UNIVERSITY OF LIVERPOOL

BSc (Hons)

Geology

UCAS code F600

Entry requirements	Study mode	Duration
A level: ABB	Full-time	3 years

Apply by: **29 January 2025**
Starts on: **22 September 2025**

About this course

Discover planet Earth: from natural hazards to natural resources, from the history of life to the history of the planet itself. You don't need to have studied geology before and this programme can open the door to a career as a professional geologist in industries such as petroleum, mineral resources, engineering geology and environmental assessment. You will gain thorough and highly practical training in modern geology, with a strong emphasis on fieldwork.

Introduction

By studying Geology at Liverpool, you'll explore the processes shaping our planet and its future. Taught by leading researchers, you'll gain insights into cutting-edge discoveries and develop the skills to address global challenges like climate change, resource management, and sustainability. Hands-on project work and field classes in diverse locations, including the UK, Ireland and Spain, will prepare you for real-world problem-solving.

In your first two years, you'll receive core training in key areas of geology. In your third year, you'll complete an independent field-based project and dissertation, honing critical skills in research, data integration, and analysis. You'll also develop

transferable skills, including teamwork, leadership, communication, and time management, through reports, presentations, and specialist software and equipment.

Our degree programs combine laboratory and fieldwork across urban, coastal, and mountainous environments. We welcome applications from all students, including those with disabilities, and provide reasonable adjustments to ensure accessibility.

What you'll learn

- A comprehensive introduction to core disciplines in geoscience
- ten days geological mapping training in Yorkshire
- 11 days advanced field techniques in Donegal, Ireland
- eight days advanced volcanology field course in Tenerife
- independent project fieldwork
- conduct original research and present your findings.

Accreditation

This degree is accredited by the Geological Society of London, satisfying the requirements of Fellowship and Chartered Geologist status.

Accreditation in detail

Geological Society of London

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Course content

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

Year one

Year one aims to provide a comprehensive introduction to core disciplines in geoscience assuming no prior knowledge of the subject. A strong feature of year one is the development of transferable skills (eg Geographical Information Systems [GIS], IT, essay writing, oral communication), integrated within a tutorial system. Tutorials are run by academic staff.

Fieldwork involves:

- One day in North England (October)
- Eight days in Pembrokeshire (Easter)

Students should take the following compulsory modules.

ENVS117 is a compulsory module for those without A level Maths or Physics at grade C or above. You should discuss this with your programme director at the start of the academic session.

Modules

Compulsory modules	Credits
EARTH STRUCTURE AND PLATE TECTONICS (ENVS112)	15
INTRODUCTION TO FIELD GEOLOGY (ENVS109)	15
SEDIMENTARY ROCKS AND FOSSILS (ENVS118)	15
INTRODUCTION TO STRUCTURAL GEOLOGY AND GEOLOGICAL MAPS (ENVS156)	15
STUDY SKILLS AND GIS (EARTH SCIENCE) (ENVS101)	15

Compulsory modules	Credits
EARTH MATERIALS (ENVS185)	15

Optional modules	Credits
CLIMATE, ATMOSPHERE AND OCEANS (ENVS111)	15
ESSENTIAL MATHS (ENVS117)	15
MATHEMATICS FOR PHYSICISTS I (PHYS107)	15
THEORY AND LABORATORY EXPERIMENTS IN EARTH SURFACES PROCESSES (ENVS165)	15

Programme details and modules listed are illustrative only and subject to change.

Year two

Year two takes subjects to greater depth and builds student skills in synthesising and evaluating geological data. A key part of the year is training students in preparation for their year three independent field projects, particularly in tutorial sessions run by academic staff.

Fieldwork involves:

- 9 days geological mapping training Yorkshire (Easter).

To fulfil the aims of the year and gain accreditation, all modules are compulsory.

