MSc

Data Science for Health (Conversion)

Study mode

Full-time
Part-time

Duration

12 months
24 months

Apply by: **29 August 2025**
Starts on: **22 September 2025**

About this course

The MSc in Data Science for Health (Conversion) programme aims to educate current and future health data scientists, at all career stages, including those in public and private sectors, in a research-intensive environment. The MSc introduces students to the basic and more complex methodologies involved in data science and incorporates the use of statistical and computational theory alongside practical application.

Introduction

Students on the MSc in Data Science for Health (Conversion) will be exposed to a combination of core health research, statistics and computer science modules. It is aimed at students wishing to move into the field of data science irrespective of their background and previous training. The programme is run by the internationally renowned and research active Department of Health Data Science.

The programme will recruit internationally and bring together students from many different backgrounds and disciplines. The programme is relevant not just to students whose careers are likely to be in UK but also to equip students with international awareness to allow them to be globally competitive and become global citizens.

This course is also open for intercalators.

Who is this course for?

This programme is designed for anyone with an interest in data science for health irrespective of previous training or qualifications.

What you'll learn

- The importance of Data Science to healthcare

- The role of a health data scientist as a member of a healthcare team.

- In-depth knowledge and a systematic understanding of the ethical, legal, and regulatory frameworks that impact on the conduct of health data science

- A broad base of knowledge, equipping them with the ability to apply statistical and machine learning approaches to analyse health-related data and critically evaluate the findings

- Professional skills including team science communication skills which will enable students to work as a successful data scientist in the public or private sector

- The opportunity to obtain specialised knowledge along a statistics track, computer science track, or a combination.

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Course content

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

Semester one

Modules

Compulsory modules	Credits
INTRODUCTION TO HEALTH DATA SCIENCE (DASC501)	15
STATISTICS FOR HEALTH RESEARCH (DASC502)	15
DATA AND ENGINEERING FOR HEALTH RESEARCH (DASC509)	15

Optional modules	Credits
USING ROUTINE DATA FOR PUBLIC HEALTH (DASC503)	15
AN INTRODUCTION TO QUALITATIVE RESEARCH (PUBH160)	15

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

Semester two

Modules

Optional modules	Credits
EVALUATION OF HEALTHCARE INTERVENTIONS (DASC504)	15
PREDICTION MODELLING & JOINT LONGITUDINAL AND SURVIVAL DATA ANALYSIS (DASC506)	15
HIGH-DIMENSIONAL DATA STRUCTURES AND LEARNING ALGORITHMS (DASC507)	15
STATISTICAL GENETICS AND PHARMACOGENOMICS (DASC508)	15
DATA MINING AND VISUALISATION (COMP527)	15
MACHINE LEARNING AND BIOINSPIRED OPTIMISATION (COMP532)	15
COMPUTATIONAL INTELLIGENCE (COMP575)	15
ACTIONABLE HEALTHCARE DATA ANALYTICS (DASC505)	15

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

Dissertation

Modules

Compulsory modules	Credits
DISSERTATION (DASC500)	60

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

Teaching and assessment

How you'll learn

The learning and teaching strategy for the programme comprises a mixture of formal lectures, practical and tutorial sessions, discussion groups, student centred learning, and project work. Additional support is sought from online materials, selected textbooks and directed reading of research literature (taken from scientific journals and conference proceedings).Each module (except the dissertation) is worth 15 credits and thus totals approximately 150 hours, 25-50 of which are in taught sessions.

How you're assessed

Semester 1

Module	Assessment 1	Assessment 2
DASC501	Written article appraisal (1500 words, 70%)	Plain language summary (600 words, 30%)
DASC502	Written data analysis (1500 words, 70%)	Poster presentation (30%)
DASC503	Written report (1500 words, 70%)	Poster + pre-recorded 5 mins oral presentation (30%)
DASC509	Written data analysis (1500 words, 50%)	Written data analysis (1000 words, 50%)

Semester 2

Module	Assessment 1	Assessment 2
DASC504	Critical appraisal	Written statistical analysis plan

	(3500 words, 60%)	(1500 words, 40%)
DASC505	Written report (1500 words, 70%)	Oral presentation (video) (15 mins, 30%)
DASC506	Written analysis plan (1000 words, 50%)	Written data analysis (2500 words, 50%)
DASC507	Written data analysis (3000 words, 80%)	Oral presentation (15 mins, 20%)
DASC508	Quality control assessment (800 words, 25%)	Written data analysis (2500 words, 75%)
COMP575	Written exam (100%)	
COMP527	Coursework (15%) Coursework (15%)	Written exam (70%)
COMP532	Coursework (15%) Coursework (15%)	Written exam (70%)

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.

Careers and employability

Developing transferable skills to enhance your employability is a key theme of the programme.

Potential employers are involved in the delivery of the course and you will be able to attend careers events with representation from higher education institutions, the NHS, industry and government agencies. This will ensure you have a variety of opportunities to network and build useful contacts.

Whenever possible, your dissertation project will be linked with external partner organisations, connecting you to potential employment and career progression opportunities.

Graduates from the MSc in Data Science for Health are likely to enter a variety of careers opportunities. These include:

- PhD student
- Research Assistant
- Trial statistician
- Epidemiologist
- Data Scientist.

Career support from day one to graduation and beyond

Career planning

From education to employment

Networking events

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 - £12,500
Part-time place, per year - £6,250

International fees

Full-time place, per year - £29,100
Part-time place, per year - £14,550

Fees stated are for the 2025-26 academic year.

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.**.

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.

Entry requirements

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

Postgraduate entry requirements

Applicants are required to have a minimum of 2.2 or equivalent qualification. Students with a first degree in any academic subject will be considered, as students will be trained on basic statistical and computing skills. for overseas students an acceptable English language qualification (IELTS 6.5 or equivalent, with no band less than 6.0) is required to ensure students can access the programme material which is all delivered in English.

International qualifications

Select your country or region to view specific entry requirements.

Applicants with any academic background will be considered, as students will be trained on basic statistical and computing skills. As such, there is no minimum entry requirement for this programme, but an acceptable English language qualification (IELTS 6.5 or equivalent, with no band less than 6.0) is required to ensure students can access the programme material which is all delivered in English.

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.

IELTS

6.5 overall, with no component below 6.0

Duolingo English Test

125 overall, with writing not less than 125, speaking and reading not less than 115, and listening not below 110

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.

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

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

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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