There is a growing need for qualified professionals with expertise in environmental modelling. The UCL Environmental Modelling MSc is a cross-disciplinary degree that provides rigorous technical and scientific training for the next generation of environmental modelling professionals.

**Degree summary**

You will gain a well-rounded training in the role, implementation and application of models in environmental science. Core modules provide a critical perspective on model-based science, and introduce essential computational and numerical methods. The programme is contextualised with reference to the challenges of understanding both natural and human-induced changes to a variety of environmental systems.

The Environmental Modelling MSc is run by UCL Geography which enjoys an outstanding international reputation for its research and teaching. Research groups contributing to the MSc include those concerned with environmental modelling and observation, past climates, and recent environmental change and biodiversity.

The programme draws on the unrivalled strengths of UCL in environment modelling. Our expertise encompasses state-of-the-art global climate models, regional ocean models, advanced hydrodynamic and hydrological simulations, palaeoclimate reconstruction over geological to recent historical timescales, earth observation-derived vegetation and carbon cycle modelling, and model-based assessment of climate change impacts on coastal, estuarine and freshwater systems.

The programme is delivered through a combination of lectures, seminars, tutorials, and laboratory and computer-based practical classes. Assessment is through independent project work, practical-based and written coursework, written examinations and the dissertation.

**Degree structure**

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

Students undertake modules to the value of 180 credits. The programme consists of four core modules (60 credits), optional modules (60 credits) and a research dissertation (60 credits).

A Postgraduate Diploma (120 credits, full-time nine months, part-time two years) is offered.

A Postgraduate Certificate (60 credits, full-time 12 weeks, part-time one year) 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**

- Models in Environmental Science
- Global Environmental Change
- Scientific Computing
- Analytical and Numerical Methods

**OPTIONAL MODULES**

- Options may include:
- Climate Modelling
- Coastal Change
- Environmental GIS
- Impacts of Climate Change on Hydro-Ecological Systems
- Lakes
- Ocean Circulation and Climate Change
- Surface Water Modelling
- Terrestrial Carbon: Monitoring and Modelling

**DISSERTATION/REPORT**

- All students undertake an independent research project, culminating in a dissertation of approximately 12,000 words and an oral presentation.
Your career

The programme has been designed to provide an ideal foundation for PhD research, or for employment with environmental monitoring and protection agencies, industry and environmental consultancies. Graduates have gone on to careers as management consultants, business analysts and university researchers.

Employability

Modelling was identified as the highest priority UK skills gap in a government review of the environmental sector. This MSc programme exposes students to the full range of environmental modelling which places graduates in a strong position to find employment. We anticipate that graduates of this MSc are either employed in the private environmental consulting sector or undertake a PhD.
Entry requirements

Applicants are expected to have a first or upper second-class Bachelor's degree in a relevant subject (e.g. computer science, environmental science, geography, oceanography, engineering, mathematics, physics or biology) from a UK university or an overseas qualification of an equivalent standard. Applicants with relevant professional experience will also be considered.

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 Environmental Modelling
- why you want to study Environmental Modelling at UCL
- what particularly attracts you to this programme
- how your academic and/or professional background meets the demands of a challenging academic environment
- 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: £10,720 (FT), £5,395 (PT) | EU: £10,720 (FT), £5,395 (PT) | Overseas: £21,790 (FT), £11,060 (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.

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

Application procedure

Email: geog-masters@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