



1. Programme Title(s) and Code(s):

<i>Programme Title</i>	<i>UCAS Code</i>	<i>GU Code</i>
BSc Archaeology and Earth Science	FF64	FF64-2208

2. Academic Session:

2016-17

3. SCQF Level (see [Scottish Credit and Qualifications Framework Levels](#)):

10

4. Credits:

480

5. Entrance Requirements:

Please refer to the current undergraduate prospectus at: <http://www.gla.ac.uk/undergraduate/prospectus/>

6. ATAS Certificate Requirement (see [Academic Technology Approval Scheme](#)):

ATAS Certificate not required

7. Attendance Type:

Full Time

8. Programme Aims:

Earth Science is one of the broadest of the sciences, being the study of the Earth and the way it works, its properties and materials, its history and evolution, its natural processes and the ways in which the planet and its inhabitants interact.

The aims of the Earth Science combined programme encompass an understanding of all aspects

¹ This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if full advantage is taken of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each course can be found in course handbooks and other programme documentation and online at www.gla.ac.uk

The accuracy of the information in this document is reviewed periodically by the University and may be checked by the Quality Assurance Agency for Higher Education.

of Earth Science, and their synthesis. The BSc programme builds from an introduction to Earth Science into a broader understanding in the Honours courses – the programme involves theoretical study and practical work in the laboratory and field.

Specific Aims of the Programme:

The programme aims are to:

- address the main issues considered desirable in an Earth Science syllabus by the subject Benchmarking statement ;
- enable students who will not normally possess any prior knowledge of Earth Science to begin to understand the geology of the Earth;
- develop the students' knowledge of the Earth and the applications of this knowledge to the solution of Earth Science problems;
- enable students to develop their capacity to learn and, in particular to develop their:
 - ability to synthesize a wide range of Earth Science data;
 - descriptive, observational, interpretational and communication skills;
 - problem-solving capacities and reasoning skills in theoretical, laboratory and field situations;

9. Intended Learning Outcomes of Programme:

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas.

Knowledge and Understanding

At the end of the programme students should be able to:

- Demonstrate theoretical and practical knowledge and understanding of the central facts, concepts and terminology of Earth Science.
- Demonstrate theoretical and practical knowledge of the following core areas: Palaeontology/Stratigraphy; Sedimentary, Igneous and Metamorphic Petrology; Structural Geology/Maps; Global Tectonics; Geomorphology.
- Demonstrate theoretical and practical knowledge and understanding of some of the following optional material: Coastal processes; Hydrology; Economic Mineralogy; Engineering Earth Science; Environmental Geoscience and Hydrogeology; Geographical Information Systems; Macrogeomorphology; Palaeoclimatology.

Skills and Other Attributes

Subject-specific/practical skills

- Apply information technology skills to the analysis and presentation of field and laboratory data, and the solution of geological problems.
- Plan, conduct and report investigations, collect, record and analyse data in the field and in the laboratory.
- Demonstrate competence in safety techniques, and the assessment of risk for ifield and laboratory work.

Intellectual skills

- Recognize and apply Earth Science theories and principles.
- Acquire the spatial and temporal framework required for Earth Science investigations.
- Analyse, synthesize and summarize information.

Transferable/key skills

- Apply logical analysis to problem solving.
- Appreciate, understand, summarise and report the key aspects of Earth Science problems.

- Demonstrate a range of employability skills.
- Apply the skills necessary for self-managed and lifelong learning.

10. Typical Learning and Teaching Approaches:

Learning and teaching are effected by the following methods:

Lecture Format: Lectures, IT/Computing instruction, Courseware work, Video-presentations, Database use, Lecture-demonstrations.

Practical and Field Format: Laboratory work, Project work, Group discussion, Seminar instruction, Skills workshops (laboratory/field), Independent project, Teamworking skills, Library work, Report/technical/site report writing instruction, Small group work.

Private study

11. Typical Assessment Methods:

Assessment is carried out in three ways:

Written degree examinations

- Including essay format and practical testing

Formal continuous assessment of coursework (formative and summative)

- Formal continuous assessment of coursework includes:
Essays, seminars, laboratory reports, field reports, rock descriptions.

Informal continuous assessment of coursework

- Including:
Verbal feedback on laboratory and field-based work.