Modules

Compulsory modules	Credits
APPLIED GEOPHYSICS (ENVS216)	15

Compulsory modules	Credits
METAMORPHISM AND CRUSTAL EVOLUTION (ENVS212)	15
RESEARCH SKILLS (EARTH SCIENCE) (ENVS200)	15
SEDIMENTARY PROCESSES AND DEPOSITIONAL ENVIRONMENTS (ENVS219)	15
STRUCTURAL GEOLOGY AND INTERPRETATION OF GEOLOGICAL MAPS (ENVS263)	15
VOLCANOLOGY AND GEOHAZARDS (ENVS284)	15
FIELD MAPPING TECHNIQUES (ENVS293)	15
EARTH AND ENVIRONMENTAL DATA SCIENCE (ENVS229)	15

Programme details and modules listed are illustrative only and subject to change.

Year three

Year three modules are research-based. The aim is to train students in the analysis of large-scale, multidisciplinary geological problems and to provide an awareness of the key applications and employment areas of geoscience. A major feature of this year of study is the independent field project and dissertation in which students have the opportunity to conduct a major piece of original field-based research and to present it in both a conference talk and a substantial report.

Fieldwork:

- 13 days advanced field techniques in Donegal, Ireland (summer between years two and three)
- Eight day field course in Tenerife.

Students take three compulsory modules and choose four optional modules as outlined below.

ENVS300 is a research project that can take place in the field, laboratory or a combination. If students choose a geological

field mapping project, data in the field will take place in Summer between Years 2 and 3. If students choose a laboratory
project, data can be collected in the summer between Years 2 and 3 and during Semester 1 of year 3. Report write up will
take place in Semester 1 and 2.

Modules

Compulsory modules	Credits
EARTH SCIENCE PROJECT (ENVS300)	30
ADVANCED GEOLOGY FIELD TECHNIQUES (ENVS351)	15
APPLIED GEOLOGY AND GEOHAZARDS OF THE CANARY ISLANDS (ENVS375)	15

Optional modules	Credits
THE LIVING, EVOLVING EARTH (ENVS320)	15
MINERAL RESOURCES (ENVS326)	15
APPLIED ENVIRONMENTAL GEOSCIENCE (ENVS331)	15
GEOENERGY (ENVS337)	15
ENGINEERING GEOLOGY AND HYDROGEOLOGY (ENVS338)	15
DYNAMICS OF CRUST AND MANTLE (ENVS355)	15
SIMULATING ENVIRONMENTAL SYSTEMS (ENVS397)	15

Programme details and modules listed are illustrative only and subject to change.

Teaching and assessment

How you'll learn

Teaching takes place through lectures, practicals, workshops, seminars, tutorials and fieldwork, with an emphasis on learning through doing. The award-winning Central Teaching Laboratories, provide a state-of-the-art facility for undergraduate practical work. Students value the learning opportunities provided by field classes, including the rapid and detailed feedback on performance.

You will typically receive 15-20 hours of formal teaching each week, and complete between 50 and 100 days of residential fieldwork over the course of their programme. In years three and four you will carry out independent research projects on a topic and location of your choice. All projects are supervised by a member of staff who will meet with you on a weekly, or more frequent, basis.

A number of the School’s degree programmes involve laboratory and field work. The field work is carried out in various locations, ranging from inner city to coastal and mountainous environments. We consider applications from prospective students with disabilities on the same basis as all other students, and reasonable adjustments will be considered to address barriers to access.

How you're assessed

Assessment matches the learning objectives for each module and may take the form of written exams, practical laboratory and computer examinations, coursework submissions in the form of essays, scientific papers, briefing notes or lab/field notebooks, reports and portfolios, oral and poster presentations and contributions to group projects, and problem-solving exercises. Assessment is via tasks that mirror those graduate students are likely to undertake working as professional geoscientists. For example, generating and interpreting quantitative spatial data, with appropriate consideration of inherent uncertainty, is a key task and necessary skill for professional environmental geoscientists, and this skill is developed and assessed on several programme modules, especially field and lab-based modules. As well as being authentic in terms of the underlying purpose of the assessed task, assessment tasks are also authentic in terms of format, intended audience, resources used, and collaborative team elements. For example, team-based environmental assessment work with professional format delivery appropriate for presentation to management-level colleagues using state-of-the-art field, lab or IT resources is central to assessments in field classes.

Liverpool Hallmarks

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.

