

Course Information Document: Undergraduate

For Academic Year 2025/26

1. Course Summary

Names of programme and award title(s)	BSc (Hons) Geology* BSc (Hons) Geology (Applied Geophysics)* BSc (Hons) Geology (Environmental Geoscience)* BSc (Hons) Geology (Volcanology)* *all programmes include 'with International Year' and 'with Work Placement Year' options (see Annex for details)
Award type	Single Honours
Mode of study	Full-time
Framework of Higher Education Qualification (FHEQ) level of final award	Level 6
Normal length of the programme	3 years; 4 years with either the International Year or Placement Year between years 2 and 3
Maximum period of registration	The normal length as specified above plus 3 years
Location of study	Keele Campus
Accreditation (if applicable)	The Geology programmes are accredited by the Geological Society of London.
Regulator	Office for Students (OfS)
Tuition Fees	<p>UK students:</p> <p>Fee for 2025/26 is £9,535*</p> <p>International students:</p> <p>Fee for 2025/26 is £17,700**</p> <p>The fee for the international year abroad is calculated at 15% of the standard year fee</p> <p>The fee for the work placement year is calculated at 20% of the standard year fee</p>

How this information might change: Please read the important information at <http://www.keele.ac.uk/student-agreement/>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

* These fees are regulated by Government. We reserve the right to increase fees in subsequent years of study in response to changes in government policy and/or changes to the law. If permitted by such change in policy or law, we may increase your fees by an inflationary amount or such other measure as required by government policy or the law. Please refer to the accompanying Student Terms & Conditions. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

** These fees are for new students. We reserve the right to increase fees in subsequent years of study by an inflationary amount. Please refer to the accompanying Student Terms & Conditions for full details. Further

2. What is a Single Honours programme?

The Single Honours programme described in this document allows you to focus more or less exclusively on this subject. In keeping with Keele's commitment to breadth in the curriculum, the programme also gives you the opportunity to take some modules in other disciplines via the Global Challenge Pathways as part of a 360-credit Honours degree. Thus it enables you to gain, and be able to demonstrate, a distinctive range of graduate attributes.

3. Overview of the Programme

Our Geology programme, where science meets sustainability, prepares you to tackle the world's most pressing environmental challenges, from understanding climate change to developing carbon-neutral energy sources and pioneering sustainable mineral extraction and carbon sequestration techniques.

Geology is an interdisciplinary field that explores Earth's origins, the evolution of life, and the exploration, extraction and management of our planet's natural resources. You'll gain a comprehensive understanding of the processes shaping our world and the skills to manage its valuable resources sustainably.

As a discipline geology introduces you into a broad range of subject specific knowledge, skills and methods. Geology also draws from disciplines such as chemistry, biology, physics, geography and environmental science, ensuring you receive a well-rounded education. This integrative approach reflects Keele's ethos of interdisciplinarity, equipping you with diverse and transferable skills highly sought after in various industries.

At Keele, we prioritise practical and applied based learning. Our programme is designed to give you as much experience using equipment, samples and digital resources as possible. Rather than giving you data to work with, we always try to provide you with the means to gather your own data to analyse and interpret. You will undertake a range of residential and one day field courses, both near campus and further away, where you will experience a range of geological features and learn a wide range of geoscience skills. With society's increasing demand for natural resources, geologists are more essential than ever, promising you a bright future with excellent job opportunities.

We have moved away from traditional exams and have designed a wide range of assessments which let you apply your knowledge and skills, and make use of equipment and data.

Join Keele University's Geology programme and prepare yourself for a buoyant and well-paid career in the geosciences. Your journey towards making a global impact starts here.

4. Aims of the programme

The broad aims of the programme are to:

- get a broad-based introduction to Geology at Level 4 that does not require previous knowledge of geology topics, and to utilise the material covered at Level 4 to lay the foundations for detailed study of geological concepts at Levels 5 & 6;
- understanding of the structure and composition of the Earth and other planets;
- understand present and past interactions between the physical, chemical and biological processes operating in the Earth's core, mantle, crust, and surface;
- appreciate the history of the Earth over geological time scales;
- promote an awareness of the context of the subject in society, as well as providing knowledge and understanding of both the exploitation management and the conservation of the Earth's resources;
- develop field, laboratory, presentational, writing and information technology skills to prepare graduates for independent work in their professional careers;
- gain hands-on experience in a wide range of geoscience methods and techniques;
- provide a fully integrated fieldwork programme, including the option to attend overseas field courses;
- provide appropriate monitoring schemes and feedback for students on their progress;
- develop the scientific fundamentals in the geosciences and an adequate knowledge base for a career in research or industry;
- specialise in a pathway within the Geology Single Honours programme enabling you to focus on either Applied Geophysics, Environmental Geoscience or Volcanology, should you want to.

In addition:

- The BSc Geology (Applied Geophysics) pathway aims to combine a broad understanding of geology with a more in-depth study of applied geophysics techniques and their practical applications.
- The BSc Geology (Environmental Geoscience) pathway aims to combine a broad understanding of geology with a more in-depth knowledge of human interactions with the Earth's environments.
- The BSc Geology (Volcanology) pathway aims to combine a broad understanding of geology with a more in-

depth study of volcanic processes and the effects of volcanoes on society from hazards to climate change.