12. Programme Structure and Features:

The B.Sc. Combined Honours programme in Earth Science and another subject is fulltime over four years and contains a minimum of 480 credits, 240 of which must be awarded for Honours courses. The four years of study are divided into two pre-Honours years in which introductory courses are followed – including Earth Science 1 and Earth Science 2 - each year being worth 120 credits. These years are followed by two Honours years in which students specialise in Earth Science, plus the relevant other subject (Archaeology). Each year is worth 120 credits. The degree is governed by the regulations of the College of Science and Engineering, and progress regulations will normally operate.

Year 1

Earth Science 1X and Earth Science 1Y (20 credits each)

Level 1 courses in the relevant second subject (Archaeology) (40 credits)

Level 1 course in a third subject (40 credits)

Exit point: Certificate of Higher Education

Year 2

Earth Science 2P (20 credits)

Earth Science 2Q (10 credits)

Earth Science 2R (10 credits)

Earth Science 2U (20 credits)

Level 2 courses the second subject (Archaeology) (60 credits).

Exit point: Diploma of Higher Education

Year 3

3H Combined Earth Science courses totalling 60 credits
3H Combined – other subject (Archaeology) (60 credits).
Exit point: BSc Designated degree

Year 4

4H Combined Earth Science courses totalling 60 credits
4H Combined – other subject (Archaeology) (60 credits).

Earth Science 1X and Earth Science 1Y are beginners' courses, no previous knowledge of Earth Science is required to join these courses.

Progress Requirements

In addition to the general requirements of Science:

Year 1 to Year 2: Earth Science 1X and Earth Science 1Y both at grade D3 or better and normally a Grade Point Average of 12 or better in these courses.

Year 2 to Year 3: Earth Science 2P, 2Q, 2R, 2U all at grade D or better, participation in the residential field excursion in Earth Science 2U and a Grade Point Average of 12 or better.

Year 3 to Year 4: Entrants must have attained an average grade D3 or better in the Level 3H courses.

Weighting of the marks for the final degree follows a 40:60 ratio (3H:4H) over the two honours years.

13. Programme Accredited By:

N/A

14. Location(s):

Glasgow

15. College:

College of Science and Engineering

16. Lead School/Institute:

Geographical and Earth Sciences [REG30400000]

17. Is this programme collaborative with another institution:

Select...

18. Awarding Institution(s):

University of Glasgow

19. Teaching Institution(s):

20. Language of Instruction:

English

21. Language of Assessment:

English

22. Relevant QAA Subject Benchmark Statements (see [Quality Assurance Agency for Higher Education](#)) and Other External or Internal Reference Points:

This Programme Specification is informed by the QAA Benchmark Statement for Earth Sciences, Environmental Sciences and Environmental Studies (ES3):

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/default.asp>

and by the SCQF Level descriptors:

<http://www.scqf.org.uk/levels.asp>

Graduates will have appropriate knowledge of the main aspects of Earth science given below.

Earth system science: An holistic view of the present and past interactions between components of the Earth system; 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.

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, and the evolution of life as revealed by the fossil record; The study of structures, materials and processes ranging in scale from atoms to planets.

Earth structure, materials and processes: The structure and composition of the solid Earth (core, mantle, crust, asthenosphere, lithosphere etc.), the hydrosphere, the atmosphere, the cryosphere and the biosphere and the processes operating within and between them.

Terminology, nomenclature and classification and practical knowledge: Earth science terminology, nomenclature and classification of rocks, minerals, fossils, and geological structures; The identification of rocks, minerals, fossils, and geological structures; Collection and documentation of geological information in the field, including the production and interpretation of geological maps; Surveying and measurement both in the field and laboratory, and using qualitative, quantitative and instrumental techniques.

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).

23. Additional Relevant Information (if applicable):

Support for students is provided by the Postgraduate/Undergraduate Adviser(s) of Studies supported by University resources such as the Student Learning Service (www.gla.ac.uk/services/sls/), Counselling &

Psychological Services (www.gla.ac.uk/services/counselling/), the Disability Service (www.gla.ac.uk/services/studentdisability/) and the Careers Service (www.gla.ac.uk/services/careers/).

Further information for intending students is available on the School of Geographical and Earth Sciences website at:

<http://www.ges.gla.ac.uk>

Current students should consult the Course Guides for the relevant years of the course at:

<http://www.ges.gla.ac.uk:443/degrees/undergraduate/earthscience>

24. Date of approval:	
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