

Royal Holloway, University of London

Course specification for an undergraduate award

BSc Environmental Geology (F630) and BSc Environmental Geology with a Year in Industry (F690)

Section 1 – Introduction to your course

This course specification is a formal document, which provides a summary of the main features of your course and the learning outcomes that you might reasonably be expected to achieve and demonstrate if you take full advantage of the learning opportunities that are provided. Further information is contained in the College prospectus, and in various handbooks, all of which you will be able to access online. Alternatively, further information on the College's academic regulations and policies can be found [here](#). Further information on the College's Admissions Policy can be found [here](#).

Your degree course in BSc Environmental Geology is delivered in three stages, each of which normally comprises one year of full-time study, during which you must follow modules to the value of 120 credits. If you choose to take a Year in Industry after completing your second stage of study, your course will be delivered in four stages, each of which normally comprises one year of full-time study, during which you must follow modules to the value of 120 credits (apart the third stage which is spent on an industrial placement, see 4 below for more information). Courses are characterised by the provision of a broad base in skills and knowledge in stages one and two, followed by opportunities for specialisation in the final stage. The course also has a strong compulsory spine, running into stages two and four, in research training and fieldwork, culminating in the production of an independent project. Training in data collection, data analysis and presentation of reports is provided in core modules along with a range of transferrable skills that contribute to the successful progression of Earth Science graduates into a wide range of careers. Teaching and learning in the course are designed to provide graduates with a sound basis of knowledge and skills in the earth and environmental sciences akin to those required by a professional environmental geologist. Specialist modules offered in the final stage are closely informed by the active research of staff, particularly in the general areas of: natural geohazards, contemporary and long-term environmental change and management; coastal and estuarine sedimentary environments; environmental pollution; the Earth's resources; modern atmospheres.

While Royal Holloway keeps all the information made available under review, courses and the availability of individual modules, especially optional modules are necessarily subject to change at any time, and you are therefore advised to seek confirmation of any factors which might affect your decision to follow a specific course. In turn, Royal Holloway will inform you as soon as is practicable of any significant changes which might affect your studies.

The following is a brief description for some of the most important terminology for understanding the content of this document:

Degree course – May also be referred to as 'degree programme' or simply 'programme', these terms refer to the qualification you will be awarded upon successful completion of your studies.

Module – May also be referred to as 'course', this refers to the individual units you will study each year to complete your degree course. Undergraduate degrees at Royal Holloway comprise a combination of modules in multiples of 15 credits to the value of 120 credits per year. On some degree courses a certain number of optional modules must be passed for a particular degree title.

Section 2 – Course details			
Date of specification update	August 2022	Location of study	Egham Campus
Course award and title	BSc Environmental Geology or BSc Environmental Geology with a Year in Industry	Level of study	Undergraduate
Course code	2261	UCAS code	F630, F690
Year of entry	2023/24		
Awarding body	Royal Holloway, University of London		
Department or school	Department of Earth Sciences School of Life Sciences and the Environment	Other departments or schools involved in teaching the course	N/A
Mode(s) of attendance	Full-time	Duration of the course	3 years – BSc Environmental Geology 4 years – BSc Environmental Geology with a Year in Industry
Accrediting Professional, Statutory or Regulatory Body requirement(s)	Geological Society. To satisfy the requirements of the Geological Society of London you will need to meet certain conditions. In the case of BSc Environmental Geology or BSc Environmental Geology with a Year in Industry this means that you must successfully complete an independent project.		
Link to Coursefinder for further information:	https://www.royalholloway.ac.uk/studying-here/	For queries on admissions:	https://royalholloway.ac.uk/applicationquery

