ENVIRONMENTAL GEOSCIENCE
MSci / UCAS CODE: F645
2021 ENTRY
www.ucl.ac.uk/prospectus
Environmental Geoscience is concerned with the interaction between Earth sciences and human activity. We explore evolution of the Earth and its internal workings, development of its biosphere and atmosphere, and its surface processes, emphasising natural and human-induced development. This allows examination of environmental issues, such as natural resources, their use to society, disposal of waste, geohazards, sustainability and risk assessment.

Key information

Programme starts
September 2021

Location
London, Bloomsbury

Degree benefits

- Benefit from up to three months of field classes in the UK and continental Europe, and an independent field mapping project, with financial support from the department.
- The department delivers world-leading research embracing the origins and history of life, Earth’s composition and structure, earthquake and volcanic hazards, and past and present climate change, and these are fully integrated within our taught programme.
- The department scored 100% for overall satisfaction in the 2019 National Student Survey. Teaching is delivered by all of our research-active staff guaranteeing up-to-the-minute understanding and providing opportunities to take part in cutting-edge research activities.
- We have recently moved into the renovated Kathleen Lonsdale Building with new, world-class facilities include bespoke teaching laboratories, new microscope facilities and student study areas, all in the heart of the department, next to staff offices and research laboratories.

Accreditation

This programme is accredited by the Geological Society. Undergraduate students may join the Geological Society as a Candidate Fellow and can become a Fellow of the Society upon graduation. A Fellow of the Society with relevant postgraduate experience in the practice of geology has the opportunity to apply for Chartered Geologist (CGeol) status.

Degree structure

In each year of your degree you will take a number of individual modules, normally valued at 15 or 30 credits, adding up to a total of 120 credits for the year. Modules are assessed in the academic year in which they are taken. The balance of compulsory and optional modules varies from programme to programme and year to year. A 30-credit module is considered equivalent to 15 credits in the European Credit Transfer System (ECTS).

The programme offers an integrated study of the Earth, encompassing the evolution of the planet and its internal workings, the development of its biosphere and atmosphere, and its surface processes, emphasising natural and man-induced development of the terrestrial environment.

You will gain a scientific training which allows an examination of environmental issues related to the Earth sciences, such as those concerned with natural resources, their use to society, the disposal of wastes and the understanding and minimisation of geohazards.

The first and second years provide core skills and knowledge in the subject. The third year provides opportunities for specialisation and diversification, with an emphasis on individual initiative and problem-based learning. The strong emphasis on fieldwork provides a unique opportunity to develop independent and team skills, and problem-solving abilities.

The first three years of the MSci programme are identical to the BSc programme. However, the additional fourth year of the MSci allows for an individual research project and advanced options, providing extra depth and breadth of knowledge.

Upon successful completion of 480 credits, you will be awarded a MSci (Hons) in Environmental Geoscience.

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.

YEAR ONE

Compulsory module(s)

- Dynamic Earth
- Earth Materials
- Environmental Systems and Processes
- From Petrology to Petrogenesis (including Cornwall fieldwork)
- Geochemistry
- History of Life
- Surface Processes (including Dorset/Devon fieldwork)
- The Earth

Optional modules

- All first year modules are compulsory.
### YEAR TWO

**Compulsory module(s)**
- Isotope Geology
- Maps, Images and Structures (including fieldwork)
- Structural Geology and Tectonics
- Surface Processes and Structures (including fieldwork)

**Optional modules**
- You will select 60 credits of optional modules from the following:
  - Ecological Patterns and Processes
  - Environmental Remote Sensing
  - Foundations of Physical Geoscience
  - Geomorphology
  - Global Geophysics
  - Hydroclimatology
  - Mathematics
  - Reconstructing Past Environments
  - Vertebrate Palaeontology and Evolution
  - Principles of Climate
  - Science and Ethics
  - Engaging the Public with Science

### YEAR THREE

**Compulsory module(s)**
- Geological and Environmental Mapping Project
- Groundwater Science

**Optional modules**
- You will select 75 credits from the following options:
  - Advanced Geochemistry
  - Biodiversity and Macroevolutionary Patterns
  - Crustal Dynamics, Mountain Building and Basin Evolution
  - Earth Resources and Sustainability
  - Field Geophysics (including fieldwork)
  - Geosciences Report
  - Global Environmental Change
  - Marine Geology
  - Metamorphism and Metamorphic Processes

### FINAL YEAR

**Compulsory module(s)**
- Earth and Planetary System Science (including fieldwork)
- Independent MSci Project

**Optional modules**
- You will select 75 credits from the following options:
  - Earth and Planetary Materials
  - Earthquake Seismology and Earthquake Hazards
  - Natural and Anthropogenic Hazards and Vulnerability
  - Palaeoceanography
  - Palaeoclimatology
  - Physical Volcanology and Volcanic Hazard
  - Tectonic Geomorphology
  - Biological Indicators of Environmental Change
  - Non-Biological Indicators of Environmental Change
  - Advanced Biodiversity and Macroevolutionary Studies
- You may take up to 30 credits outside the department.

