MSc Economics and Data Analytics
(One Year Full-Time)

Introduction

The MSc Economics and Data Analytics is a programme designed for those who want to gain some of the most in-demand skills for today's labour market. This programme, jointly offered by the UCD School of Economics and the UCD School of Mathematics and Statistics, combines knowledge of human behavior and decision-making from economics with the latest data analytics techniques, such as Data Programming, Machine Learning, and Bayesian Analysis. Students can choose to study full-time or part-time and will receive a strong foundation in both economics and data analytics through core modules. Students will also have the opportunity to put their skills into practice through talks with industry professionals, group projects, and presentations. In the spring trimester, students can choose from a variety of elective modules in data analytics, econometrics, and economics. Graduates of this program will be well-prepared for exciting career opportunities in tech, consulting, NGOs or government, and even doctoral studies in economics.

Programme Highlight

The MSc Economics and Data Analytics is a joint programme from UCD's School of Economics and School of Mathematics and Statistics. It is a great option for anyone interested in studying how data can be used to understand the economy and drive business decisions. Students will learn from top economists and statisticians, in small classes, and get hands-on experience through workshops and projects. Students enjoy great flexibility through the mix of in-person and online delivery (economics modules are taught in person; data analytics modules are taught online).

Programme Content and Structure

90 credits Taught Masters	60 credits Taught Modules	30 credits Dissertation	or	30 credits Internship

Autumn Trimester

In the Autumn trimester, you will undertake a two-week foundational course in mathematics and statistics. You will also take the following modules:
- Microeconomics
- Macroeconomics
- Data Programming with R
- Introduction to Data Analytics
- Econometrics

Spring Trimester

In the Spring trimester, you take the core module Research and Career Skills, and choose modules worth 25 credits from (at least one from each block):

Block I: Data Analytics and Econometrics
- Microeconometrics
- Causal Inference and Policy Evaluation
- Statistical Machine Learning
- Time Series Econometrics
- Quantitative Text Analysis
- Inference for Data Analytics
- Bayesian Analysis
- Monte Carlo
- Programming for Social Scientists

Block II: Economics
- Advanced Macroeconomics
- Advanced Microeconomics
- International Trade
- Aviation Economics
- Health and Welfare Economics
- Energy Economics and Policy
- Economics of Competition Policy
- Behavioural Economics: Policy Applications
- Decision Theory

Summer Trimester

In the Summer trimester, you will do a supervised thesis or internship.

Why study at UCD?

Graduate Education

12,000 graduate students; 17% graduate research students; structured PhDs

Graduate Employability

Ranked no. 1 in Ireland in QS Graduate Employability ranking

Global Careers

Dedicated careers support; 2 year stayback visa to work in Ireland

Global Community

8,500 international students and 300,000 alumni network across 165 countries

Global Profile

UCD is ranked in the top 1% of higher education institutions worldwide

Welcoming Campus

Modern parkland campus with 24 hr security. Wide range of facilities, clubs, societies and supports

Career Opportunities

This programme prepares graduates for a wide range of in-demand career paths in the private and public sectors. Data analytics is at the forefront of the modern economy, and by completing the MSc Economics and Data Analytics, graduates will be equipped with the skills and knowledge to succeed in the competitive job market now and into the future. UCD graduates from related Economics masters and the MSc Data Analytics, have gone on to pursue successful careers in industries like technology, finance, and consulting. Many others have secured positions in public institutions like central banks, government departments, and research institutes, or continued their studies with PhD programmes in economics or statistics.

Applicant Profile

- A primary degree with a minimum of an upper second class honours or international equivalent in Economics or a degree in which Economics is a major component.

- We also consider applicants with a minimum of upper second class honours in a cognate area with a strong quantitative component (e.g. business, finance, engineering).

- We will also admit applicants with a Higher Diploma in Economics with a minimum of an upper second class honours.

- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.

About the School

UCD School of Economics is Ireland's leading economics department. Our staff are experts with international reputations in a wide range of topics such as macroeconomics, econometrics, applied microeconomics, behavioural economics, health economics, international trade and economic history. School members play a significant role in debating economic policy issues and in contributing to the formulation of economic policy.

UCD School of Mathematics and Statistics is Ireland's highest ranking School of Mathematics and Statistics. The School is the largest of its kind in Ireland and offers the greatest choice of programmes at undergraduate, masters and PhD level, reflecting the ubiquity of the mathematical sciences in the modern world.

Fees and Scholarships

Tuition fee information is available on **www.ucd.ie/fees**. Please note that UCD offers a number of graduate scholarships for full-time, self-funding international students, holding an offer of a place on a UCD masters programme. Please see **www.ucd.ie/global/scholarships** for further information.

Related Masters

- MSc Applied Economics
- MSc Quantitative Economics
- MSc Behavioural Economics
- MSc Data Analytics

Academic Profiles

Ben Elsner

I am very excited about this new programme. Both schools have run successful graduate programmes for years and have now joined forces to offer a highly attractive skill set to graduates. Students develop a thorough understanding of both data analytics and economic theory. Modules are taught by some of the leading academics in Europe, and the location of Dublin as a major tech hub means that our graduates will have many career opportunities at their doorstep.

Michael Salter-Townshend

Our postgraduate programme in Data Analytics covers cutting edge methods, from processing and visualising data to fitting complex models. We build solid theoretical foundations, so that our students can not only use, but also adapt these methods. We've already seen many great students from a background in economics, but I'm really excited to see this combination with Economics for the first time. Students who are keen to focus on economics applications can also pursue masters level Data Analytics proficiency.