Section 3 – Degree course structure					
3.1 Mandatory module information					
The following table summarises the mandatory modules which students must take in each year of study					
Year	Module code	Module title	Credits	FHEQ level	Module status (Mandatory Condonable MC or Mandatory Non-Condonable MNC)
1	GL1101	Evolving Earth	30	4	MC
1	GL1201	Dynamic Planet	30	4	MC
1	GL1301	Human Interactions with the Earth	30	4	MC
1	GL1500	Physics and Chemistry of the Earth	15	4	MC
1	GL1900	Earth Scientists Toolkit	15	4	MC
2	GL2200	Stratigraphy and History of Life	15	5	MC
2	GL2210	Regional Geology	15	5	MC
2	GL2320	Geohazards	15	5	MC
2	GL2410	Geochemistry	15	5	MC
2	GL2930	Geological Field Skills for Environmental Students	15	5	MNC
** for year in industry students only) 3	GL3141	Applied Geology (Industrial Placement)	30	6	MNC
3 (stage 4 for year in industry students)	GL3010	Techniques in Earth Sciences	15	6	MC

3 (stage 4 for year in industry students)	GL3300	Aqueous Geology	15	6	MC
3 (stage 4 for year in industry students)	GL3321	Environmental Geology Project	30	6	MNC
3 (stage 4 for year in industry students)	GL3940	Methods of Environmental Investigation	15	6	MC

This table sets out the most important information for the mandatory modules on your degree course. These modules are central to achieving your learning outcomes, so they are compulsory, and all students on your degree course will be required to take them. You will be automatically registered for these modules each year. Mandatory modules fall into two categories: 'condonable' or 'non-condonable'.

In the case of mandatory 'non-condonable' (MNC) modules, you must pass the module before you can proceed to the next year of your course, or to successfully graduate with a particular degree title. In the case of mandatory 'condonable' (MC) modules, these must be taken but you can still progress or graduate even if you do not pass them. Please note that although Royal Holloway will keep changes to a minimum, changes to your degree course may be made where reasonable and necessary due to unexpected events. For example: where requirements of relevant Professional, Statutory or Regulatory Bodies have changed and course requirements must change accordingly, or where changes are deemed necessary based on student feedback and/or the advice of external advisors, to enhance academic provision.

3.2 Optional modules

In addition to mandatory modules, there will be a number of optional modules available during the course of your degree. Although Royal Holloway will keep changes to a minimum, new options may be offered, or existing ones may be withdrawn. For example, where reasonable and necessary due to unexpected events, where requirements of relevant Professional, Statutory or Regulatory Bodies (PSRBs) have changed and course requirements must change accordingly, or where changes are deemed necessary on the basis of student feedback and/or the advice of External Advisors, to enhance academic provision. There may be additional requirements around option selection; please contact the Department for further information.

In stage 2, you will select 45 credits of optional modules.

In stage 3 (or 4 if you are taking the BSc Environmental Geology with a Year in Industry), you will select 45 credits of optional modules.

If you are studying for the BSc Environmental Geology with a Year in Industry you must take GL3141 Applied Geology (Industrial Placement) (30 credits) between 2 and 4.

Section 4 - Progressing through each year of your degree course

For further information on the progression and award requirements for your degree, please refer to Royal Holloway's [Academic Regulations](#).

Progression throughout the year/s is monitored through performance in summative or formative coursework assignments. Please note that if you hold a Student Visa and you choose to leave (or are required to leave because of non-progression) or complete early (before the course end date stated on your CAS), then this will be reported to UKVI.

All first-year undergraduate students are required to take and pass the non-credit bearing Moodle-based Academic Integrity module SS1001 to progress into the second year of study (unless their course includes the alternative mandatory SS1000 module). The pass mark for the module assessment is stated in the on-line Academic Integrity Moodle module. Students may attempt the assessment as often as they wish with no penalties or capping. Students who meet the requirements for progression as stipulated in the [College's Undergraduate Regulations](#) (Section: Conditions for progression to the next stage) but fail to pass the Moodle-based Academic Integrity module will not be permitted to progress into their second year of academic study at the College.

BSc Environmental Geology with a Year in Industry only - The third year of this degree course will be spent on a work placement. Students are supported by their academic department and the Royal Holloway Careers Service to find a suitable placement. However, Royal Holloway cannot guarantee that all students who are accepted onto this degree course will secure a placement, and the ultimate responsibility lies with the student. You will need to achieve an agreed level of academic performance to proceed onto, or remain on, a placement as detailed in the course specification and the College's Undergraduate Regulations. This year forms an integral part of the degree course and students will be asked to complete assessed work. The mark for this work will count towards the degree. For students on the Year in Industry course GL3141 is mandatory non-condonable and must be passed to qualify for the degree title Year in Industry.