### Your learning

We use a mixture of lectures, practical classes, field courses, directed reading, problem-orientated learning, private study and tutorials to enable you to gain the theoretical knowledge and practical skills demanded by the programme, as well as to develop key transferable skills such as critical analysis, report writing, team working and organisational skills.

### Assessment

You will be assessed by a combination of written examinations, practical examinations, coursework, independent project reports and sometimes an oral examination.

### Accessibility

Details of the accessibility of UCL buildings can be obtained from AccessAble. Further information can also be obtained from the UCL Student Support & Wellbeing team.
Entry requirements

**A LEVELS**

**Standard Offer:** AAB. Two sciences preferred.

**GCSE:** English Language and Mathematics at grade C or 5. For UK-based students, a grade C or 5 or equivalent in a foreign language (other than Ancient Greek, Biblical Hebrew or Latin) is required. UCL provides opportunities to meet the foreign language requirement following enrolment, further details at: www.ucl.ac.uk/ug-reqs.

**Contextual Offer:** BBB. Two sciences preferred.

**GCSE:** English Language and Mathematics at grade C or 5. For UK-based students, a grade C or 5 or equivalent in a foreign language (other than Ancient Greek, Biblical Hebrew or Latin) is required. UCL provides opportunities to meet the foreign language requirement following enrolment, further details at: www.ucl.ac.uk/ug-reqs.

**IB DIPLOMA**

**Standard Offer:** 36 points. A score of 17 points in three higher level subjects to preferably include two sciences, with no score lower than 5.

**Contextual Offer:** 32 points. A score of 15 points in three higher level subjects to preferably include two sciences, with no score lower than 5.

**CONTEXTUAL OFFERS – ACCESS UCL SCHEME**

As part of our commitment to increasing participation from underrepresented groups, students may be eligible for a contextual offer as part of the Access UCL scheme. For more information see www.ucl.ac.uk/prospectus.

**OTHER QUALIFICATIONS**

UCL considers a wide range of UK and international qualifications for entry into its undergraduate programmes. Full details are given at: www.ucl.ac.uk/otherquals.

**UNDERGRADUATE PREPARATORY CERTIFICATES (International foundation courses)**

UCL Undergraduate Preparatory Certificates (UPCs) are intensive one-year foundation courses for international students of high academic potential who are aiming to gain access to undergraduate degree programmes at UCL and other top UK universities.

Typical UPC students will be high achievers in a 12-year school system which does not meet the standard required for direct entry to UCL.

For more information see: www.ucl.ac.uk/upc.

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**TUITION FEES**

The fees indicated are for undergraduate entry in the 2021/22 academic year. The UK fees shown are for the first year of the programme at UCL only. Fees for future years may be subject to an inflationary increase. The Overseas fees shown are the fees that will be charged to 2021/22 entrants for each year of study on the programme, unless otherwise indicated below.

- **UK:** £9,250 (2021/22)
- **Overseas:** £31,200 (2021/22)

Full details of UCL’s tuition fees, tuition fee policy and potential increases to fees can be found on the UCL Students website.

**ADDITIONAL COSTS**

The department makes a substantial contribution towards fieldwork costs (ranging between £150-800 per student per trip), covering all accommodation and in-field transportation for all fieldwork which is organised by the department. The majority of the fieldtrips include breakfast and/or dinner. Some fieldtrips in the second year are self-catered. Students are expected to cover their transportation to and from the beginning of the field location for some of the 2nd and 3rd year non-UK field trips (cost of a return flight/train or bus), at an estimated cost of £200-£400. In the third year, there is an optional fieldtrip for 30 days of independent mapping. For this fieldtrip, the department provides a cheque for £800 to each student. In the fourth year, there is a 4-day trip to Germany. Students are expected to cover their transport to Germany (~£150). In-field transportation and accommodation (half-board) are covered by the department.

A guide including rough estimates for these and other living expenses is included on the UCL Fees and funding pages. If you are concerned by potential additional costs for books, equipment, etc., please get in touch with the relevant departmental contact (details given on this page).

**FUNDING**

Various funding options are available, including student loans, scholarships and bursaries. UK students whose household income falls below a certain level may also be eligible for a non-repayable bursary or for certain scholarships. Please see the Fees and funding pages for more details.

**CONTACT**

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**UK withdrawal from the EU**

For up-to-date information relating to specific key questions following the UK’s withdrawal from the EU, please refer to:

www.ucl.ac.uk/brexit.

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This information is for guidance only. It should not be construed as advice or relied upon and does not form part of any contract. For more information on UCL’s degree programmes please see the UCL Undergraduate Prospectus at www.ucl.ac.uk/prospectus.