5. What you will learn

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding
- Subject specific skills
- Employability skills

Subject knowledge and understanding

Successful students will be able to demonstrate knowledge and understanding of:

- geological processes and how they integrate to shape the natural world at different temporal and spatial scales;
- geological time, including the principles of stratigraphy, the stratigraphic column, dating techniques, rates of Earth processes and major events in Earth history;
- the evolution of life on Earth as revealed by the fossil record;
- major geoscience paradigms, including uniformitarianism, the extent of geological time and plate tectonics;
- the structure and composition of the Earth and other planets;
- the terminology, nomenclature and classification of rocks, minerals, fossils and geological structures;
- the need for both a multi-disciplinary and interdisciplinary approach to the development of knowledge in the geosciences;
- the different components of the Earth system and how they interact to change the physical world and their impact on society;
- different methods used in the observation, analysis, interpretation and representation of geological and geophysical information;
- how the geology of a field study area can be used to illustrate and deepen understanding of the geological evolution of a wider region;
- modern environments and processes, and use of this knowledge to interpret aspects of the geological record;
- issues concerning the exploration, availability and sustainability of natural resources;
- geological aspects of human impacts on the physical environment;
- natural hazards and their impacts on society;
- applications of Geology to the development of knowledge, wealth creation and improving quality of life, the United Nations Sustainable Development Goals and how they relate to geology.

Subject specific skills

Successful students will be able to:

- identify a wide range of igneous, sedimentary and metamorphic rocks, as well as a wide range of minerals, fossils and geological structures;
- implement three-dimensional analysis with particular reference to the subsurface distribution and relationships of rocks observed at the surface;
- collect and record geological and geophysical information in the field, including the production and interpretation of geological maps;
- plan, design and execute an independent piece of project work in the geological sciences, including acquisition and recording of geological data, followed by the processing, interpretation and presentation of this data, and the production of a final report;
- make safe and effective use of a range of field equipment commonly used by the geoscience profession and develop an understanding of the scope and limitations of such equipment;
- undertake effective fieldwork with due regard for safety, risk assessment, rights of access, relevant health and safety regulations and sensitivity to the impact of investigations on the environment;
- work safely in a scientific laboratory, with awareness of standard methods and procedures and with due regard for risk assessment and relevant health and safety regulations;
- prepare effective maps and diagrams using a range of appropriate technologies;
- employ a variety of technical and laboratory-based methods for the collection and analysis of geological and geophysical information;
- combine and interpret different types of geological and geophysical evidence using quantitative and qualitative approaches;
- appreciate the issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of geoscience data in the field and laboratory;
- use powers of observation, analysis and imagination to make decisions in the light of uncertainty.

In addition to the learning outcomes of the BSc Geology programme, successful students of the **BSc Geology (Applied Geophysics)** pathway will be able to:

- use geophysical techniques in geotechnics, ground engineering, geoforensics and environmental monitoring.

In addition to the learning outcomes of the BSc Geology programme, successful students of the **BSc Geology (Environmental Geoscience)** pathway will be able to:

- employ applied methodologies to assess and solve a variety of pressing environmental issues.

In addition to the learning outcomes of the BSc Geology programme, successful students of the **BSc Geology (Volcanology)** pathway will be able to:

- use a combination of specialist field techniques, equipment and software to understand a variety of volcanic phenomena.

Key or transferable skills (including employability skills)

Successful students will be able to:

- develop and sustain effective approaches to learning and study, including time management, flexibility;
- creativity and intellectual integrity;
- communicate effectively to a variety of audiences in written, verbal and graphical forms;
- work with numerical data using appropriate qualitative and quantitative techniques, as well as computer software packages;
- work effectively with a variety of types of information technology to analyse and present information and data, as well as solve numerical problems;
- use the internet as a means of communication and a source of information;
- demonstrate competence in spatial awareness and observation;
- conduct field and laboratory studies;
- reference work in an appropriate manner;
- work with information handling and retrieval systems using data from a wide range of sources;
- work effectively both as an individual and as part of a group or team, recognising and respecting the viewpoints of others;
- sustain motivation to work towards a goal over an extended period of time;
- recognise responsibilities as a local, national and international citizen.

Keele Graduate Attributes

The Keele Graduate Attributes are the qualities (skills, values and mindsets) which you will have the opportunity to develop during your time at Keele through both the formal curriculum and also through co- and extra-curricular activities (e.g., work experience, and engagement with the wider University community such as acting as ambassadors, volunteering, peer mentoring, student representation, membership and leadership of clubs and societies). Our Graduate Attributes consist of four themes: **academic expertise, professional skills, personal effectiveness, and social and ethical responsibility**. You will have opportunities to engage actively with the range of attributes throughout your time at Keele: through your academic studies, through self-assessing your own strengths, weaknesses, and development needs, and by setting personal development goals. You will have opportunities to discuss your progress in developing graduate attributes with, for example, Academic Mentors, to prepare for your future career and lives beyond Keele.

6. How is the programme taught?

Learning and teaching methods used on the programme vary according to the subject matter and level of the module. They include the following:

- Lectures
- Workshops
- Practical classes
- Field courses
- Individual progress interviews
- Directed reading
- Group presentations and linked discussion
- Independent study and project work
- Use of online learning via the Keele Learning Environment (KLE) and other platforms (e.g. MS Teams, MS Sway)
- You will learn through a variety of engaging and innovative activities and assessments. The programmes are designed so that knowledge and skills are introduced in a supportive manner that leads to greater independence as you develop as a geologist.