The Liverpool Curriculum framework sets out our distinctive approach to education. Our teaching staff support our students to develop academic knowledge, skills, and understanding alongside our **graduate attributes**:

- Digital fluency
- Confidence
- Global citizenship

Our curriculum is characterised by the three **Liverpool Hallmarks**:

- Research-connected teaching
- Active learning
- Authentic assessment

All this is underpinned by our core value of **inclusivity** and commitment to providing a curriculum that is accessible to all students.

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Careers and employability

There has never been a better time to study Earth sciences. Many of the fundamental questions of our times will be answered by geoscientists, as we seek to provide sustainable resources for the world's population, as well as predict and mitigate climate change and natural hazards by building a better understanding of the planet on which we live.

Our recent graduates have gained employment within a degree-related field or continued within further education after graduation. We have close links with geoscience and environmental industries ensuring that our degrees properly equip you for future employment.

Recent employers

- Geological Surveys in the UK and abroad
- Hydrocarbon and support industries: ExxonMobil, BP, Shell, Geotrace, Geokinetics, Neftex, Robertson, Deloitte, CGG, Osiris, PGS
- Engineering and environmental consultancies: The Environment Agency, Environmental Resources Management, URS Corporation, Caulmert Ltd, VerdErg Renewables, RSK Geophysics, RSK Environment, Geomaterials, Fugro
- Mining and related industries: Gold Fields, Rio Tinto, Cliffs Natural Resources, Geological Solutions, Hanson Aggregate Marine Ltd, Aggregate Industries.

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Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

Tuition fees

UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)

Full-time place, per year - £9,535
Year in industry fee - £1,905
Year abroad fee - £1,430 (applies to year in China)

International fees

Full-time place, per year - £29,100
Year in industry fee - £1,905
Year abroad fee - £14,550 (applies to year in China)

The tuition fees shown are correct for 2025/26 entry. Please note that the year abroad fee also applies to the year in China.

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support. Learn more about paying for your studies.

Additional costs

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This includes costs for a lab coat, geological field kit, and sustenance during compulsory field trips.

Students should expect to cover the following costs.

Lab coat- approximately £10-20. Students are advised to purchase a lab coat before the start of their studies. The first lab practical will take place in teaching week one and all students are required to wear a lab coat.

Geological field kit – £69.50. Students are advised to purchase the recommended field kit from the School's online shop before the start of their studies. Field kits will also be available on campus at the start of the semester. The field kit contains:

- Compass clinometer
- Helmet
- Hand lens
- Stereonet
- Michel-Levy chart
- Hi-vis jacket
- Grain size card
- Large, clear plastic bag
- Whistle

Project/dissertation costs – the School may provide a budget of up to £200 for certain field or lab-based projects. Desk-based projects receive no budget from the School.

Compulsory field courses – students will undertake compulsory field courses in years one, two and three. The School will normally cover the cost of accommodation and travel for these courses. Students are required to cover sustenance (food and drinks) costs.

Geophysics (North America) programme only- additional costs of year three in North America are around £1,500- £2,000 (costs will vary according to the type of accommodation, flights etc). £600 travel bursary available from the University.

Find out more about additional study costs.

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Entry requirements

The qualifications and exam results you'll need to apply for this course.

A levels

ABB including one science A level.

Applicants with the Extended Project Qualification (EPQ) are eligible for a reduction in grade requirements. For this course, the offer is **BBB** with **A** in the EPQ.

You may automatically qualify for reduced entry requirements through our contextual offers scheme. Based on your personal circumstances, you may automatically qualify for up to a two-grade reduction in the entry requirements needed for this course. When you apply, we consider a range of factors – such as where you live – to assess if you're eligible for a grade reduction. You don't have to make an application for a grade reduction – we'll do all the work.

Find out more about how we make reduced grade offers.

If you don't meet the entry requirements, you may be able to complete a foundation year which would allow you to progress to this course.

Available foundation years:

- Earth Sciences (4 year route including a Foundation Year at Carmel College) BSc (Hons)

T levels

T levels are not currently accepted.

GCSE

4/C in English and 4/C in Mathematics

Subject requirements

Acceptable sciences: Mathematics, Further Mathematics, Physics, Chemistry, Biology, Geology, Geography, Environmental Science, Applied Science, Use of Mathematics
For applicants from England: For science A levels that include the separately graded practical endorsement, a "Pass" is required.

