





# MSc Business Analytics School of Business

EU Tuition Fees (2024/25) €9,500 (full-time) / €6,650 p.a. (parttime)

International Tuition Fees (2024/25) €18,000 (full-time)

Fees may be liable to change. See www.maynoothuniversity.ie/student-fees-grants

### Why study Business Analytics?

This programme is for students who would like to solve business problems through quantitative data analytics. Organizations today realize that data analytics is a critical competitive capability to survive in the new era of Big Data and Artificial Intelligence. Businesses now have abundance of data at their disposal generated from traditional functions such as sales and operations, but also, more recently, from social media and the Internet of Things. That has made the volumes and variety of data of value to businesses even bigger, effectively dubbed as the Big Data era. Mining data and finding insights of value to businesses is a crucial process to move from raw and seemingly messy data, to organized insights supporting evidence based management. For example, classifying free-text tweets of consumers opinions of a certain company's product into positive, neutral, and negative sentiments can help the company identify potential issues and deal with them in a proactive manner. This MSc in Business Analytics is for graduates with degrees that include quantitative techniques such business, management, mathematics, physics, and others, who would be interested in applying quantitative analytics in business, including in commercial, governmental and non-governmental organizations. The Big Data analytics market is set to grow with a rise in demand for data analytics jobs. This programme enables students to bridge their business analytics skills gaps and get ready to contribute to this exciting and growing data-based economy.

### Why this programme?

This programme will build the foundational knowledge in business analytics which includes technical knowledge of the various models to perform descriptive and predictive analytics. Modules are designed to balance the understanding of analytics techniques, their principles and their business applications, but at the same time not delving into their complicated mathematical or statistical foundations where no further benefits to business applications are gained. This is not a domain-agnostic programme which focuses on technologies only, but rather a programme that covers technical aspects but always in light of their business functions applications. This programme covers classical aspects of business analytics, but will emphasize new applications of business analytics made possible through recent advances in artificial intelligence and machine learning, such as in non-structured data like text analytics. This programme offers a placement option, is offered in the part-time mode in addition to the full-time model, and also has a core module, Analytics Live, where students apply their knowledge to a particular organisation and work with that organisation to solve a business problem through business analytics. It also offers an autumn school at the beginning to bring students from various backgrounds to basic levels in business, mathematics, statistics, and programming for business analytics.

### How will this help my career?

This programme will equip students with a distinctive capability to understand business analytics in terms of what it can do, but also how it works, so they can adapt their knowledge to various challenges they face in their future careers. The programme offers a dedicated module to career planning and development so students can develop their own career strategy. Career paths include roles such as business analysts, analytics associates, business intelligence engineers, operations analysts, and product analysts, among others. All students on this MSc are entitled to free Graduate membership of the IMCA (Institute of Management Consultants & Advisors) for the duration of the programme and for the 12 months following completion.



### What are the entry requirements?

Candidates should have a minimum 2.2 grade honours (level 8) degree which includes quantitative techniques including business studies, management science, economics, finance, accounting, engineering, mathematics, physics, computer science, and other sciences. Applicants whom have a minimum of three years work experience in a position that employs quantitative methods and a 2.2 honours degree may be considered for entry on a case by case basis. In exceptional circumstances consideration will be given to candidates who do not hold a primary degree, but who do have at least 10 years relevant work experience at least 3 of which must be in a position that employs quantitative techniques. This is done through the Maynooth University Procedure for Non Standard Entrants and Recognition of Prior Experiential Learning. International applicants must have a recognised primary degree which is considered equivalent to Irish university primary degree level at 2.2.

#### Course Structure

The programme is intensive with a focus on hands-on learning experience. It is made up of eight taught modules. Modules cover the foundations of business analytics (**Principles of Business Analytics**, and **Predictive Analytics**), real-world analytics projects with an organization (**Analytics Live**), analytics applications and sociotechnical implications (**Marketing Analytics**, **Contemporary Issues in IT**, and **People**, **Organisations & Society**), in addition to Core Experiences modules (**Career Planning and Development**, and **Evidence Based Management**). The programme also offers a preparatory **Autumn School** to prepare students from different backgrounds to arrive at basic levels of Business, Maths & Statistics, and Programming for Business Analytics. For each module, tuition is through four days, which will be timetabled three to four weeks apart so that learning can occur between the individual teaching days. The programme is available in a full-time mode (12 months), or part-time mode (24 months, with four modules in each year).

#### **Module Themes**

Autumn School (2 weeks): Basics of Business, Maths & Statistics, and Programming for Business Analytics

Principles of Business Analytics

**Predictive Analytics** 

Career Planning and Development

People, Organisations & Society

**Analytics Live** 

Contemporary Issues in IT

**Marketing Analytics** 

Evidence Based Management

Summer Semester Options; Business Consultancy Project / Dissertation / Work Placement

## How to apply?

**Apply online** at www.pac.ie, choose Maynooth University PAC Code: MH48D full-time / MH49D part-time

#### Where can I find more information?

For more information on the MSc in Business Analytics, please contact business@mu.ie or the Programme Director, Dr Fabiano Pallonetto, at fabiano.pallonetto@mu.ie, or visit www.maynoothuniversity.ie/schoolbusiness.