



UNIVERSITY OF  
LIVERPOOL

MSc

## Data Science for Economics

**Study mode**

Full-time

**Duration**

12 months

Apply by: **28 August 2026**

Starts on: **21 September 2026**

### About this course

MSc Data Science for Economics is an excellent opportunity for students who wish to pursue a career requiring a sophisticated understanding of the way data is used in businesses and utilising state-of-the-art analytical skills to solve problems.

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### Introduction

Data is everywhere in the modern economy and businesses are seeking talented new recruits to leverage it. The ability to extract, handle, and analyse large amounts of data is a key skill at the modern company to unlock the potential of firms.

MSc Data Science for Economics offers you rigorous training in the big data methods and cutting-edge econometric tools needed to answer the most important questions facing businesses. You will be fully prepared to work as a data scientist, statistician, or economist, driving the analytical direction of their firms.

MSc Data Science for Economics will teach you how to model economic problems, collect and analyse data, conduct rigorous empirical analyses, and discuss their work with diverse audiences. The modules in this programme cover a wide range of fields within economics and data science.

You will be taught to use data for forecasting and evaluating different policy options through models built on an understanding of causal relationships. Technical skills and competencies are at the heart of each module in the programme, and at the end of their studies, you will have a familiarity with two or more software packages (such as Python, R, and STATA).

The Management School has ringfenced a number of [Management School Excellence Scholarships](#) for our economics master's programmes. Eligibility and more information can be found on the School's [scholarship pages](#). In addition, international students could be eligible to receive a discount of up to £5,000 off your tuition fees with the University of Liverpool Postgraduate Global Advancement Scholarship, find out more on the [Postgraduate Global Advancement Scholarship](#) webpages.

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## Who is this course for?

Ideal for those who want to get rigorous training in the big data methods and advanced econometric tools needed to answer the most important questions facing businesses. It's an excellent opportunity for students who wish to pursue a career requiring a sophisticated understanding of the way data is used in businesses and utilising state-of-the-art analytical skills to solve problems.

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## What you'll learn

- Data management and visualisation for economics
  - Econometric and statistical methods
  - Machine learning and big data econometrics
  - Applied macroeconometrics and microeconometrics.
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## Accreditation

The University of Liverpool Management School is one of an elite group of institutions worldwide to hold the gold standard 'triple-crown' accreditation from AACSB, AMBA and EQUIS.

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### Accreditation in detail

#### AACSB

AACSB Accreditation Standards require a high quality teaching environment, a commitment to continuous improvement, and curricula responsive to the needs of businesses. This achievement means that the Management School meets specific standards of excellence. It also means it's committed to on-going improvement in delivering high quality education.

## **AMBA**

[AMBA](#) is the highest standard of achievement in postgraduate business education. MBA students and graduates, business schools and employers all recognise it as a gold standard. AMBA's rigorous criteria and assessment process ensure that only programmes that demonstrate the highest standards in teaching, learning and curriculum design; career development and employability; and student, alumni and employer interaction achieve accreditation.

## **EQUIS**

The School is also accredited by [EQUIS](#), which is the leading international system of quality assessment, improvement and accreditation of higher education institutions in management and business administration. Institutions that are accredited by EQUIS must demonstrate not only high general quality in all dimensions of their activities, but also a high degree of internationalisation and corporate connections.

# Course content

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

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## Semester one

The 12 month programme consists of seven compulsory modules and one optional module, followed by a dissertation carried out over the summer period upon completion of Semester two.

In addition to the modules outlined below, a new required module: **Data Management and Visualisation for Economics** will be taught in Semester one.

## Modules

Compulsory modules	Credits
<a href="#">ECONOMETRIC AND STATISTICAL METHODS (ECON814)</a>	15
<a href="#">MACROECONOMIC ANALYSIS (ECON905)</a>	15
<a href="#">MICROECONOMIC ANALYSIS (ECON915)</a>	15

Programme details and modules listed are illustrative only and subject to change.

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## Semester two

The 12 month programme consists of seven compulsory modules and one optional module, followed by a dissertation carried out over the summer period upon completion of Semester two.

