### Programme Specification

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Awarding body</strong></td>
<td>University of London</td>
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<tr>
<td><strong>Teaching Institution</strong></td>
<td>Birkbeck College</td>
</tr>
<tr>
<td><strong>Programme Title(s)</strong></td>
<td>Grad Cert Environmental Geology</td>
</tr>
<tr>
<td><strong>Programme Code(s)</strong></td>
<td>GCGGLEVI_C</td>
</tr>
<tr>
<td><strong>UCAS code</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Home Department</strong></td>
<td>Earth and Planetary Sciences</td>
</tr>
<tr>
<td><strong>Exit Award(s)</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Duration of Study (number of years)</strong></td>
<td>2 years Part-time</td>
</tr>
<tr>
<td><strong>Mode of Study</strong></td>
<td>FT</td>
</tr>
<tr>
<td><strong>Level of Award (FHEQ)</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>Other teaching depts or institution</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Professional, Statutory Regulatory Body (PSRB) details</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>QAA Benchmark Statement</strong></td>
<td>Earth Sciences</td>
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### Programme Rationale & Aims

**Main Aims:**
Consistent with the general aim of the teaching provision within the College to provide higher education for people otherwise engaged during the day, through teaching in the evening, and in line with the benchmark statements for Earth Sciences (ES3), our Grad Cert Environmental Geology aims to:

- widen admission to include those with genuine ability and enthusiasm but lacking traditional academic qualifications;
- provide research-based teaching to enable students to understand a systems approach to geology, including:

  a) **Earth System Science**
  - A holistic view of the present and past interactions between components of the Earth system and the effects of extra-terrestrial influences on these interactions
  - Understanding of the cycling of matter and the flows of energy into, between and within the solid Earth, hydrosphere, atmosphere and biosphere
  - The chemistry, physics, biology and mathematics that underpin our understanding of Earth structure, materials and processes.

  b) **Major Geoscience Paradigms**
  - Uniformitarianism: the present is the key to the past; The extent of geological time
  - Plate tectonics

  c) **Temporal and Spatial Scales**
  - Geological time, including the principles of stratigraphy, radiometric dating, the stratigraphic column, rates of Earth processes, major events in Earth history
- Study of structures, materials and processes ranging in scale from atoms to planets

d) Earth Structure, Materials and Processes
- Studies of the structure and composition of the solid Earth (core, mantle, crust, asthenosphere, lithosphere etc.), the hydrosphere, atmosphere, cryosphere and biosphere and the processes operating within and between them.

e) Terminology, Nomenclature and Classification and Practical Knowledge
- Earth science terminology, nomenclature and classification of rocks, minerals, and geological structures.
- The identification of rocks, minerals and geological structures.
- Collection and documentation of geological information, including the production and interpretation of geological maps.
- Surveying and measurement both in the field and laboratory, and using qualitative, quantitative and instrumental techniques.

f) Awareness and Informed Concern of Earth Science Issues
- The exploration for, and the development and exploitation of, Earth resources
- Geological aspects of human impacts on the environment.
- Geohazards and their impacts on human societies.

- Earth science perspectives on sustainability and social awareness (e.g. renewable versus non-renewable resources, climate change, the history of life and biodiversity);
- foster independent and critical thought, so that students can reach appropriate conclusions based on relevant evidence;
- provide the practical field and laboratory skills necessary to contribute to that evidence;
- provide general skills in learning, information technology, data processing and communication appropriate to any subsequent employment.

**Distinctive Features:**
Part-time, evening, face-to-face study, and/or distance learning.

<table>
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<tr>
<th>Entry Criteria</th>
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<tr>
<td>Certificate of Higher Education in Geology or previous study to that level.</td>
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<tr>
<th>Learning Outcomes</th>
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<tr>
<td>To gain the qualification the learner will have demonstrated the following skills specified in the learning outcomes for approved modules in the programme and for the programme as a whole:</td>
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</table>

1. Subject Specific
   a) Recognising and using subject-specific theories, paradigms, concepts and principles

2. Intellectual
   a) Powers of observation, analysis and imagination to make decisions in the light of uncertainty |
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<tr>
<th>Heading</th>
<th>Details</th>
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<tr>
<td>b) Integration of information from fieldwork, experimental and theoretical investigations and have used both quantitative and qualitative approaches to acquiring and interpreting data.</td>
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3. Practical
a) Planning, conducting and reporting investigations including using secondary data
b) Collecting, recording and analysing data, using appropriate techniques in the field and laboratory
c) Undertaking investigations in field and laboratory in a safe manner, paying due attention to risk assessment, rights of access, health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders.

4. Personal and Social
a) Understanding individual and collective goals and responsibilities and performing in an appropriate way
b) Recognising and respecting the views and opinions of others; evaluating individual performance
c) Skills necessary for self-management and lifelong learning (time-management, working independently setting realistic targets)
d) Adaptable and flexible approach to work and study.

Learning, teaching and assessment methods

The teaching team are committed to the provision of face-to-face evening teaching, and the lecture remains central to the learning experience that we provide. Nevertheless, we use a wide range of other teaching methods. This diversity develops independence of learning and critical thought, and illustrates the value and nature of group work and teamwork. Modules from the Department of Earth and Planetary Sciences are provided as downloadable PDF files, containing full text, diagrams and photographs of lecture and practical material, as well as videos of lectures.