Directed reading, on-line learning materials and lecture slides available in advance on the KLE help you prepare for lectures and the practical classes reinforce concepts learned in lectures through problem solving and practical application of geological techniques. Some classes are taught in workshop format integrating both

lecture and practical material. Fieldwork provides a deep, immersive learning experience that puts geological processes and their products into their four dimensional context. The independent mapping project provides the opportunity to bring together and demonstrate proficiency in all areas of geology.

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Academic Mentors or module lecturers on a one-to-one basis. These learning and teaching methods enable students to achieve the learning outcomes of the programme in a variety of ways.

7. Teaching Staff

Our core teaching staff members have between them expertise and interests in all major areas of Earth Sciences as well as complementary vocational disciplines such as computing and forensic science. In addition, members of the Geography and Environmental Sciences lecturing staff also contribute to the Geology degree programmes. All current academic members of staff are active researchers and many have a distinguished track record in publication, the generation of grant income, industrial collaboration and journal editorship. Several staff have particular interests in the development of geoscience education and/or have played an active role in the promotion of UK geoscience activities (e.g. via membership of Geological Society committees). A number of members of staff are Fellows/Senior Fellows of the Higher Education Academy (H.E.A.) with some having an MA in Teaching and Learning. Many have professional qualifications such as Fellow of the Geological Society (F.G.S.), Chartered Geologist (C.Geol), European Geologist (EurGeol), Fellow of the Royal Astronomical Society (F.R.A.S.), as well as others. Members of Geology staff have also won both group and individual Keele Teaching and Learning Excellence Awards.

The University will attempt to minimise changes to our core teaching teams, as delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff changes, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

8. What is the structure of the Programme?

The academic year runs from September to June and is divided into two semesters. The number of weeks of teaching will vary from course to course, but you can generally expect to attend scheduled teaching sessions between the end of September and mid-December, and from mid-January to the end of April. Our degree courses are organised into modules. Each module is usually a self-contained unit of study and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort. An outline of the structure of the programme is provided in the tables below.

There are two types of module delivered as part of your programme. They are:

- Compulsory modules - a module that you are required to study on this course;
- Optional modules - these allow you some limited choice of what to study from a list of modules.

Global Challenge Pathways

This programme includes the option for you to take a Global Challenge Pathway. These modules offer you an exciting opportunity to work with students and staff from different disciplines to explore topical global issues such as power and conflict, health inequalities, climate change, generative AI, social justice, global citizenship, and enterprise from different perspectives.

Global Challenge Pathways can either be taken as one 15-credit module at Levels 4, 5 and 6, or one 15-credit module at Levels 5 and 6. For more information about our Global Challenge Pathways please visit:

<https://www.keele.ac.uk/study/undergraduate/globalchallengepathways/>

Modern Languages or Certificate in TESOL

Alternatively, you could choose to study modules with the University Language Centre. The Language Centre offers three pathways; The Language Specialist, The Language Taster, and The Trinity Certificate in Teaching English to Speakers of Other Language (TESOL). Language Centre modules are available separately for students at Level 4. At Levels 5 and 6 they are included within the Global Challenge Pathways.

If you choose the Language Specialist pathway, you will automatically be enrolled on a Semester 2 Modern Language module as a continuation of your language of choice as a faculty funded 'additional' module. Undertaking a Modern Languages module in Semester 2 is compulsory if you wish to continue to the Language Specialist Global Challenge Pathway the following academic year.

For more information about Language Centre option modules available to you please visit the following

webpages.

For new (Level 4) students please visit: <https://www.keele.ac.uk/study/languagecentre/>

For current (Level 5 and Level 6) students please visit: <https://www.keele.ac.uk/students/academiclife/global-challenge-pathways/>

For further information on the content of modules currently offered, please visit: <https://www.keele.ac.uk/recordsandexams/modulecatalogue/>

A summary of the credit requirements per year is as follows.

Year	Compulsory	Optional	
		Min	Max
Level 4	105	15	15
Level 5	105	15	15
Level 6	0	120	120

BSc Geology students must take a 30 credit field course module, and a 30 credit dissertation module.

Module Lists

Level 4

At Level 4, students take 105 credits of compulsory modules. The remaining 15 credits may either be used to take a Global Challenge Pathway or the optional module listed below.

Compulsory modules	Module Code	Credits	Period
Minerals and Rocks	ESC-10070	15	Semester 1
Earth Structure	ESC-10074	15	Semester 1
Academic, Professional and Field Skills	ESC-10101	30	Semester 1-2
Geoscience Data Interpretation, Analysis and Visualisation	ESC-10047	15	Semester 2
The Earth System	ESC-10048	15	Semester 2
Earth and Life Through Time	ESC-10103	15	Semester 2

Optional modules	Module Code	Credits	Period
Sustainable Staffordshire	GEG-10019	15	Semester 2

The Level 4 modules belonging to the specialist pathways in BSc Geology are set out below.

BSc Geology (Applied Geophysics), Level 4 modules: The Level 4 modules are the same as for BSc Geology.

BSc Geology (Environmental Geoscience), Level 4 modules: The Level 4 modules are the same as for BSc Geology.

BSc Geology (Volcanology), Level 4 modules: The Level 4 modules are the same as for BSc Geology

Level 5

At Level 5, students take 105 credits of compulsory modules. The remaining 15 credits may either be used to take a Global Challenge Pathway or the optional module listed below.

