# PROGRAMME SPECIFICATION

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| Name, title and level of final qualification(s) | **BSc Geology**<br>(Level 6) |
| Name and title of any exit qualification(s) | Dip HE Geology<br>Cert HE Geology |
| Is the programme offered with a Foundation Year? | No |
| Awarding Body | University of London |
| Teaching Institution(s) | Birkbeck, University of London |
| Home Department/other teaching departments | School of Natural Sciences |
| Location of delivery | Central London and Online |
| Language of delivery and assessment | English |
| Mode of study, length of study and normal start month | Full-time (3 years); Part-time (4 years); Part-time (6 years)<br>September |
| Professional, statutory or regulatory body | The Geological Society |
| QAA subject benchmark group(s) Higher Education Credit Framework for England | Earth Sciences, Environmental Sciences and Environmental Studies |
| UCAS code | F600 |
| Birkbeck Course Code | UUBSGLGY_C (full-time, 3 years)<br>UBSGLOGY_C (part-time, 4 years)<br>UBSGLOGD_C (part-time, 6 years) |
| HECoS Code | 100395 |
| Start date of programme | Pre 1980 |
| Date of programme approval | Pre 1980 |
| Date of last programme amendment approval | November 2022 |
| Valid for academic entry | **2025-26** |
| Date of last revision to document | 14/05/2025 |

## Admissions requirements

We welcome applicants without traditional entry qualifications as we base decisions on our own assessment of qualifications, knowledge and previous work experience. We may waive formal entry requirements based on judgement of academic potential.

UCAS tariff: 104 points, A level BCC

The UCAS tariff score is applicable to you if you have recently studied a qualification that has a UCAS tariff equivalence. UCAS provides a tariff calculator for you to work out what your qualification is worth within the UCAS tariff.

*Audience*
The BSc aims to attract:

a) UCAS students who require training and an accredited BSc to take up a career related to Geology and also those seeking to gain a broadly based BSc in science, plus applicants who wish to study geology for the purposes of intellectual endeavour without the desire to forge a new career or change to a new career;

b) Part-time students who require training and an accredited BSc to take up a career related to Geology and also those seeking to gain a broadly based BSc in science, plus applicants who wish to study geology for the purposes of intellectual endeavour without the desire to forge a new career or change to a new career;

c) Overseas students who require training and an accredited BSc to take up a career related to Geology and also those seeking to gain a broadly based BSc in science, plus applicants who wish to study geology for the purposes of intellectual endeavour without the desire to forge a new career or change to a new career.

## Course aims

*Main Aims*
BSc Geology will provide a broadly based and research-led introduction across the entire discipline of geology.

Consistent with the general aim of the teaching provision within the College to provide higher education both for (a) people otherwise engaged during the day, through flexible teaching contact hours and location, and (b) through UCAS admission, and in line with the benchmark statements for Earth Sciences (ES3), our BSc Geology aims to:

- Provide research-based teaching to enable students to gain a multi-disciplinary understanding of geology, both in theoretical terms and in terms of practical training in field geology.
- Widen admission, in particular through distance learning, to include those with genuine ability and enthusiasm, but lacking traditional academic qualifications;
- Foster independent and critical thought so that students can reach appropriate conclusions based on relevant evidence;
- Provide general skills in learning, information technology, data processing and communication appropriate to any subsequent employer;
- Provide research skills and a knowledge base that would allow graduates to proceed to masters and PhD programmes in the UK and abroad.