In advanced modules considerable time is given to practicals, poster sessions, oral presentations, independent research, problem-solving, and IT sessions. Field-based modules are available.

Assessment methods used and rationale

A variety of assessment methods are utilised in different modules to assess the different types of learning outcome. Assessment criteria clearly state expected levels of achievement. Comments of visiting examiners, both from within the university and from other universities are discussed at a variety of teaching committees and sub-boards and where possible suitable changes are made to the curriculum and syllabus. We believe that our criteria discriminate effectively because of the range of classes of degrees awarded with approval of external examiners.

Within the Grad Cert programme, assessment methods are very diverse. We believe that such diversity, together with associated instruction, increases the range of key skills, and allows students, with different existing skills, the opportunity to demonstrate their academic ability.
Many modules have continuous course assessment and most have an unseen written examination. Assessed coursework includes:

- practical reports;
- essays;
- problem solving and data analysis;
- oral communication and poster presentations;
- internet surveys;
- literature review

Workloads

Because of the special circumstances of Birkbeck College students we ensure a reasonable distribution of workloads by:

- setting staggered deadlines for course work;
- setting defined milestones within project work.

Some assessment has additional formative value, e.g. oral and poster presentations, and computer-based tests, are part of the assessment process but also contribute to the development of key skills. Coursework of different kinds allows students to use different skills. By providing coursework students learn key personal and transferable skills. Especially in later stages of the programme, assessed coursework provides the opportunity for students to become self-motivated learners.

Programme Description

This programme can be studied part-time over 2 years. To complete the Grad Cert Environmental Geology, students will take a total of 4 15-credit modules (60 credits).

Programme Structure

Part- Time programme

Years 1 and 2

<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Credits</th>
<th>Status*</th>
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<tbody>
<tr>
<td>6</td>
<td>EASC055H6</td>
<td>Assessed Field Techniques 3</td>
<td>15</td>
<td>option</td>
</tr>
<tr>
<td>6</td>
<td>SCES036H6</td>
<td>Environmental Isotopes</td>
<td>15</td>
<td>Option</td>
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<tr>
<td>6</td>
<td>SCES014H6</td>
<td>Palaeoclimatology</td>
<td>15</td>
<td>option</td>
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<tr>
<td>6</td>
<td>EASC044H6</td>
<td>Geological Hazards</td>
<td>15</td>
<td>option</td>
</tr>
<tr>
<td>6</td>
<td>EASC048H6</td>
<td>Earth’s Resources and Raw Materials</td>
<td>15</td>
<td>Option</td>
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<tr>
<td>6</td>
<td>EASC059H6</td>
<td>Volcanism in the Solar System</td>
<td>15</td>
<td>Option</td>
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Total 60

Status*

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module
**Regulations**

- **Admissions**
  This programme adheres to the College Admissions Policy

- **Credit Transfer**
  Accredited Prior Learning will be considered in line with the College Policy on Accredited Prior Learning

- **Programme Regulations**
  This programme adheres to the College Common Awards Scheme
  [http://www.bbk.ac.uk/registry/policies/regulations](http://www.bbk.ac.uk/registry/policies/regulations)

- **Programme Specific Regulations (or not applicable)** N/A

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**Student Attendance Framework – in brief**

The full version of the ‘Student Attendance Framework’ is available

**Principle**

Consistent and regular student attendance in class (or equivalent) promotes and affords student success. Inconsistent and irregular attendance is less likely to result in student success and is consistent with lower marks and degree classifications being achieved and awarded.

**Attendance expectation**

Birkbeck, University of London expects you to consistently attend all timetabled sessions, including lectures, seminars, group and individual tutorials, learning support sessions, workshops, laboratories, field trips, inductions and demonstrations.

**E-Registers**

All Birkbeck students are issued with student cards. Students are expected to take them to classes and to assessment venues and to present them to a member of staff if requested. This is for the purpose of identifying Birkbeck students.

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**Student Support and Guidance**

All Birkbeck students have access to a range of student support services, details can be found on our website here: [http://www.bbk.ac.uk/student-services](http://www.bbk.ac.uk/student-services)

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**Methods of Enhancing Quality and Standards**

The College has rigorous procedures in place for the monitoring and enhancing its educational provision. This includes regular monitoring of programmes drawing on feedback from various sources including external examiner’s reports, student feedback, student achievement and progression data. In addition, departments are reviewed every four to five years through the internal review process that includes external input.
For more information please see the Academic Standards and Quality website [http://www.bbk.ac.uk/registry/about-us/operations-and-quality](http://www.bbk.ac.uk/registry/about-us/operations-and-quality).

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<tbody>
<tr>
<td>24</td>
<td><strong>Programme Director</strong></td>
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<tr>
<td>25</td>
<td><strong>Start Date</strong> <em>(term/year)</em></td>
</tr>
<tr>
<td>26</td>
<td><strong>Date approved by TQEC</strong></td>
</tr>
<tr>
<td>27</td>
<td><strong>Date approved by Academic Board</strong></td>
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<tr>
<td>28</td>
<td><strong>Date(s) updated/amended</strong></td>
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