Compulsory modules	Module Code	Credits	Period
Igneous and Metamorphic Petrology	ESC-20001	15	Semester 1
Palaeoclimatology and Quaternary Studies	ESC-20036	15	Semester 1
Geological Field Skills	ESC-20126	30	Semester 1-2
Reconstructing Past Environments	ESC-20002	15	Semester 2
Geochemistry	ESC-20064	15	Semester 2
Geoethics and Environmental Justice	ESC-20142	15	Semester 2

Optional modules	Module Code	Credits	Period
Earth's Changing Landscapes	ESC-20110	15	Semester 1
Flexible Work Placement (Level 5)	NAT-20011	15	Semester 1-2

Level 5 Module Rules

Please note: You cannot take both Flexible Work Placement (Level 5) and Flexible Work Placement (Level 6)

The Level 5 modules belonging to the specialist pathways in BSc Geology are set out below.

BSc Geology (Applied Geophysics), Level 5 modules:

Compulsory modules	Module Code	Credits	Period
Geological Field Skills	ESC-20126	30	SEM1-2
Igneous and Metamorphic Petrology	ESC-20001	15	SEM1
Palaeoclimatology and Quaternary Studies	ESC-20036	15	SEM1
Reconstructing Past Sedimentary Environments	ESC-20002	15	SEM2
Near-Surface Geophysics	ESC-20098	15	SEM2
Geoethics and Environmental Justice	ESC-20142	15	SEM2
Optional Modules	Module Code	Credits	Period
Flexible Work Placement (Level 5)	NAT-20011	15	SEM 1-2
Earth's Changing Landscape	ESC-20110	15	SEM 1

BSc Geology (Environmental Geoscience), Level 5 modules:

Compulsory modules	Module Code	Credits	Period
Geological Field Skills	ESC-20126	30	SEM1-2
Igneous and Metamorphic Petrology	ESC-20001	15	SEM1
Human Impacts on the Environment, Scientific Perspectives	ESC-20017	15	SEM 1
Reconstructing Past Sedimentary Environments	ESC-20002	15	SEM2
Environmental Analytical Methods	ESC-20032	15	SEM 2
Geoethics and Environmental Justice	ESC- 20142	15	SEM2
Optional Modules	Module Code	Credits	Period
Flexible Work Placement (Level 5)	NAT-20011	15	SEM 1-2
Earth's Changing Landscape	ESC-20110	15	SEM 1

BSc Geology (Volcanology), Level 5 modules:

Compulsory modules	Module Code	Credits	Period
Geological Field Skills	ESC-20126	30	SEM1-2
Igneous and Metamorphic Petrology	ESC-20001	15	SEM1
Volcanoes and the Environment	ESC-20094	15	SEM1
Reconstructing Past Sedimentary Environments	ESC-20002	15	SEM2
Environmental Analytical Methods	ESC-20032	15	SEM2
Geochemistry	ESC-20064	15	SEM2
Optional Modules	Module Code	Credits	Period
Flexible Work Placement (Level 5)	NAT-20011	15	SEM 1-2
Earth's Changing Landscape	ESC-20110	15	SEM 1

Level 6

Optional modules	Module Code	Credits	Period
Clean Technology	ESC-30040	15	Semester 1
Extinction!	ESC-30106	15	Semester 1
Extractive Resources and Critical Minerals	ESC-30146	30	Semester 1
Applied GIS	ESC-30152	30	Semester 1
Geoscience: Independent Field Project - ISP	ESC-30032	30	Semester 1-2
Independent Research Dissertation	ESC-30144	30	Semester 1-2
Flexible Work Placement (Level 6)	NAT-30008	15	Semester 1-2
Professional Experience in Education	NAT-30012	15	Semester 1-2
Natural Hazards	ESC-30009	15	Semester 2
Volcanic and Magmatic Processes	ESC-30033	15	Semester 2
Advanced Geological Field Techniques	ESC-30138	15	Semester 2
Structures and Sub-Surface Processes	ESC-30140	30	Semester 2
Engineering and Applied Geology	ESC-30156	30	Semester 2

Level 6 Module Rules

BSc Geology students must choose to study **EITHER** ESC-30144 Independent Research Dissertation **OR** ESC-30032 Geoscience: Independent Field Project

BSc Geology students must choose to study **EITHER** ESC-30138 Advanced Geological Field Techniques **OR** ESC-30033 Volcanic and Magmatic Processes

Students may only choose a maximum of one (or none) of the following modules: Flexible Work Placement (level 6); Professional Experience in Education; Global Challenge Pathway.

The Level 6 modules belonging to the specialist pathways in BSc Geology are set out below.

BSc Geology (Applied Geophysics), Level 6 modules:

Compulsory modules	Module Code	Credits	Period
Independent Research Dissertation	ESC-30144	30	SEM 1-2
Frontiers in Applied Geophysics	ESC-30076	15	SEM 1
Applied GIS	ESC-30152	30	SEM 1
Engineering and Applied Geology	ESC-30156	30	SEM 2
Optional modules	Module Code	Credits	Period
Clean Technology	ESC-30040	15	SEM1
Natural Hazards	ESC-30009	15	SEM 2
Flexible Work Placement (level 6)	NAT-30008	15	SEM 1-2
Professional Experience in Education	NAT-30012	15	SEM 1-2

BSc Geology (Environmental Geoscience), Level 6 modules:

Compulsory modules	Module Code	Credits	Period
Independent Research Dissertation	ESC-30144	30	SEM 1-2
Frontiers in Environmental Geoscience	ESC-30078	15	SEM 1
Extractive Resources and Critical Minerals	ESC-30146	30	SEM 1
Engineering and Applied Geology	ESC-30156	30	SEM 2
Optional modules	Module Code	Credits	Period
Extinction!	ESC-30106	15	SEM 1
Natural Hazards	ESC-30009	15	SEM 2
Flexible Work Placement (level 6)	NAT-30008	15	SEM 1-2
Professional Experience in Education	NAT-30012	15	SEM 1-2

BSc Geology (Volcanology), Level 6 modules:

Compulsory modules	Module Code	Credits	Period
Independent Research Dissertation	ESC-30144	30	SEM 1-2
Frontiers in Volcanology	ESC-30074	15	SEM 1
Volcanic and Magmatic Processes	ESC-30033	15	SEM 2
Natural Hazards	ESC-30009	15	SEM 2
Optional modules	Module Code	Credits	Period
Extinction!	ESC-30106	15	SEM 1
Extractive Resources and Critical Minerals	ESC-30146	30	SEM 1
Structures and Sub-Surface Processes	ESC-30140	30	SEM 2
Flexible Work Placement (level 6)	NAT-30008	15	SEM 1-2
Professional Experience in Education	NAT-30012	15	SEM 1-2

9. Final and intermediate awards

Credits required for each level of academic award are as follows:

BSc (Hons) Geology BSc (Hons) Geology (Applied Geophysics) BSc (Hons) Geology (Environmental Geoscience) BSc (Hons) Geology (Volcanology)	360 credits	<p>You will require at least 120 credits at levels 4, 5 and 6</p> <p>You must accumulate at least 270 credits in your main subject (out of 360 credits overall), with at least 90 credits in each of the three years of study*, to graduate with a named single honours degree in this subject.</p> <p>*An exemption applies for students transferring from a Combined Honours programme - see point 3.4 here: https://www.keele.ac.uk/regulations/regulationc3/</p>
Diploma in Higher Education	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher
Certificate in Higher Education	120 credits	You will require at least 120 credits at level 4 or higher

International Year option: in addition to the above students must pass a module covering the international year in order to graduate with a named degree including the 'international year' wording. Students who do not complete, or fail the international year, will be transferred to the three-year version of the programme.

Work Placement Year option: in addition to the above students must pass a non-credit bearing module covering the work placement year in order to graduate with a named degree including the 'with Work Placement Year' wording. Students who do not complete, or fail the work placement year, will be transferred to the three-year version of the programme.

10. How is the Programme Assessed?

The wide variety of assessment methods used on this programme at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance. Assessments on the course are based on hands-on, practical tasks where possible. We do not use 'traditional' exams as a method of assessment on our programmes. The following list is representative of the variety of assessment methods used on your programme:

- **Technical reports** allow you to demonstrate your ability to articulate ideas clearly and concisely in a format used in the geological industry. Technical reports also develop and demonstrate research and presentation skills (including appropriate scholarly referencing).
- **Laboratory reports** - structured proformas and full laboratory reports are formal summaries of work carried out in the geological laboratory and test your understanding of the practical aspects of the programme and develop the skills necessary to enable you to present and analyse your results.
- **Class tests** taken either in the geological laboratory or online via the Keele Learning Environment (KLE) assess your subject knowledge and your ability to apply it in a more structured and focused way.
- **Dissertations** enable you to explore in depth an area of particular interest through a substantial piece of focused research and writing, and demonstrate a deeper understanding of geological issues.
- **Field course exercises** allow you to demonstrate your understanding of geological features encountered in the field. This might include the contents of your field notebook, field sketches, geological logs and maps.
- **Oral and poster presentations and reports** assess your subject knowledge and understanding and your ability to articulate this orally and graphically. Group work also tests your ability to work effectively as members of a team, and to reflect on these processes as part of your own personal development
- **Literature Syntheses** of other scholars' work test your ability to identify and summarise the key points of a text and to evaluate the quality of arguments and the evidence used to support them. They also help you provide a background context for your research project work.
- **Portfolios** may consist of a range of different pieces of work but on a common theme to allow you to demonstrate your knowledge and understanding via a number of different formats.

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in

identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

11. Contact Time and Expected Workload

This measure of contact time is intended to provide you with an indication of the type of activity you are likely to undertake during this programme. The data is compiled based on module choices and learning patterns of students on similar programmes in previous years. Every effort is made to ensure this data is a realistic representation of what you are likely to experience, but changes to programmes, teaching methods and assessment methods mean this data is representative and not specific.

Undergraduate courses at Keele contain an element of module choice; therefore, individual students will experience a different mix of contact time and assessment types dependent upon their own individual choice of modules. The figures below are an example of activities that a student may expect on your chosen course by year stage of study. Contact time includes scheduled activities such as: lecture, seminar, tutorial, project supervision, demonstration, practical classes and labs, supervised time in labs/workshop, fieldwork and external visits. The figures are based on 1,200 hours of student effort each year for full-time students.

Activity

	Scheduled learning and teaching activities	Guided independent Study	Placements
Year 1 (Level 4)	33.9%	66.1%	0%
Year 2 (Level 5)	39.4%	60%	0.6%
Year 3 (Level 6)	32.5%	67.5%	0%

12. Accreditation

This programme is accredited by the Geological Society of London (the GeoSoc). More information about accreditation from the GeoSoc can be found at: <https://www.geolsoc.org.uk/accreditation>

13. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: <http://www.keele.ac.uk/student-agreement/>

14. Other Learning Opportunities

Study abroad (semester)

Students on the programme have the potential opportunity to spend a semester abroad in their second year studying at one of Keele's international partner universities.

