

BSc (Hons)

Geology with Physical Geography

UCAS code F6F8

| 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

The Earth surface system is dynamic and diverse, with changes driven by the interplay of physical, chemical, geological and biological processes in a wide range of environments. Drawing on the complementary expertise of staff in geology and physical geography, this integrated degree programme provides a clear view of the controlling processes that link landscape evolution with environmental change and natural events that impact human activity.

Introduction

You'll be taught by research active staff, at the forefront of their chosen fields, learning about cutting-edge science before it appears in textbooks. You'll also have the opportunity to undertake project work within the Department's research groups.

Your training will include the comprehensive study of surface and near-surface processes, relevant to many industrial, engineering and environmental employment sectors. Years one and two cover a wide range of geological and physical geography topics, allowing for greater choice in the final year.

Fieldwork in years two and three at Liverpool is designed specifically for this degree programme integrating geology and geomorphology were you will have academic

tutors from both disciplines.

A research-based dissertation is undertaken in year three on a geological and/or geomorphological topic.

A two-week field class to South Eastern Spain in year three has been designed exclusively for Geology with Physical Geography students, integrating all aspects of the degree.

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

What you'll learn

- The comprehensive study of sub-surface and near-surface processes
- Specific practical skills necessary for a career in Earth Sciences
- Transferable life skills and independent thinking
- Nine to ten days of fieldwork in year one
- 11 days of fieldwork in year two
- Eight days of fieldwork in year three.

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

Course content

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

Year one

In year one, you will take seven compulsory modules and one optional module as outlined below.

Fieldwork involves:

- 1 day in North England (October)
- 8 days in Pembrokeshire (Easter).

ENVS117 is required for students without A2 Maths or Physics or equivalent from a Foundation year. You must discuss this with your Programme Director at the start of the academic session.

Modules

| Compulsory modules | Credits |
|--|---------|
| EXPERIMENTS IN PHYSICAL GEOGRAPHY (ENVS120) | 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 |
| THEORY AND LABORATORY EXPERIMENTS IN EARTH SURFACES PROCESSES (ENVS165) | 15 |
| EARTH MATERIALS (ENVS185) | 15 |

| Optional modules | Credits |
|---|---------|
| EARTH STRUCTURE AND PLATE TECTONICS (ENVS112) | 15 |
| LIVING WITH ENVIRONMENTAL CHANGE (ENVS119) | 15 |
| ESSENTIAL MATHS (ENVS117) | 15 |

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

Year two

In year two, you will take the following compulsory modules and two optional modules as outlined below.

Fieldwork involves:

- 15 days in Scotland (Easter)
- 3 days in NW England/Wales
- 9 days in North Yorkshire.

Modules

| Compulsory modules | Credits |
|---|---------|
| APPLIED GEOPHYSICS (ENVS216) | 15 |
| GEOMORPHOLOGY: ICE, SEA AND AIR (ENVS252) | 15 |
| RESEARCH SKILLS (EARTH SCIENCE) (ENVS200) | 15 |
| SEDIMENTARY PROCESSES AND DEPOSITIONAL ENVIRONMENTS (ENVS219) | 15 |
| FIELD MAPPING TECHNIQUES (ENVS293) | 15 |

| Compulsory modules | Credits |
|---|---------|
| EARTH AND ENVIRONMENTAL DATA SCIENCE (ENVS229) | 15 |
| | |
| Optional modules | Credits |
| METAMORPHISM AND CRUSTAL EVOLUTION (ENVS212) | 15 |
| CHANGING ENVIRONMENTS (ENVS214) | 15 |
| CATCHMENT HYDROLOGY (ENVS217) | 15 |
| CLIMATOLOGY (ENVS231) | 15 |
| SOILS, SLOPES AND THE ENVIRONMENT (ENVS238) | 15 |
| ENVIRONMENTAL GEOPHYSICS (ENVS258) | 15 |
| STRUCTURAL GEOLOGY AND INTERPRETATION OF GEOLOGICAL MAPS (ENVS263) | 15 |
| APPLIED ENVIRONMENTAL GEOSCIENCE (ENVS331) | 15 |
| FLUVIAL ENVIRONMENTS (ENVS372) | 15 |
| CARBON, NUTRIENTS AND CLIMATE CHANGE MITIGATION (ENVS381) | 15 |
| VOLCANOLOGY AND GEOHAZARDS (ENVS284) | 15 |

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

Year three

In year three, students take the following compulsory modules, and five optional modules as outlined below.