*Distinctive Features*
The BSc is taught face-to-face either full- or part-time in the evenings. Additionally, the BSc can be taken entirely by online distance learning via live streaming. The course provides both a

theoretical overview of geology and practical training in field geology. We also provide virtual field classes that can be studied in exceptional circumstances (including disability and other issues that may hinder participation in the field). The BSc programmes include routes through Cert HE Geology and Dip HE Geology**.**

**Course structure**

| Level | Module Code | Module Title | Credit | Status | Teaching term(s) |
|---|---|---|---|---|---|
| **Full-time – 3 years** | | | | | |
| **Year 1** [120 credits] | | | | | |
| 4 | SCES060S4 | Earth as a Planet | 30 | Comp | 1 |
| 4 | EASC042H4 | Life and the Fossil Record | 15 | Comp | 1 |
| 4 | EASC050H4 | Earth History | 15 | Comp | 2 |
| 4 | SCES061S4 | Planetary Materials | 30 | Comp | 2 |
| 4 | SCES062S4 | Introduction to Field Geology* | 30 | Comp | 3 |
| | *In exceptional circumstances, with the approval of the Programme Director, this module may be substituted with: SCES063S4 Introduction to Field Geology (Virtual). | | | | |
| **Year 2** [120 credits] | | | | | |
| 5 | SCES005H5 | Igneous Petrology | 15 | Comp | 1 |
| 5 | SCES008H5 | Sedimentary Petrology and Stratigraphy | 15 | Comp | 1 |
| 5 | EASC011H5 | Structural Geology and Tectonics | 15 | Comp | 1 |
| 5 | SCES006H5 | Metamorphic Petrology | 15 | Comp | 2 |
| 5 | SCES064S5 | Planetary Geophysics | 30 | Comp | 2 |
| 5 | SCES065H5 **or** SCES066H5 | Preparation for Map and Thesis **or** Preparation for BSc Research Project (depending which will be taken in year 3) | 15 | Comp | 1,2,3 |
| 5 | EASC054H5 | Field Mapping Training* | 15 | Comp | 3 |
| | *In exceptional circumstances, with the approval of the Programme Director, this module may be substituted with: SCES073H5 Planetary Exploration Analogue Mission. | | | | |
| **Year 3** [120 credits, no more than 60 credits per term] | | | | | |
| 6 | SCES069S6 **or** SCES070S6 | Map and Thesis **or** BSc Research Project | 30 | Comp | 1,2,3 |
| 6 | EASC041H6 | Global Tectonics | 15 | Comp | 1 |
| 6 | SCES050H6 | The Vertebrate Fossil Record | 15 | Comp | 2 |
| 6 | EASC044H6 | Geological Hazards | 15 | Comp | 2 |
| Plus 45 credits chosen from | | | | | |
| 6 | SCES047H6 | Planetary Interiors | 15 | Option | 1 |
| 6 | EASC059H6 | Volcanism in the Solar System | 15 | Option | 1 |
| 6 | SCES002H6 | Comets, Asteroids and Meteorites | 15 | Option | 2 |