Exactly which countries are available depends on the student's choice of degree subjects. An indicative list of countries is on the website (<http://www.keele.ac.uk/studyabroad/partneruniversities/>); however this does not guarantee the availability of study in a specific country as this is subject to the University's application process for studying abroad.

No additional tuition fees are payable for a single semester studying abroad but students do have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad to be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination.

Whilst students are studying abroad any Student Finance eligibility will continue, where applicable students may

be eligible for specific travel or disability grants. Students studying in Erasmus+ destinations may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible for income dependent bursaries at Keele. Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.

Study Abroad (International Year)

A summary of the International Year, which is a potential option for students after completion of year 2 (Level 5), is provided in the Annex for the International Year.

Work Placement Year

Students have the opportunity to apply directly for the 4-year 'with Work Placement Year' degree programme or to transfer onto the 4-year degree programme at the end of Year-1 and in Year-2 at the end of Semester 1. Students who are initially registered for the 4-year degree programme may transfer onto the 3-year degree programme at any point in time, prior to undertaking their year-long placement. Eligibility rules are included in the Annex.

Students wishing to take the work placement year should meet with the Programme Director to obtain their signature to confirm agreement before they will be allowed to commence their placement.

International students who require a Tier 4 visa must check with the Immigration Compliance Team prior to commencing any form of placement.

A summary of the Work Placement Year, which is a potential option for students after completion of year 2 (Level 5), is provided in the Annex for the Work Placement Year.

15. Additional Costs

Field Course Costs

COMPULSORY FIELD COURSES: **ALL** students undertake compulsory field courses as part of their studies - these are provided at no cost.

The University provides significant financial support for the compulsory fieldwork elements of the degree programme and the costs of travel and accommodation for compulsory field courses are fully paid for by the University up to and including Year 3. Students are responsible for their own subsistence and field gear.

OPTIONAL FIELD COURSES: In addition to compulsory field courses, the programme offers optional UK and overseas field trips as part of second and third-year modules. The cost of these trips is subsidised by the University but you will incur additional costs (e.g. due to flight costs). To help students manage their field course costs, the payments are spread over the course of the academic year in which you participate in the field course. The first instalment is non-refundable due to the need to pre-book accommodation etc. in advance. The costs of field courses are indicated at the start of the year, with details clearly communicated to students.

INDEPENDENT RESEARCH PROJECT: **ALL** students undertake an independent research project in their final year, which MAY include fieldwork. Students are responsible for organising their own transport and accommodation as well as paying any costs incurred whilst carrying out fieldwork. These costs are extremely variable as they are dependent on where the student carries out their project.

IMPORTANT: Students are expected to have adequate clothing for field trips. We reserve the right to change the venues of field courses due to both cost and academic considerations. Some field courses are fully or partly catered for. Others are self-catered and students are expected to purchase meals (e.g., lunch and/or evening meal).

The costs below are only for indicative purposes and correct at the time of printing:

Activity	Estimated Cost
Field courses - compulsory	£0.00
Field courses - optional	£200.00 - £1,600.00
Equipment - waterproof and appropriate clothing and footwear for field courses	£200.00
Total estimated additional costs (maximum amount is based on a student attending all optional field courses as well as having to purchase all outdoor clothing)	£200 - £1,800

These costs have been forecast by the University as accurately as possible but may be subject to change as a result of factors outside of our control (for example, increase in costs for external services). Forecast costs are reviewed on an annual basis to ensure they remain representative. Where additional costs are in direct control of the University we will ensure increases do not exceed 5%.

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation. We do not anticipate any further costs for this programme.

16. Annex - International Year

BSc (Hons) Geology with International Year; BSc (Hons) Geology (Applied Geophysics) with International Year; BSc (Hons) Geology (Environmental Geoscience) with International Year; BSc (Hons) Geology (Volcanology) with International Year

International Year Programme
<p>Students registered for this Single Honours programme may either be admitted for or apply to transfer during their period of study at Level 5 to the International Year option. Students accepted onto this option will have an extra year of study (the International Year) at an international partner institution after they have completed Year 2 (Level 5) at Keele.</p> <p>Students who successfully complete both the second year (Level 5) and the International Year will be permitted to progress to Level 6. Students who fail to satisfy the examiners in respect of the International Year will normally revert to the standard programme and progress to Level 6 on that basis. The failure will be recorded on the student's final transcript.</p> <p>Study at Level 4, Level 5 and Level 6 will be as per the main body of this document. The additional detail contained in this annex will pertain solely to students registered for the International Year option.</p>
International Year Programme Aims
<p>In addition to the programme aims specified in the main body of this document, the international year programme of study aims to provide students with:</p> <ol style="list-style-type: none"> 1. Personal development as a student and a researcher with an appreciation of the international dimension of their subject 2. Experience of a different culture, academically, professionally and socially
Entry Requirements for the International Year

Students may apply to the 4-year programme during Level 5. Admission to the International Year is subject to successful application, interview and references from appropriate staff.

