APPLIED INFECTIOUS DISEASE EPIDEMIOLOGY
MSc /
2019/20 ENTRY

www.ucl.ac.uk/graduate/
This programme builds on UCL’s research strengths in core epidemiological skills applied to the field of infectious diseases. You will also focus on the use of new technologies (omics) for analysing pathogens and their applications in tackling global public health challenges. You will be equipped for a career at the intersection of epidemiology and biological science, with a strong emphasis on clinical and public health medicine.

**Degree summary**

You will learn principles of basic statistics and epidemiology, transmission dynamics, and infection pathogenesis. You will also study infectious diseases in high-, middle-, and low-income settings, using examples in the classroom drawn from a range of conditions, including STIs, HIV, TB, influenza and other airborne viruses, and emerging, vaccine-preventable, vertically transmitted, and vector-borne diseases.

Infection prevention and control is a major global health priority. Researchers, public health personnel, security analysts, international health professionals, policymakers, and those working in health-related finance all need to understand infectious disease epidemiology at some level, and the barriers that prevent infection control.

Tomorrow’s infectious disease epidemiologists will need a firm grounding in core principles such as transmission dynamics and study design and analysis. However, radical developments and scientific advances, including sequencing and other molecular technologies, big data opportunities, and the microbiota, have changed the way we can measure host-pathogen relationships.

This MSc takes an interdisciplinary approach to infectious disease epidemiology, layering basic and clinical science, bioinformatics and molecular epidemiology on top of essential statistical, epidemiological and critical appraisal skills.

The programme will be delivered through a mixture of lectures and tutorials, practical sessions, critical appraisal, interpretation of data, application of evidence to hypothetical and real scenarios, presentations by peers, peer evaluation and marking, debates (classroom and virtual), critique of policy documents, and Moodle discussion forums.

**Degree structure**

Mode: Full-time: 1 year; Part-time: 2 years; Flexible: up to 5 years

Location: London, Bloomsbury

Students undertake modules to the value of 180 credits. Students will learn key concepts in infection and population health, and synthesise understanding about microbiology, immunology, and epidemiology of pathogens to inform infection control and public health interventions. The programme consists of four compulsory modules (75 credits), three optional modules (45 credits), and a 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.

**COMPULSORY MODULE**

- Fundamental Principles of Infection and Population Health
- Epidemiology and Infectious Diseases
- Basic Statistics for Medical Sciences
- Molecular Epidemiology for Infectious Diseases

**OPTIONAL MODULES**

- Regression Modelling
- Advanced Statistical Modelling
- Immunisation and Communicable Diseases
- Sexual Health Programming in Low and Middle-income Countries
- Infectious Disease Epidemiology and Global Health Policy
- Mobile Health (m-Health) for Infectious Diseases - Diagnostics, Management, Prevention and Surveillance
- Key Principles of Health Economics
- Evaluating Interventions
- Economic Evaluation in Healthcare
- Climate Change and Health
- Urban Health
- Global Health Promotion
- Research in Action: The Qualitative Approach
- Conflict, Humanitarianism and Health

Other optional modules available include Evolution and Infectious Diseases; Global Eradication of Viruses; HIV Frontiers from Research to Clinic.

**DISSERTATION/REPORT**

All MSc students undertake an individual research project on a topic relevant to applied infectious disease epidemiology, which includes a presentation and culminates in a dissertation of 7,000 words.
Your career

The programme has two pathways of optional modules that map on to the careers market.

Pathway 1 is aimed at students considering a career as an infectious disease epidemiologist requiring strong quantitative and data analysis skills in data analysis.

Pathway 2 is designed for those intending a career in international global health and policy-related work where their focus will be on infectious disease control.

Employability

A major focus in this programme will be on the practical application of knowledge and skills to infection and population health problems. We will also encourage students to critically appraise and intellectually challenge the evidence in infection and population health, and to work in multidisciplinary teams to seek solutions to hypothetical and real-world public health problems. These are all vital transferrable skills in the job market.
Entry requirements

A minimum of an upper second-class Honours in a relevant degree of a UK university, or an overseas qualification of an equivalent standard, a professional qualification in a health related area such as medicine or nursing of an equivalent standard. Relevant research, work or volunteer experience will be viewed favourably. Students without the minimum academic standards may be considered if they have extensive relevant work or research experience.

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

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 Applied Infectious Disease Epidemiology at graduate level
- why you want to study Applied Infectious Disease Epidemiology at UCL
- what particularly attracts you to the chosen programme
- how your academic and professional background meets the demands of this challenging 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: £10,440 (FT), £5,210 (PT)
// EU: £10,440 (FT), £5,210 (PT)
// Overseas: £19,420 (FT), £9,570 (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.

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

Funding opportunities relevant to this programme include:

- Institute for Global Health Postgraduate Bursary
- Africa Health Research Institute (AHRI) Institute Studentship

Find out more on the Institute for Global Health website

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

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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