BTEC

BTEC Level 3 National Extended Diploma: D*DD in relevant Diploma
BTEC National Diploma: DD plus grade B at A level (including one science subject)
BTEC National Extended Certificate: Distinction plus grades BB at A level (including one science subject)

International Baccalaureate

33 overall including one Higher Level science and no score less than 4

Irish Leaving Certificate

H1, H2, H2, H2, H3, H3 including H2 or above in one science

Scottish Higher/Advanced Higher

Not accepted without Advanced Highers at ABB (including one science subject)

Welsh Baccalaureate Advanced

Accepted at Grade B alongside AB in A Levels (including one science subject)

Access

Considered if taking a relevant subject. 45 Level 3 credits in graded units, including 30 at Distinction and a further 15 with at least Merit. 15 Distinctions are required in one science. GCSE English and Mathematics grade C/4 or above also required.

International qualifications

Select your country or region to view specific entry requirements.

If you hold a bachelor's degree or equivalent, but don't meet our entry requirements, you could be eligible for a Pre-Master's course. This is offered on campus at the University of Liverpool International College, in partnership with Kaplan International Pathways. It's a specialist preparation course for postgraduate study, and when you pass the Pre-Master's at the required level with good attendance, you're guaranteed entry to a University of Liverpool master's degree.

English language requirements

You'll need to demonstrate competence in the use of English language, unless you're from a majority English speaking country.

We accept a variety of international language tests and country-specific qualifications.

International applicants who do not meet the minimum required standard of English language can complete one of our Pre-Sessional English courses to achieve the required level.

IELTS

6.0 overall, with no component below 5.5

TOEFL iBT

78 overall, with minimum scores of listening 17, writing 17, reading 17 and speaking 19. TOEFL Home Edition not accepted.

TOEFL Paper

Grade 6 at Standard Level or grade 5 at Higher Level

Duolingo English Test

115 overall, with speaking, reading and writing not less than 105, and listening not below 100

Pearson PTE Academic

59 overall, with no component below 59

LanguageCert Academic

65 overall, with no skill below 60

Cambridge IGCSE First Language English 0500

Grade C overall, with a minimum of grade 2 in speaking and listening. Speaking and listening must be separately endorsed on the certificate.

Cambridge IGCSE First Language English 0990

Grade 4 overall, with Merit in speaking and listening

Cambridge IGCSE Second Language English 0510/0511

0510: Grade C overall, with a minimum of grade 2 in speaking. Speaking must be separately endorsed on the certificate. 0511: Grade C overall.

Cambridge IGCSE Second Language English 0993/0991

0993: Grade 5 overall, with a minimum of grade 2 in speaking. Speaking must be separately endorsed on the certificate. 0991: Grade 5 overall.

Cambridge ESOL Level 2/3 Advanced

169 overall, with no paper below 162

LanguageCert

Grade 4 at Standard Level or grade 4 at Higher Level

Pre-sessional English

Do you need to complete a Pre-sessional English course to meet the English language requirements for this course?

The length of Pre-sessional English course you'll need to take depends on your current level of English language ability.

Pre-sessional English in detail

If you don’t meet our English language requirements, we can use your most recent IELTS score, or the equivalent score in selected other English language tests, to determine the length of Pre-sessional English course you require.

Use the table below to check the course length you're likely to require for your current English language ability and see whether the course is available on campus or online.

Your most recent IELTS score	Pre-sessional English course length	On campus or online
5.5 overall, with no component below 5.5	6 weeks	On campus
5.5 overall, with no component below 5.0	10 weeks	On campus and online options available
5.0 overall, with no component below 5.0	12 weeks	On campus and online options available
5.0 overall, with no component below 4.5	20 weeks	On campus
4.5 overall, with no component below 4.5	30 weeks	On campus
4.0 overall, with no component below 4.0	40 weeks	On campus

If you’ve completed an alternative English language test to IELTS, we may be able to use this to assess your English language ability and determine the Pre-sessional English course length you require.

Please see our guide to Pre-sessional English entry requirements for IELTS 6.0 overall, with no component below 5.5, for further details.

Alternative entry requirements

- If your qualification isn't listed here, or you're taking a combination of qualifications, contact us for advice
- Applications from mature students are welcome.

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