The criteria to be applied are:

- Academic Performance (an average of 55% across all modules in Semester 1 at Level 5 is normally required. Places on the International Year are then conditional on achieving an average mark of 55% across all Level 5 modules. Students with up to 15 credits of re-assessment who meet the 55% requirement may progress to the International Year. Where no Semester 1 marks have been awarded performance in 1st year marks and ongoing 2nd year assessments are taken into account)
- General Aptitude (to be demonstrated by application for study abroad, interview during the 2nd semester of year 2 (Level 5), and by recommendation of the student's Academic Mentor, 1st and 2nd year tutors and programme director)

Students may not register for both an International Year and a Placement Year.

Student Support

Students will be supported whilst on the International Year via the following methods:

- Phone or Skype conversations with Study Abroad tutor, in line with recommended Academic Mentoring meeting points.
- Support from the University's Global Education Team

Learning Outcomes

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete a Keele undergraduate programme with International Year will be able to:

1. Describe, discuss and reflect upon the cultural and international differences and similarities of different learning environments
2. Discuss the benefits and challenges of global citizenship and internationalisation
3. Explain how their perspective on their academic discipline has been influenced by locating it within an international setting.
4. Design, plan and critically evaluate a practical investigation on geology topic, record relevant information accurately and systematically and be able to reflect upon the data in a critical manner.
5. Integrate, apply and develop fundamental geology principles to describe and explain phenomena and solve problems in the context of selected topics within geology.

These learning outcomes will all be assessed by the submission of a satisfactory individual learning agreement, the successful completion of assessments at the partner institution and the submission of the reflective portfolio element of the international year module.

Regulations

Students registered for the International Year are subject to the programme-specific regulations (if any) and the University regulations. In addition, during the International Year, the following regulations will apply:

Students undertaking the International Year must complete 120 credits, which must comprise *at least* 40% in the student's discipline area.

This may impact on your choice of modules to study, for example you will have to choose certain modules to ensure you have the discipline specific credits required.

Students are barred from studying any module with significant overlap to the Level 6 modules they will study on their return. Significant overlap with Level 5 modules previously studied should also be avoided.

Additional costs for the International Year

Tuition fees for students on the International Year will be charged at 15% of the annual tuition fees for that year of study, as set out in Section 1. The International Year can be included in your Student Finance allocation, to find out more about your personal eligibility see: www.gov.uk

Students will have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination.

Students who meet external eligibility criteria may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible income dependent bursaries at Keele.

Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some Governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.

17. Annex - Work Placement Year

BSc (Hons) Geology with Work Placement Year; BSc (Hons) Geology (Applied Geophysics) with Work Placement Year; BSc (Hons) Geology (Environmental Geoscience) with Work Placement Year; BSc (Hons) Geology (Volcanology) with Work Placement Year

Work Placement Year summary

Students registered for this programme may either be admitted for or apply to transfer during their studies to the 'with Work Placement Year' option (NB: for Combined Honours students the rules relating to the work placement year in the subject where the placement is organised are to be followed). Students accepted onto this programme will have an extra year of study (the Work Placement Year) with a relevant placement provider after they have completed Year 2 (Level 5) at Keele.

Students who successfully complete both the second year (Level 5) and the Work Placement Year will be permitted to progress to Level 6. Students who fail to satisfactorily complete the Work Placement Year will normally revert to the 3-year programme and progress to Level 6 on that basis. The failure will be recorded on the student's final transcript.

Study at Level 4, Level 5 and Level 6 will be as per the main body of this document. The additional detail contained in this annex will pertain solely to students registered for the Work Placement Year option.

Work Placement Year Programme Aims

In addition to the programme aims specified in the main body of this document, the Work Placement Year aims to provide students with:

- the opportunity to carry out a long-term work-based learning experience in the geological sector
- enhanced employability skills training

Entry Requirements for the Work Placement Year

Admission to the Work Placement Year is subject to successful application, interview and references from appropriate staff. Students have the opportunity to apply directly for the 4-year 'with work placement year' degree programme, or to transfer onto the 4-year programme at the end of Year-1 and in Year-2 at the end of Semester 1. Students who are initially registered for the 4-year degree programme may transfer onto the 3-year degree programme at any point in time, prior to undertaking the year-long work placement. Students who fail to pass the work placement year, and those who fail to meet the minimum requirements of the work placement year module, (* or equivalent, work placement), will be automatically transferred onto the 3-year degree programme.

* We recommend where possible students undertake a placement of between 9 - 12 months on a full-time basis to maximize academic and personal growth. However, the Work Placement Year mandates a minimum of 24 weeks in duration, ideally on a full-time basis, but no less than 21 hours per week. This enables those undertaking an unpaid placement to work on a part-time basis alongside.

The criteria to be applied are:

- A good University attendance record and be in 'good academic standing'.
- Academic Performance (an average of 50% across all modules in Semester 1 at Level 5 is normally required. Places on the Work Placement Year are then conditional on achieving an average mark of 50% across all Level 5 modules. Students with up to 15 credits of re-assessment who meet the 50% requirement may progress to the Work Placement Year. Where no Semester 1 marks have been awarded performance in 1st year marks and ongoing 2nd year assessments are taken into account)
- Students undertaking work placements will be expected to complete a Health and Safety checklist prior to commencing their work experience and will be required to satisfy the Health and Safety regulations of the company or organisation at which they are based.
- (*International students only*) Due to visa requirements, it is not possible for international students who require a Tier 4 Visa to apply for direct entry onto the 4-year with Work Placement Year degree programme. Students wishing to transfer onto this programme should discuss this with student support, the academic tutor for the work placement year, and the Programme Lead. Students should be aware that there are visa implications for this transfer, and it is the student's responsibility to complete any and all necessary processes to be eligible for this programme. There may be additional costs, including applying for a new Visa from outside of the UK for international students associated with a transfer to the work placement programme.