Fieldwork involves:

- Optional number of field days (up to 28 days) to carry out independent field data collection as part of the final year Earth Science Project
- Eight days in the southern Spain
- Three to five days in NW England.

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 |
|--|----------------------|
| FLUVIAL ENVIRONMENTS (ENVS372) | 15 |
| GEODYNAMICS OF THE MEDITERRANEAN (ENVS368) | 15 |
| EARTH SCIENCE PROJECT (ENVS300) | 30 |
| | |
| | |
| Optional modules | Credits |
| Optional modules GEOENERGY (ENVS337) | Credits 15 |
| • | |
| <u>GEOENERGY (ENVS337)</u> | 15 |

| Optional modules | Credits |
|--|---------|
| NATURAL HAZARDS AND SOCIETY (ENVS319) | 15 |
| SIMULATING ENVIRONMENTAL SYSTEMS (ENVS397) | 15 |
| THE LIVING, EVOLVING EARTH (ENVS320) | 15 |
| APPLIED ENVIRONMENTAL GEOSCIENCE (ENVS331) | 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.

Our excellent staff to student ratio means you will never be an anonymous student in an enormous class and you'll have the opportunity to get to know all staff in the Department. You will have fortnightly tutorials with a member of academic staff in years one and two, and you will be assigned a personal tutor, who can offer guidance and support throughout your time at the University.

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.

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.

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 the cost of a geological field kit, dissertation expenses, and optional field classes in year three.

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 <u>recommended</u> <u>field kit</u> 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.

Year three optional field class:

- Option A: Europe. One-week residential field class (eg to the Algarve). Students will cover the full cost of the field class, including travel, accommodation, food, and the price of the field class (around £800)
- Option B: North America. Two-week residential field class. Students will cover the full cost of the field class, including travel, accommodation, food, and the price of the field class (around £1,300).

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). A £600 travel bursary is available from the University.

Find out more about additional study costs.

Entry requirements

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

A levels

ABB including one science A level. Acceptable sciences: Mathematics, Further Mathematics, Physics, Chemistry, Biology, Geology, Geography, Environmental Science, Applied Science, Use of Mathematics.

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)
- <u>Geography BSc (Hons) (4 year route including a foundation year at Carmel</u>
 <u>College)</u> BSc (Hons)

T levels

T levels are not currently accepted.

GCSE

4/C in English and 4/C in Mathematics

Subject requirements

For applicants from England: For science A levels that include the separately graded practical endorsement, a "Pass" is required.

BTEC Level 3 National Extended Diploma

D*DD in relevant Diploma.

International Baccalaureate

33 overall including two Higher Level sciences and no score less than 4

Irish Leaving Certificate

H1, H2, H2, H2, H3, H3 including H2 or above in two sciences

Scottish Higher/Advanced Higher

Not accepted without Advanced Highers at grades ABB

Welsh Baccalaureate Advanced

Acceptable at grade B including 2 Science A Levels at grades AB

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 each of two sciences. GCSE English and Mathematics grade C/4 or above also required.

International qualifications

Select your country or region to view specific entry requirements.

Many countries have a different education system to that of the UK, meaning your qualifications may not meet our direct entry requirements. Although there is no direct Foundation Certificate route to this course, completing a Foundation Certificate, such as that offered by the <u>University of Liverpool International</u> <u>College</u>, can guarantee you a place on a number of similar courses which may interest you.

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 <u>international language tests</u> and <u>country-</u> <u>specific qualifications</u>.

International applicants who do not meet the minimum required standard of English language can complete one of our <u>Pre-Sessional English courses</u> 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 <u>the equivalent score in selected other English language tests</u>, 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 <u>Pre-sessional English entry requirements</u> 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, <u>contact us</u> for advice
- <u>Applications from mature students</u> are welcome.

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