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| 6 | SCES035H6 | Remote Sensing and Planetary Surfaces | 15 | Option | 2 |
| 6 | EASC048H6 | Earth's Resources and Raw Materials | 15 | Option | 3 |
| 6 | SCES075S6 | Advanced Field Geology | 30 | Option | 3 |
| 6 | SSGE125S6 | Climate and Society: Past, Present and Future | 30 | Option | 3 |
| 6 | SC05002S6 | Geology and Geomorphology for the Low-Carbon Transition<br>*This module will run from 2027/28 onwards* | 30 | Option | tbc |
| **Part-time – 4 years** | | | | | |
| **Year 1** [90 credits] | | | | | |
| 4 | SCES060S4 | Earth as a Planet | 30 | Comp | 1 |
| 4 | SCES061S4 | Planetary Materials | 30 | Comp | 2 |
| 4 | SCES062S4 | Introduction to Field Geology* | 30 | Comp | 3 |
| | *In exceptional circumstances, with the approval of the Programme Director, this module may be substituted with: SCES063S4 Introduction to Field Geology (Virtual). | | | | |
| **Year 2** [90 credits] | | | | | |
| 4 | EASC042H4 | Life and the Fossil Record | 15 | Comp | 1 |
| 5 | SCES005H5 | Igneous Petrology | 15 | Comp | 1 |
| 5 | SCES008H5 | Sedimentary Petrology and Stratigraphy | 15 | Comp | 1 |
| 4 | EASC050H4 | Earth History | 15 | Comp | 2 |
| 5 | SCES006H5 | Metamorphic Petrology | 15 | Comp | 2 |
| 5 | EASC054H5 | Field Mapping Training* | 15 | Comp | 3 |
| | *In exceptional circumstances, with the approval of the Programme Director, this module may be substituted with: SCES073H5 Planetary Exploration Analogue Mission. | | | | |
| **Year 3** [90 credits] | | | | | |
| 5 | EASC011H5 | Structural Geology and Tectonics | 15 | Comp | 1 |
| 5 | SCES064S5 | Planetary Geophysics | 30 | Comp | 2 |
| 5 | SCES065H5<br>**or**<br>SCES066H5 | Preparation for Map and Thesis<br>**or**<br>Preparation for BSc Research Project<br>*(depending which will be taken in year 3)* | 15 | Comp | 1,2,3 |
| 6 | SCES075S6<br>**or**<br>other | Advanced Field Geology<br>**or**<br>Other 30 credits of optional Level 6 modules, see list on 3-year specification | 30 | Option | 3<br><br>1, 2, 3 |
| **Year 4** [90 credits] | | | | | |
| 6 | SCES069S6<br>**or**<br>SCES070S6 | Map and Thesis<br>**or**<br>BSc Research Project | 30 | Comp | 1,2,3 |
| 6 | EASC041H6 | Global Tectonics | 15 | Comp | 1 |

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|---|---|---|---|---|---|
| 6 | SCES050H6 | The Vertebrate Fossil Record | 15 | Comp | 2 |
| 6 | EASC044H6 | Geological Hazards | 15 | Comp | 2 |
| 6 | - | 1 x 15 credits of option from level 6 not already taken, see 3-year pathway for list. | 15 | Option | 1, 2, 3 |
| **Part-time - 6 years** | | | | | |
| **Year 1** [60 credits] | | | | | |
| 4 | SCES060S4 | Earth as a Planet | 30 | Comp | 1 |
| 4 | SCES062S4 | Introduction to Field Geology* | 30 | Comp | 3 |
| | *In exceptional circumstances, with the approval of the Programme Director, this module may be substituted with: SCES063S4 Introduction to Field Geology (Virtual). | | | | |
| **Year 2** [60 credits] | | | | | |
| 4 | EASC042H4 | Life and the Fossil Record | 15 | Comp | 1 |
| 4 | EASC050H4 | Earth History | 15 | Comp | 2 |
| 4 | SCES061S4 | Planetary Materials | 30 | Comp | 2 |
| **Year 3** [60 credits] | | | | | |
| 5 | SCES005H5 | Igneous Petrology | 15 | Comp | 1 |
| 5 | SCES008H5 | Sedimentary Petrology and Stratigraphy | 15 | Comp | 1 |
| 5 | SCES006H5 | Metamorphic Petrology | 15 | Comp | 2 |
| 5 | EASC054H5 | Field Mapping Training* | 15 | Comp | 3 |
| | *In exceptional circumstances, with the approval of the Programme Director, this module may be substituted with: SCES073H5 Planetary Exploration Analogue Mission. | | | | |
| **Year 4** [60 credits] | | | | | |
| 5 | EASC011H5 | Structural Geology and Tectonics | 15 | Comp | 1 |
| 5 | SCES064S5 | Planetary Geophysics | 30 | Comp | 2 |
| 5 | SCES065H5<br>**or**<br>SCES066H5 | Preparation for Map and Thesis<br>**or**<br>Preparation for BSc Research Project<br>*(depending which will be taken in year 3)* | 15 | Comp | 1,2,3 |
| **Year 5** [60 credits] | | | | | |
| 6 | EASC041H6 | Global Tectonics | 15 | Comp | 1 |
| 6 | SCES050H6 | The Vertebrate Fossil Record | 15 | Comp | 2 |
| **and** | | | | | |
| 6 | SCES075S6<br>**or**<br>other | Advanced Field Geology<br>**or**<br>Other 30 credits of optional Level 6 modules, see option list on 3-year specification | 30 | Option | 3<br><br>1, 2, 3 |

