Environmental Geoscience BSc / Environmental Geoscience is concerned with the interaction between the Earth sciences and human activity, and this BSc provides a sound topical background in the environmental aspects of the Earth sciences. The programme is fully accredited by the Geological Society of London.

**Key information**

**Programme starts**  
September 2018

**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 programme is fully accredited by the Geological Society of London.
- World-leading research in geophysical hazards, mineral, ice and rock physics and palaeoenvironmental analysis is undertaken in the department and is used in the development of our courses.
- World-class facilities include hosting the UK's only NASA Regional Planetary Image Facility, use of the UCL University of London Observatory, and collaboration with the Natural History Museum.

**Research Excellence Framework (REF) 2014**

The Research Excellence Framework, or REF, is the system for assessing the quality of research in UK higher education institutions. The 2014 REF was carried out by the UK’s higher education funding bodies, and the results used to allocate research funding from 2015/16.

- 92% rated 4* ('world-leading') or 3* ('internationally excellent')

Learn more about the scope of UCL’s research, and browse case studies, on our Research Impact website.

**Accreditation**

This programme is accredited by The Geological Society. Undergraduate students may join The Geology 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 0.5 or 1.0 credits, adding up to a total of 4.0 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 1.0 credit 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 human-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 waste outputs and the understanding and minimisation of geohazards. The strong emphasis on fieldwork provides a unique opportunity to develop independent and team skills, and problem-solving abilities.

The programme assumes no previous knowledge of the Earth sciences but builds on a firm foundation of basic science acquired during the first two years. The third year of teaching is research-led, based around the department's research strengths and research grouping, and includes a field-based independent mapping project.

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 both independent and team skills, and problem-solving abilities.

The BSc programme is identical to the first three years of the MSci programme.

**YEAR ONE**

**Core or 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.
Data taken from the ‘Destinations of Leavers from Higher Education’ survey undertaken by HESA looking at the destinations of UK and EU students in the 2013-2015 graduating cohorts six months after graduation.

---

**YEAR TWO**

<table>
<thead>
<tr>
<th>Core or compulsory module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isotope Geology</td>
</tr>
<tr>
<td>Maps, Images and Structures (including Italy fieldwork)</td>
</tr>
<tr>
<td>Structural Geology and Tectonics</td>
</tr>
<tr>
<td>Surface Processes and Structures (including Pyrenees fieldwork)</td>
</tr>
</tbody>
</table>

**Optional modules**

- You will select 2.0 credits of optional modules from the following:
  - Environmental Remote Sensing
  - Remote Sensing and Planetary Surfaces
  - Foundations of Physical Geoscience
  - Geomorphology
  - Global Geophysics
  - Hydroclimatology
  - Mathematics
  - Reconstructing Past Environments
  - Science and Ethics
  - Engaging the Public With Science
  - Science in Popular Culture

**FINAL YEAR**

<table>
<thead>
<tr>
<th>Core or compulsory module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geological and Environmental Mapping Project</td>
</tr>
<tr>
<td>Groundwater Science</td>
</tr>
</tbody>
</table>

**Optional modules**

- You will select 2.5 credits from the following options:
  - Advanced Geochemistry
  - Biodiversity and Macroevolutionary Patterns
  - Crustal Dynamics, Mountain Building and Basin Evolution
  - Earth Resources and Sustainability
  - Field Methods in Active Tectonics (including Abruzzo-Vesuvius fieldwork)
  - Geosciences Report
  - Global Environmental Change
  - Marine Geology

---

**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.

---

**Your career**

You will develop a number of skills, including the ability to gather and evaluate data, assess geo-environmental issues from a scientific standpoint, prepare written reports, lead discussion groups and use computational methods. Fieldwork provides a natural laboratory where you can develop rock identification, fabric recognition and map-making skills.

All our students are encouraged and helped towards making informed career choices. We have excellent relationships with many employers in diverse aspects of the Earth and planetary sciences, and students are actively guided towards achieving their potential at UCL in preparation for their future careers.

---

First destinations of recent graduates (2013-2015) from this programme at UCL include:

- Full-time student, MSc in Environmental Technology at Imperial College London
- Innovations Analyst, The Carbon Trust
- Full-time student, MSc in Palaeobiology at the University of Bristol
- Innovations Analyst, The Carbon Trust

**Your application**

Application for admission should be made through UCAS (the Universities and Colleges Admissions Service). Applicants currently at school or college will be provided with advice on the process; however, applicants who have left school or who are based outside the United Kingdom may obtain information directly from UCAS.

We will assess your application on the basis of your performance, or predicted performance academically, but we will also be looking for an indication of how your interest in natural and Earth sciences has developed, what aspects particularly appeal to you, and whether you have undertaken any research or reading to find out about the subject matter you wish to study.

We normally reach a decision on making an offer on the basis of the application alone. If you are resident in the UK and have been made an offer you will be invited to an applicant open day. This visit will include introductory talks on UCL Earth Sciences and our degree programmes, a tour of the department and UCL and a question and answer session.
Entry requirements

A LEVELS
Grades
AAA-ABB
Subjects
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
Points
34-36 overall.
Subjects
A score of 16-18 points in three higher level subjects, preferably to include two sciences, with no score lower than 5.

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)
The 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.

TUITION FEES
The fees indicated are for undergraduate entry in the 2018/19 academic year. The UK/EU fees shown are for the first year of the programme at UCL only. The Overseas fees shown are the fees that will be charged to 2018/19 entrants for each year of study on the programme, unless otherwise indicated below.

// UK & EU: £9,250 (2018/19)
// Overseas: £25,960 (2018/19)

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
Students will be required to pay for transportation to overseas field trips and food. (The department covers accommodation and transport costs in the UK.)

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
Dr Pieter Vermeesch
Email: earthsci@ucl.ac.uk
Telephone: +44 (0)20 7679 2428
Department: Earth Sciences

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/eu-referendum

Disclaimer
This information is for guidance only. It should not be construed as advice nor 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