

Number of Places: 30

PAC Code(s): Full-time 1-year MSc: GYE06; Part-time 2-year MSc : GYE07; Part-time 1-year Diploma: GYE27

Fees and Funding: Available online at: <http://www.nuigalway.ie/courses/fees-and-funding/fees.html#eng>

When to Apply: This is a popular programme. Candidates are encouraged to apply as early as possible. Offers will be issued on a continuous basis until the programme is full. Please visit www.nuigalway.ie/postgrad/assessmentdates, for more information.

Career Opportunities

Graduates will be excellently qualified to pursue new career opportunities in industry, to establish new ventures or do PhD-level research.

Find out more:

Dr. Conor Hayes

T: +353 91 495077

E: conor.hayes@nuigalway.ie

or visit: www.nuigalway.ie/courses/taught-postgraduate-courses/msc-in-computer-science-data-analytics.html