| **Year 6** [60 credits] | | | | | |
|---|---|---|---|---|---|
| 6 | SCES069S6<br>**or**<br>SCES070S6 | Map and Thesis<br>**or**<br>BSc Research Project | 30 | Comp | 1,2,3 |
| 6 | EASC044H6 | Geological Hazards | 15 | Comp | 2 |
| 6 | - | 1 x 15 credit optional Level 6 module not already chosen, see 3-year specification | 15 | Option | 1, 2, 3 |

*Core:* *Module must be taken and passed by student*
*Compulsory:* *Module must be taken but can be considered for compensated credit (see CAS regulations paragraph 24)*
*Option:* *Student can choose to take this module*

*Organisation of the material*

The material is organised into both 30 credits and 15 credits modules that build towards the 360 credits required to complete the BSc. The material is delivered over Terms 1, 2 and 3 (Term 1 is ~October-December; Term 2 ~January-March; Term 3 ~May-July), and the final project or Map and Thesis also include independent work during the summer between your penultimate and final years. Delivery of modules occurs as follows:

i) During the evenings from Monday through to Friday from 6.00 – 9.00 pm, through face-to-face attendance in central London, or via live-streamed video depending on programme. A 15 credit module would typically be completed in a single term.

ii) Residential field classes occur in three 10-day blocks located either in the UK or overseas. They occur in Term 3, or the vacation between Term 2 and Term 3. These field classes are intended for face-to-face participation at the chosen field location, however we also offer alternatives in the case of exceptional circumstances (including disability and other issues that may hinder participation in the field), subject to Programme Director approval.

iii) 15 and 30 credit modules are examined through a variety of combinations of exams (may be face-to-face or online), assessed work, and student presentations. All assessments are to be completed before the start of the following term.

**How you will learn**

Your learning and teaching is organised to help you meet the learning outcomes (below) of the course. As a student, we expect you to be an active learner and to take responsibility for your learning, engaging with all of the material and sessions arranged for you.

Each course is divided into modules. You will find extensive information on the virtual learning site, Moodle (see Academic Support below), about each of your modules. This will include what to expect, the work you need to prepare, links to reading lists, information about how and when you will be assessed, etc. Additionally, video recordings of all class sessions are collected in Moodle for catching up if you miss a class session and/or for later revision.

Teaching is through a combination of classroom and field teaching that are designed to build up your skills and train you to carry out independent work and independent research during your Project or Map and Thesis. The ability to conduct independent work and research will facilitate transition to employment in industry, study at masters or PhD level (subject to final classification), and your your personal intellectual endeavours.

Students on the distance learning (fully-online) route through the programme equally are supported via the resources on Moodle, as described above. Instead of attending classes on-site, if you have chosen to study by distance learning, you will “attend” virtually, through live streamed lectures and practicals. This offers real-time Q&A interaction with the lecturer and with classmates. Beyond the scheduled, vitriual class sessions, lecturers are available during published office hours to discuss lecture content via email, telephone, or, if appropriate, live video link.

**How we will assess you**

The course will use a variety of assessment methods. Assessment is used to enhance your learning rather than simply to test it. For most of the modules associated with this course, your assessment will be through the following types of assessment.

As described above, 15 and 30 credit modules are examined through a variety of combinations of exams (face-to-face or online), assessed work, and student presentations. All assessments are to be completed by the end of each term.

**Learning outcomes (what you can expect to achieve)**

‘Learning outcomes’ indicate what you should be able to know or do at the end of your course. Providing them helps you to understand what your teachers will expect and also the learning requirements upon which you will be assessed.