Section 5 – Educational aims of the course

- to provide a sound and extensive basis for the study of Geology relating to the natural environment, by developing relevant knowledge and understanding, and transferable skills;
- to provide a flexible and progressive structure in which you are able to gain knowledge, understanding and appropriate skills relating to distinctive research specialisms;
- to offer a range of specialist modules and research projects which allow you to develop expertise and research interests in your chosen field;
- to equip you with the knowledge and skills appropriate for a career in the Earth Sciences, and generally to provide you with a range of personal attributes relevant to the world beyond Higher Education, enabling you to engage in lifelong learning and to contribute to the wider community.

Section 6 - Course learning outcomes

In general terms, the courses provide opportunities for students to develop and demonstrate the following learning outcomes. (*Categories – Knowledge and understanding (K), Skills and other attributes (S), and Transferable skills (*)*)

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| <ol style="list-style-type: none"> 1. The scientific, interdisciplinary study of the physical, chemical and biological processes operating on and within the Earth (K); 2. The interaction of these processes in the consideration of the Earth as a dynamic system through time, (crust-mantle processes, surface processes, biosphere, atmosphere and hydrosphere) (K); 3. The composition and structure of the Earth, and how these influence the natural environment (K); 4. The concept of spatial variation, and thinking in 3-dimensional space and 4-dimensional space and time (K); 5. The operation of physical systems in, and on the surface of, the Earth (K); 6. The significance of time and historical change in the physical world (K); 7. The techniques of investigation in the Earth sciences (geophysical, geochemical, remote sensing, geological data collection and analysis) (K); 8. The main methods and decision-making strategies used in the critical analysis and interpretation of geological information (K); 9. The application of the Earth Sciences to resource exploitation (hydrocarbons, minerals, water), civil and environmental engineering (construction, waste disposal) and environmental hazards (earthquakes, volcanic eruptions, floods, landslides) (K); 10. The social and political role of the Earth Sciences in the exploitation and conservation of geological resources (K); 11. Develop a strategy for tackling a scientific problem (S); 12. Collect, document and analyse different types of data using appropriate techniques and methodologies (S); 13. Synthesise data and information, and recognise or formulate hypotheses for the interpretation of this information (S); | <ol style="list-style-type: none"> 14. The description and interpretation of rocks and minerals in hand specimen and through the use of a petrological microscope (S); 15. The analysis and interpretation in time and space of structural and stratigraphic data presented as geological maps (S); 16. Reduction and interpretation of geophysical and other remotely sensed data (S); 17. The design and analysis of experiments in a safe and effective manner (S); 18. The recording of environmental data in spatial context (S); 19. The collection of rocks, minerals, fossils and environmental media in a safe, efficient and environmentally sensitive manner (S); 20. The attainment of certain standards of numeracy (S*); 21. The ability to use appropriate computer technology and communication using the internet (S*); 22. The use of libraries and the retrieval of information from diverse sources (S*); 23. The ability to assemble information, analyze and synthesize results and present them in a variety of reporting formats including short written reports, longer dissertations and presentation as posters and oral presentations (S*); 24. Working in a team, setting goals by discussion, and sharing information and ideas to develop a collective outcome to a problem (S*); 25. The use of multiple mediums to communicate science to a wide range of audiences (S*). |
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Section 7 - Teaching, learning and assessment

The learning outcomes are embedded within the mandatory and optional modules available to the students. A progression of knowledge and understanding is achieved by starting with a basic grounding, which is subsequently reinforced and developed through application to specialist topics. In stages one and two, different aspects are taught as 30 or 15 credit modules, these modules are linked through tutorial exercises and most importantly through the mandatory field and research skills course where the application of theory and practical skills learnt in class are used to solve geological and environmental problems. In the final stage, specialist topics utilise this broad grounding to build more in-depth knowledge and understanding of certain sub-disciplines. Integration of all aspects of the final stage of the taught course occurs through the independent research project and the final year field trip. Practical classes comprise 60% of the timetabled study time, reflecting the emphasis on learning through practical study. Lectures are used to introduce material and provide a context for private study. Tutorials supplement and reinforce knowledge and understanding. An appropriate field and research skills course provides opportunities for you to apply concepts developed in the classroom and lecture theatre and is a fundamental aspect of the teaching course. Field and laboratory project work carried out as individuals or in teams represents an opportunity for you to develop in-depth knowledge of specialist areas. Transferable, laboratory and field skills are identified within the learning outcomes of modules and summarized in a skills progression chart in the undergraduate handbook.