Students may not register for both an International Year and a Work Placement Year.

Student Support

Students will be supported whilst on the Work Placement Year via the following methods:

- Regular contact between the student and a named member of staff who will be assigned to the student as their University supervisor. The University supervisor will be in regular contact with the student throughout the year, and be on hand to provide advice (pastoral or academic) and liaise with the Placement supervisor on the student's behalf if required.
- Two formal contacts with the student during the placement year: the University supervisor will visit the student in their placement organization at around 5 weeks after the placement has commenced, and then visit again (or conduct a telephone/video call tutorial) at around 15 weeks into the placement.
- Weekly supervision sessions will take place with the placement supervisor (or his/her nominee) throughout the duration of the placement.

Learning Outcomes

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete the 'with Work Placement Year' option will be able to:

1. critically evaluate their learning from the work placement
2. explain how the professional environmental sector operates and what skills are needed to develop their career
3. apply academic theory learnt as part of the taught degree to real situations in the work place
4. evaluate their own employability skills (via a SWOT Analysis) and create Intended Learning Outcomes for their placement in order to develop the skills areas which they have identified as being weak or needing further enhancement
5. develop, through practice in the work place, the work-related skills identified through their SWOT analysis and Intended Learning Outcomes

These learning outcomes will be assessed through the non-credit bearing Work Placement Year module (NAT-30010) which involves:

1. Mid-Placement Portfolio (SWOT analysis & Action Plan + Evaluation by Host) [30%]
2. Final Placement Portfolio (Reflective Diary + Evaluation by Host) [70%]

Regulations

Students registered for the 'with Work Placement Year' option are subject to programme-specific regulations (if any) and the University regulations. In addition, during the Work Placement Year, the following regulations will apply:

- Students undertaking the Work Placement Year must successfully complete the zero-credit rated 'Work Placement Year' module (NAT-30010)
- In order to ensure a high quality placement experience, each placement agency will sign up to a placement contract (analogous to a service level agreement).
- Once a student has been accepted by a placement organisation, the student will make a pre-placement visit and a member of staff identified within the placement contract will be assigned as the placement supervisor. The placement supervisor will be responsible for ensuring that the placement experience meets the agreed contract agreed with the University.
- The placement student will also sign up an agreement outlining his/her responsibilities in relation to the requirements of each organisation.

Students will be expected to behave professionally in terms of:

(i) conforming to the work practices of the organisation; and

(ii) remembering that they are representatives of the University and their actions will reflect on the School and have an impact on that organisation's willingness (or otherwise) to remain engaged with the placement.

Additional costs for the Work Placement Year

Tuition fees for students on the Work Placement Year will be charged at 20% of the annual tuition fees for that year of study, as set out in Section 1. The Work Placement Year can be included in your Student Finance allocation; to find out more about your personal eligibility see: www.gov.uk

Students will have to bear the costs of travelling to and from their placement provider, accommodation, food and personal costs. Depending on the placement provider additional costs may include parking permits, travel and transport, suitable clothing, DBS checks, and compulsory health checks.

A small stipend may be available to students from the placement provider during the placement but this will need to be explored on a placement-by-placement basis as some organisations, such as charities, may not have any extra money available. Students should budget with the assumption that their placement will be unpaid.

Eligibility for student finance will depend on the type of placement and whether it is paid or not. If it is paid, this is likely to affect student finance eligibility, however if it is voluntary and therefore unpaid, should not affect student finance eligibility. Students are required to confirm eligibility with their student finance provider.

International students who require a Tier 4 visa should check with the Immigration Compliance team prior to commencing any type of paid placement to ensure that they are not contravening their visa requirements.

Version History

This document

Date Approved: 13 March 2025

Previous documents

Version No	Year	Owner	Date Approved	Summary of and rationale for changes
1	2024/25	STEVEN ROGERS	02 August 2024	Removed ESC-30025
1	2023/24	STUART EGAN	10 March 2023	
1	2022/23	STUART EGAN	28 March 2022	Removal of optional module ESC-30020 Water Resources
1.1	2021/22	STUART EGAN		Optional module changes: at Level 6, replacement of ESC-30036 (Exploration Geophysics for the Hydrocarbon Industry) with ESC-30082 (Reservoir Geology and Geophysics); and at Level 4, replacement of module ESC-10072 (Environmental Management) with ESC-10061 (Studying the Environment) in the Geology (Environmental Geoscience) pathway.
1	2021/22	STUART EGAN	05 March 2021	
1.2	2020/21	STUART EGAN	14 July 2022	Revisions for 2022/23 for Level 6 only: - Added ESC-30082 (Reservoir Geology and Geophysics) as a level 6 option module, which has replaced ESC-30036 (Exploration Geophysics for the Hydrocarbon Industry) - Added ESC-30038 (Geological Communication Skills) as a level 6 option module to broaden student choice of optional modules. - Removal of optional module ESC-30020 Water Resources
1.1	2020/21	STUART EGAN	05 March 2021	Minor revision: added module ESC-30058 (The Science of Soil) as a level 6 option module.
1	2020/21	IAN STIMPSON	18 December 2019	
1.1	2019/20	STUART EGAN	05 March 2021	Minor revision: added module ESC-30058 (The Science of Soil) as a level 6 option module.
1	2019/20	IAN STIMPSON	18 December 2019	