At the end of this course, you should be able to:

1) Identify and understand the formation and significance a wide variety of geological, mineralogical and palaeontological materials.

2) Understand the geological settings of a a wide variety of geological, mineralogical and palaeontological materials, and interpret geological histories and geological scenarios from this relevant to industry and research.

3) Carry out practical skills in field geology relevant to industry and research.

4) Have a broad range of transferable skills including technical, IT, computing, communication, organisational and research skills.

**Careers and further study**

You will find Geology and Earth Science graduates in the following kinds of roles, as described in detail by the Geological Society, London (see https://www.geolsoc.org.uk/Geology-Career-Pathways/Careers/Job-Sectors), who accredit the BSc Geology:

- Mining and quarrying;
- Energy industries;
- Engineering Geology;
- Environmental Geology and contaiminated land;
- Hydrogeology;
- Natural Hazards and Risk;
- Education;
- Museum and library work;
- Publishing and broadcasting;
- Financial management of resources and risk.

Birkbeck’s BSc Geology graduates will complete with a set of valuable attributes, for example:

- The ability to work as part of a team and/or as an individual
- High-level oral and written communication skills in English, computer numerical skills and computer graphics skills
- Research skills
- Skills in evaluating and assessing types of information
- The ability to present yourself and an argument

Birkbeck offers a range of careers support to its students. You can find out more on the careers pages of our website.

**Academic regulations and course management**

Birkbeck's academic regulations are contained in its Common Award Scheme Regulations and Policies published by year of application on the Birkbeck website.

You will have access to a course handbook on Moodle and this will outline how your course is managed, including who to contact if you have any questions about your module or course.

**Support for your study**

Your learning at Birkbeck is supported by your teaching team and other resources and people in the College there to help you with your study. Birkbeck uses a virtual learning environment called Moodle and each course has a dedicated Moodle page and there are further Moodle sites for each of your modules. This will include your course handbook.

Birkbeck will introduce you to the Library and IT support, how to access materials online, including using Moodle, and provide you with an orientation which includes an online Moodle module to guide you through all of the support available. You will also be allocated a personal tutor and provided with information about learning support offered within your School and by the College.

Please check our website for more information about student support services. This covers the whole of your time as a student with us including learning support and support for your wellbeing.

We can offer some financial support in the form of small bursaries to help fund fieldwork and study materials, facilitated by financial contributions from alumni.

**Quality and standards at Birkbeck**

Birkbeck's courses are subject to our quality assurance procedures. This means that new courses must follow our design principles and meet the requirements of our academic regulations. Each new course or module is subject to a course approval process where the proposal is scrutinised by subject specialists, quality professionals and external representatives to ensure that it will offer an excellent student experience and meet the expectation of regulatory and other professional bodies.

You will be invited to participate in an online survey for each module you take. We take these surveys seriously and they are considered by the course team to develop both modules and the overall courses. Please take the time to complete any surveys you are sent as a student.

We conduct an annual process of reviewing our portfolio of courses which analyses student achievement, equality data and includes an action plan for each department to identify ongoing enhancements to our education, including changes made as a result of student feedback.

Our periodic review process is a regular check (usually every four years) on the courses by department with a specialist team including students.

Each course will have an external examiner associated with it who produces an annual report and any recommendations. Students can read the most recent external examiner reports on the course Moodle pages. Our courses are all subject to Birkbeck Baseline Standards for our Moodle module information. This supports the accessibility of our education including expectations of what information is provided online for students.

The information in this programme specification has been approved by the College's Academic Board and every effort has been made to ensure the accuracy of the information it contains.

Programme specifications are reviewed periodically. If any changes are made to courses, including core and/or compulsory modules, the relevant department is required to provide a revised programme specification. Students will be notified of any changes via Moodle.

Further information about specifications and an archive of programme specifications for the College's courses is available online.