Assessment of skills, knowledge and understanding is by means of formal examinations, coursework practical exercises, literature research reports, fieldwork and laboratory exercises and reports, oral presentations and independent dissertations. Independent research projects in stage three provide opportunities to develop and integrate a wide range of discipline-specific and transferable skills and students are encouraged to regard these as an important forum for demonstrating their abilities. Full details of the assessments for individual modules can be obtained from the [Department](#).

Contact hours come in various forms and may take the form of time spent with a member of staff in a lecture or seminar with other students. Contact hours may also be laboratory or, studio-based sessions, project supervision with a member of staff, or discussion through a virtual learning environment (VLE). These contact hours may be with a lecturer or teaching assistant, but they may also be with a technician, or specialist support staff.

The way in which each module on your degree course is assessed will also vary, however, the assessments listed above are all 'summative', which means you will receive a mark for it which will count towards your overall mark for the module, and potentially your degree classification, depending on your year of study. On successful completion of the module you will gain the credits listed. 'Coursework' might typically include a written assignment, like an essay. Coursework might also include a report, dissertation or portfolio. 'Practical assessments' might include an oral assessment or presentation, or a demonstration of practical skills required for the particular module

More detailed information on modules, including teaching and learning methods, and methods of assessment, can be found via the online [Module Catalogue](#). The accuracy of the information contained in this document is reviewed regularly by the university, and may also be checked routinely by external agencies, such as the Quality Assurance Agency (QAA).

Section 8 – Additional costs	
<p>There are no single associated costs greater than £50 per item on this degree course.</p> <p>The department will provide you with a set of essential field work equipment, for example a hard hat, compass in your first year. Some of the mandatory modules involve attending a field trip; these costs are paid for by the department.</p>	
<p>These estimated costs relate to studying this particular degree course at Royal Holloway. General costs such as accommodation, food, books and other learning materials and printing etc., have not been included, but further information is available on our website.</p>	

Section 9 – Indicators of quality and standards	
QAA Framework for Higher Education Qualifications (FHEQ) Level	4-6
<p>Your course is designed in accordance with the FHEQ to ensure your qualification is awarded on the basis of nationally established standards of achievement, for both outcomes and attainment. The qualification descriptors within the FHEQ set out the generic outcomes and attributes expected for the award of individual qualifications. The qualification descriptors contained in the FHEQ exemplify the outcomes and attributes expected of learning that results in the award of higher education qualifications. These outcomes represent the integration of various learning experiences resulting from designated and coherent courses of study.</p>	
QAA Subject benchmark statement(s)	http://www.qaa.ac.uk/quality-code/subject-benchmark-statements
<p>Subject benchmark statements provide a means for the academic community to describe the nature and characteristics of courses in a specific subject or subject area. They also represent general expectations about standards for the award of qualifications at a given level in terms of the attributes and capabilities that those possessing qualifications should have demonstrated.</p>	

Section 10– Intermediate exit awards (where available)		
You may be eligible for an intermediate exit award if you complete part of the course as detailed in this document. Any additional criteria (e.g. mandatory modules, credit requirements) for intermediate awards is outlined in the sections below.		
Award	Criteria	Awarding body
Diploma in Higher Education (DipHE)	Pass in 210 credits of which at least 90 must be at or above FHEQ Level 4 and at least 120 of which must be at or above FHEQ Level 5	Royal Holloway and Bedford New College
Certificate in Higher Education (CertHE)	Pass in 120 credits of which at least 90 must be at or above FHEQ Level 4	Royal Holloway and Bedford New College