Medical statistics is a fundamental scientific component of health research. Medical statisticians interact with biomedical researchers, epidemiologists and public health professionals and contribute to the effective translation of scientific research into patient benefits and clinical decision-making. As new biomedical problems emerge, there are exciting challenges in the application of existing tools and the development of new superior models.

Degree summary

The UCL Medical Statistics degree provides students with a sound background in theoretical statistics as well as practical hands-on experience in designing, analysing and interpreting health studies, including trials and observational studies. The taught component equips students with analytical tools for healthcare economic evaluation, and the research project provides experience in using real clinical datasets.

One of the strengths of UCL Statistical Science is the breadth of expertise on offer; the research interests of staff span the full range from foundations to applications, and make important original contributions to the development of statistical science.

UCL is linked with four NHS hospital trusts and hosts three biomedical research centres, four clinical trial units and an Institute of Clinical Trials and Methodology. Established links between UCL Statistical Science, the NIHR UCLH/UCL Biomedical Research Centre and the Clinical Trial Units provide high-quality biomedical projects for Master's students and opportunities for excellent postgraduate teaching and medical research.

The programme is delivered through a combination of lectures, tutorials and classes, some of which are dedicated to practical work. External organisations deliver technical lectures and seminars where possible. Assessment is through written examination and coursework. The research project is assessed through the dissertation and a 15-minute presentation.

Workshops running during the teaching terms provide preparation for this project and cover the communication of statistics, for example, the presentation of statistical graphs and tables.

Degree structure

Mode: Full-time: 1 year; Part-time: 2 years
Location: London, Bloomsbury

Studying on a part-time basis involves spreading the taught modules over two years, but with the same teaching times as for full-time students (i.e. Monday-Friday during the daytime).

Students undertake modules to the value of 180 credits. The programme consists of a foundation course, six core modules (90 credits) two optional modules (30 credits) and the research dissertation (60 credits).

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.

<table>
<thead>
<tr>
<th>COMPULSORY MODULES</th>
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<tbody>
<tr>
<td>Foundation Course (not credit bearing)</td>
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<tr>
<td>Statistical Inference</td>
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<tr>
<td>Statistical Models and Data Analysis</td>
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<tr>
<td>Medical Statistics I</td>
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<td>Medical Statistics II</td>
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<td>Statistical Computing</td>
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<td>Applied Bayesian Methods</td>
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<th>OPTIONAL MODULES</th>
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<tr>
<td>At least one from:</td>
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<tr>
<td>Statistics for Interpreting Genetic Data</td>
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<tr>
<td>Bayesian Methods in Health Economics</td>
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<td>and at least one from:</td>
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<tr>
<td>Epidemiology</td>
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<tr>
<td>Statistical Design of Investigations</td>
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<th>DISSERTATION/REPORT</th>
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<td>All MSc students undertake an individual research project, culminating in a dissertation of approximately 10,000–12,000 words.</td>
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</table>
Your career

Medical statisticians enable the application of the best possible quantitative methods in health research and assist in the reliable translation of research findings to public and patients’ health care.

The National Institute of Health Research (NIHR) has identified medical statistics as one of the priority areas in their capacity building strategy.

Employability

There is an acute shortage of medical statisticians in the UK and employment opportunities are excellent. Recent graduates from this programme have been employed by clinical trials units, the pharmaceutical industry, NHS trusts and universities (e.g. London School of Hygiene & Tropical Medicine, UCL).
Entry requirements

A minimum of an upper second-class Bachelor’s degree in a quantitative discipline from a UK university or an overseas qualification of an equivalent standard. Knowledge of mathematical methods and linear algebra at university level and familiarity with introductory probability and statistics is required. Relevant professional experience will also be taken into consideration.

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: Standard.

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

Your application

Students are advised to apply as early as possible due to competition for places. Those applying for scholarship funding (particularly overseas applicants) should take note of application deadlines.

When we assess your application we would like to learn:
// why you want to study Statistics (Medical Statistics) at graduate level
// why you want to study Statistics (Medical Statistics) at UCL
// what particularly attracts you to this programme
// how your academic background meets the demands of this programme
// where you would like to go professionally with your degree

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 an application processing fee for this programme of £75 for online applications and £100 for paper applications. Further information can be found at: www.ucl.ac.uk/prospective-students/graduate/taught/application.

FEES AND FUNDING 2019/20 ENTRY

// UK: £11,060 (FT), £5,500 (PT)
// EU: £11,060 (FT), £5,500 (PT)
// Overseas: £26,110 (FT), £13,340 (PT)

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.

The Department of Statistical Science has been awarded two National Institute for Health Research (NIHR) studentships in Medical Statistics for the 2019/20 academic year. The studentships cover tuition fees at the UK/EU rate and a maintenance stipend of £17,280 per annum (based on the standard UK Research Council rate with London weighting). There is no separate application process for these studentships; all eligible applicants to the MSc Statistics (Medical Statistics) programme will automatically be considered.

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

APPLICATION DEADLINE

All applicants: 15 March 2019

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

CONTACT

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Telephone: +44 (0)20 7679 8311

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