## Modules

Compulsory modules	Credits
<a href="#"><u>APPLIED MACROECONOMETRICS (ECON920)</u></a>	15
<a href="#"><u>APPLIED MICROECONOMETRICS (ECON826)</u></a>	15
<a href="#"><u>MACHINE LEARNING AND BIG DATA ECONOMETRICS (ECON701)</u></a>	15
Optional modules	Credits
<a href="#"><u>TOPICS IN MONEY AND BANKING (ECON916)</u></a>	15
<a href="#"><u>CURRENT TOPICS IN ECONOMICS (ECON827)</u></a>	15
<a href="#"><u>LABOUR ECONOMICS (ECON702)</u></a>	15
<a href="#"><u>PUBLIC ECONOMICS (ECON703)</u></a>	15

Programme details and modules listed are illustrative only and subject to change.

## Final project

The 12 month programme consists of seven compulsory modules and one optional module, followed by a dissertation carried out over the summer period upon completion of Semester two.

## Modules

Compulsory modules	Credits
<a href="#"><u>DISSERTATION (ECON912)</u></a>	60

Programme details and modules listed are illustrative only and subject to change.

## Teaching and assessment

### How you'll learn

Modules are taught using the latest active learning techniques including real-world case studies, social media, lecture capture and real-time financial and business data using our Bloomberg trading floor.

The principal forms of teaching are face-to-face lectures and seminars with lectures normally being supported by material such as hand-outs and presentations. Seminars give the opportunity for detailed discussion of a topic under the direction of a tutor. You are normally expected to prepare work in advance for seminars and may be expected to present work or give presentations.

In addition, this course offers an enhanced programme of events and activities such as coding bootcamps and guest speakers.

Following semester two you will complete a dissertation the support of an academic supervisor.

Teaching time will account for an average of 10 hours per week and you should anticipate an additional 30 hours of self-directed study and group work.

### How you're assessed

In semester one and two, you will take modules totalling 120 credits. The dissertation completed during the summer period is worth 60 credits and students will be supported by their academic supervisor.

Students are required to complete 180 credits to achieve a full MSc.

Subject to meeting specific criteria outlined by the University, students will graduate with a Pass, Merit or Distinction.

Assessment tasks are varied and some may be designed specifically to meet the learning outcomes of a particular programme of study, but students can expect to be assessed via coursework, essay, group work, presentations, case studies, negotiation exercises, reports and examinations. The weighting of individual components will vary from one module to another. All assessment information is included within the module specification.

## Liverpool Hallmarks

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.

The Liverpool Curriculum framework sets out our distinctive approach to education. Our teaching staff support our students to develop academic knowledge, skills, and understanding alongside our **graduate attributes**:

- Digital fluency
- Confidence
- Global citizenship

Our curriculum is characterised by the three **Liverpool Hallmarks**:

- Research-connected teaching
- Active learning
- Authentic assessment

All this is underpinned by our core value of **inclusivity** and commitment to providing a curriculum that is accessible to all students.

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# Careers and employability

The Data Science for Economics MSc arms you with advanced analytical and econometric methods tailored to the modern data-driven economy. You'll develop expertise in Python, R, STATA, forecasting, causal analysis, and data visualisation All skills that are highly valued by businesses seeking data scientists, statisticians, or economists with deep technical and economic insights.

From day one, you'll benefit from dedicated in-house career support, including one-to-one guidance, workshops, seminars, and employer networking, rooted in close ties with regional, national, and international organisations.

Skills you'll sharpen include:

- Data management, visualization, and big-data econometrics
- Empirical model-building and quantitative forecasting
- Critical problem-solving with complex dataset
- Clear oral and written communication of data insights.

Graduates emerge highly employable, equipped to guide analytical strategy in firms across sectors.

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## Career support from day one to graduation and beyond

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### Career planning

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### From education to employment

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### Networking events

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# Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

## Tuition fees

### UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)

Full-time place, per year – £13,500

### International fees

Full-time place, per year – £28,500

Fees stated are for the 2025/26 academic year. Tuition fees for the academic year 2026/27 will be announced soon.

