HEALTH DATA ANALYTICS
MSc /
2019/20 ENTRY

www.ucl.ac.uk/graduate/
Health data analytics involves extracting insights from health data, either to shape national policy, manage local organisations or inform the care of an individual. As more and more data becomes available electronically, the demand for skilled and trained individuals to take advantage of it becomes increasingly urgent.

Degree summary

As a student on the MSc Health Data Analytics, you will learn about mathematical and statistical approaches to understanding health data, including operational research, machine learning and health economics. You will also learn the fundamentals of how health data is collected, represented, stored and processed as well as how to analyse it effectively and how best to present analyses to have an impact on decisions.

- Health data analysts are employed in interesting and challenging roles in healthcare organisations, government agencies and commercial organisations, including IT suppliers, consultancy organisations and pharmaceutical companies. The demand for skilled analysts is growing and graduates with the right skills and training can choose from a range of exciting and rewarding opportunities.

- This programme has been designed in conjunction with the NHS to meet an identified shortage in skilled analysts. The aim is to provide a unique educational experience which not only prepares you for a technical role in analysis but equips you to take on senior roles in NHS organisations. The NHS needs not only more analytics staff, but also managers and decision makers who understand the importance of data and the role that analytics should be playing in shaping policy.

- Our programme is delivered by a unique team, including mathematicians, computer scientists and statisticians with expertise in the analysis of health data in a variety of forms and for a variety of purposes. The team are highly experienced not just in teaching and research but in the practical application of data analytics to the problems of health and healthcare organisations. We work closely with the NHS and with other commercial organisations to ensure our work is relevant and up-to-date.

The programme is taught by ‘blended learning’, and therefore includes interactive online teaching and face-to-face lectures, seminars and workshops including substantial use of examples of real clinical systems. Assessment is through examination, critical evaluations, technical tasks, coursework and project reports, compulsory programming and database assignments, and the dissertation.

Degree structure

Mode: Part-time: 2 years; Flexible: up to 5 years
Location: London, Bloomsbury

Students undertake modules to the value of 180 credits. The programme consists of three compulsory modules (45 credits), five optional modules (75 credits) and a research project (60 credits).

A Postgraduate Diploma (120 credits, flexible study 2-5 years) is offered.
A Postgraduate Certificate (60 credits, flexible study over a period of two years) is offered.

Please note that the list of modules given here is indicative. This information is published a long time in advance of enrolment and module content and availability is subject to change.

COMPULSORY MODULES
- Principles of Health Data Analytics
- Research Methods in Healthcare
- Statistical Methods for Health Data Analytics

OPTIONAL MODULES
- Students choose five of the following:
  - Key Principles of Health Economics
  - Public Health Data Science
  - Learning Health Systems
  - Information Law & Governance in Clinical Practice
  - Economic Evaluation of Health Care
  - Essentials of Informatics for Healthcare Systems
  - Machine Learning in Health Care
  - Clinical Decision Support Systems
  - Patient Safety and Clinical Risk

Please note that the optional modules listed here may be subject to change.

DISSERTATION/REPORT
- All MSc students undertake an independent research project, normally based at their place of work, which culminates in a piece of work written in the style of a journal article.
Your career

Health data analysts are employed by NHS England in a variety of roles, notably within NHS Improvement, assessing policy proposals and evaluating the economic or financial suitability of initiatives. They are employed in acute trusts and in public health, mental health and other community-focused organisations to assist in the planning of services and the assessment of demand and to identify improvements in the organisation and management of services. Consultancy organisations providing services to the health sector also employ analysts as do data and IT organisations.

Employability

On graduation, you will be skilled in the use of mathematical and statistical techniques for the manipulation and analysis of data. You will be familiar with state-of-the-art statistical packages but also have detailed practical experience of working with health data and the specific challenges and responsibilities that it entails. You will understand the processes by which data is collected and have insights into how that impacts its significance. These experiences will equip you to work in the NHS and also in a range of commercial and other organisations dealing with healthcare data.
Entry requirements

A minimum of a second-class Bachelor's degree in a relevant discipline from a UK university, or an overseas qualification of an equivalent standard.

English language proficiency level

If your education has not been conducted in the English language, you will be expected to demonstrate evidence of an adequate level of English proficiency.

The level of English language proficiency for this programme is: Good.

Information about the evidence required, acceptable qualifications and test providers is provided at: www.ucl.ac.uk/graduate/english-requirements

Your application

When we assess your application we would like to learn:

- why you want to study Health Data Analytics at graduate level
- what particularly attracts you to the programme at UCL
- how your academic and professional background and interests meet the demands of this challenging programme
- where you would like to go professionally with your degree and how it fits with your career goals

Together with essential academic requirements, the personal statement is your opportunity to illustrate whether your reasons for applying to this programme match what the programme will deliver.

There is no application fee for this programme.

FEES AND FUNDING 2019/20 ENTRY

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<tr>
<th>Region</th>
<th>Fee (PT)</th>
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<tbody>
<tr>
<td>UK</td>
<td>£5,100</td>
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<tr>
<td>EU</td>
<td>£5,100</td>
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The tuition fees shown are for the year indicated above. Fees for subsequent years may increase or otherwise vary. Further information on fee status, fee increases and the fee schedule can be viewed on the UCL Students website.

Fees for flexible, modular study are charged pro-rata to the appropriate full-time Master's fee taken in an academic session.

Full details of funding opportunities can be found on the UCL Scholarships website: www.ucl.ac.uk/scholarships

APPLICATION DEADLINE

All applicants: 26 July 2019

Details on how to apply are available on the website at: www.ucl.ac.uk/graduate/apply

CONTACT

Programme Administrator

Email: courses-IHI@ucl.ac.uk

EU referendum

For up-to-date information relating to specific key questions following the UK's decision to leave the EU, please refer to www.ucl.ac.uk/brexit