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support.

- You can [pay your tuition fees in instalments](#).
- All or part of your tuition fees can be [funded by external sponsorship](#).
- International applicants who accept an offer of a place will need to [pay a tuition fee deposit](#).

If you're a UK national, or have settled status in the UK, you may be eligible to apply for a Postgraduate Loan worth up to £12,167 to help with course fees and living costs. [Learn more about paying for your studies](#).

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## Additional costs

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This could include buying a laptop, books, or stationery.

Find out more about the [additional study costs](#) that may apply to this course.

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# Entry requirements

The qualifications and exam results you'll need to apply for this course.

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## Postgraduate entry requirements

We accept a 2:2 honours degree from a UK university, or an equivalent academic qualification from a similar non-UK institution. This degree should be in Economics or a closely related discipline with a quantitative focus.

Students with a 2:2 degree from a quantitative science discipline (e.g. Mathematics, Physics, Statistics, Operations Research) are also encouraged to apply.

Applicants should have competency in A level Mathematics/Statistics or equivalent.

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## International qualifications

Select your country or region to view specific entry requirements.

If you hold a bachelor's degree or equivalent, but don't meet our entry requirements, a Pre-Master's can help you gain a place. This specialist preparation course for postgraduate study is offered on campus at the **University of Liverpool International College**, in partnership with Kaplan International Pathways. Although there's no direct Pre-Master's route to this MSc, completing a Pre-Master's pathway can guarantee you a place on many other postgraduate courses at The University of Liverpool.

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## English language requirements

You'll need to demonstrate competence in the use of English language, unless you're from a majority English speaking country.

We accept a variety of international language tests and country-specific qualifications.

International applicants who do not meet the minimum required standard of English language can complete one of our [Pre-Sessional English courses](#) to achieve the required level.

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### **IELTS**

6.5 overall, with no component below 6.0

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### **TOEFL iBT**

88 overall, with minimum scores of listening 19, writing 19, reading 19 and speaking 20. TOEFL Home Edition not accepted.

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### **Duolingo English Test**

125 overall, with writing not less than 125, speaking and reading not less than 115, and listening not below 110. For academic year 2025/26 only, we will also accept the production, literacy, comprehension and conversation score set: 120 overall, with no component below 105.

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### **Pearson PTE Academic**

61 overall, with no component below 59

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### **LanguageCert Academic**

70 overall, with no skill below 65

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### **PSI Skills for English**

B2 Pass with Merit in all bands

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### **INDIA Standard XII**

National Curriculum (CBSE/ISC) – 75% and above in English. Accepted State Boards – 80% and above in English.

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### **WAEC**

C6 or above

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## Pre-sessional English

Do you need to complete a Pre-sessional English course to meet the English language requirements for this course?

The length of Pre-sessional English course you'll need to take depends on your current level of English language ability.

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### Pre-sessional English in detail

If you don't meet our English language requirements, we can use your most recent IELTS score, or [the equivalent score in selected other English language tests](#), to determine the length of Pre-sessional English course you require.

Use the table below to check the course length you're likely to require for your current English language ability and see whether the course is available on campus or online.

Your most recent IELTS score	Pre-sessional English course length	On campus or online
6.0 overall, with no component below 6.0	6 weeks	On campus
6.0 overall, with no component below 5.5	10 weeks	On campus and online options available
6.0 overall, with no more than one component below 5.5, and no component below 5.0	12 weeks	On campus and online options available
5.5 overall, with no more than one component below 5.5, and no component below 5.0	20 weeks	On campus
5.0 overall, with no more than one component below 5.0, and no component below 4.5	30 weeks	On campus

Your most recent IELTS score	Pre-sessional English course length	On campus or online
4.5 overall, with no more than one component below 4.5, and no component below 4.0	40 weeks	On campus

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If you've completed an alternative English language test to IELTS, we may be able to use this to assess your English language ability and determine the Pre-sessional English course length you require.

Please see our guide to [Pre-sessional English entry requirements](#) for IELTS 6.5 overall, with no component below 6.0, for further details.

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