

Geography and Oceanography BSC (Hons)

COURSE DETAILS

• A level requirements: ABB

• UCAS code: FF78

• Study mode: Full-time

• Length: 3 years

KEY DATES

• Apply by: <u>29 January 2025</u>

• Starts: 22 September 2025

Course overview

Our Geography and Oceanography BSc (Hons) programme explores how the Earth behaves as a result of interactions between the land, the oceans, and the atmosphere. If you're interested in understanding complex issues such as climate change, rising sea levels, and environmental pollution, this is the course for you.

INTRODUCTION

Complex issues such as climate change, sea-level rise, and environmental pollution can only be fully understood if all the different facets of the Earth's behaviour are considered. While the ocean sciences aspect deals with present-day and future climate change scenarios, the link to physical geography provides an understanding of changes in climate over the last several thousand years to provide context for recent climate change.

Your training will cover core topics in oceanography, physical geography, geology, and ecology as well as modules in IT and communication skills. There will be the opportunity to participate in fieldwork throughout your studies, as well as a full sea practical during your final year.

Fieldwork is carried out in a range of locations, ranging from inner city to coastal and mountainous environments. This includes local coastal waters and other locations across the UK.

Liverpool was the first UK university programme to combine land, ocean, and climate studies in one integrated programme of study. Our links with the campus-based National Oceanography Centre provide guest lectures and supervision of projects from their scientists.

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

- Accredited by the Institute of Marine Engineering, Science and Technology
- Guest lectures and project supervision from scientists at National Oceanography Centre (NOC)
- Lectures and assignments are regularly updated with the latest research
- Fieldwork opportunities in local and UK waters
- Paid summer internships are offered working alongside academics at the University, NOC, or elsewhere
- Students without mathematics, physics or chemistry at A level are provided with remedial courses

ACCREDITATION

This course is accredited by the Institute of Marine Engineering, Science and Technology.

Course content

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

YEAR ONE

The required modules in year one provide grounding in ocean science and physical geography, as well as developing essential and transferable skills that are required throughout your degree programme. Optional modules allow you to focus on areas of environmental sciences that interest you.

Students are pre-registered for ENVS128. Students wanting a more advanced maths module should switch to ENVS117.

COMPULSORY MODULES

CLIMATE, ATMOSPHERE AND OCEANS (ENVS111)

Credits: 15 / Semester: semester 1

Climate, Atmosphere and Oceans provides an understanding of how the climate system operates. The module draws on basic scientific principles to understand how climate has evolved over the history of the planet and how the climate system is operating now. Attention is particularly paid to the structure and circulation of the atmosphere and ocean, and how they both interact. The course emphasises acquiring mechanistic insight and drawing upon order of magnitude calculations. By the end of the module students will understand how the oceans and atmosphere combine to shape Earth's climate. Students gain quantitative skills by completing a series of coursework exercises and a final exam. Students address the Net Zero carbon goal via group work involving digital storytelling.

EXPERIMENTS IN PHYSICAL GEOGRAPHY (ENVS120)

Credits: 15 / Semester: semester 1

The module uses laboratory experiments to allow students to gain first-hand experience of some fundamental physical, biological and chemical processes underlying physical geography, aimed primarily at interactions between people and their physical environment. It is designed to provide a foundation for environmental modules in the second and third years. This module comprises multiple whole-day practical sessions, each designed to give students first-hand experience of a topic important in understanding our changing environment. Dedicated computer practicals are also run to provide training in use of EXCEL, MINITAB, and basic inferential statistics. Students get formal feedback in each assessed week (one poster per group). However, perhaps most valuable is the feedback obtained informally via discussions during the sessions.

MARINE ECOSYSTEMS: DIVERSITY, PROCESSES AND THREATS (ENVS122)

Credits: 15 / Semester: semester 2

This module is designed to deliver an introduction to the diversity of marine ecosystems across the globe. Each week during in person lectures you will be introduced to a new ecosystem and will learn about this habitat, specifically the main organisms, key processes, and human threats to each ecosystem described and explored. Central to this module are interactive discussion sessions (workshops) that will build an understanding of how marine ecosystems are expected to respond to the human-induced changes of the anthropocene. During these workshops you will learn to critique a piece of scientific research in small group discussions guided by academics. Your knowledge and understanding will be assessed via open-book online tests, and a group project in which you will create an infographic outlining the threats a particular ecosystem faces.

STUDY SKILLS (OCEAN AND CLIMATE SCIENCES) (ENVS103)

Credits: 15 / Semester: whole session

This module is designed to introduce students to key concepts and skills in ocean and climate sciences, for instance key software tools for data analysis and illustration and fieldwork experience. Students will also develop more generic skills, particularly in communication through essay writing and oral and poster presentations. The module also introduces students to academic integrity and shows students how to access scientific literature and how to use bibliographic software. All students are assigned to a tutorial group with one of the academic staff as their tutor. Teaching is carried out both to the whole year group and also during tutorial group meetings. The module is assessed via a series of coursework assignments.

THEORY AND LABORATORY EXPERIMENTS IN EARTH SURFACES PROCESSES (ENVS165)

Credits: 15 / Semester: semester 2

The module uses a lecture and laboratory-based problem-solving approach to explore some of the fundamental physical and chemical processes underlying physical geography. It is designed to provide a foundation for environmental and physical geography modules in the second and third year. This module comprises multiple whole-day practical sessions, each designed to give students first-hand experience of a topic important in understanding our changing environment. Students get formal feedback in each assessed week (one poster per group). However, perhaps most valuable is the feedback obtained informally via discussions during the sessions.

QUANTITATIVE SKILLS FOR ECOLOGY AND MARINE BIOLOGY (ENVS128)

Credits: 15 / Semester: semester 1

This module will help students to develop the quantitative skills needed for ecology, marine biology and related subjects, including basic mathematics, statistics and computing. It will be delivered via a series of lectures, practical classes and problem-solving sessions. No mathematical knowledge above GCSE level will be assumed.

INTRODUCTION TO CLIMATE CHANGE AND MITIGATION (ENVS189)

Credits: 15 / Semester: semester 2

This module will introduce you to the concept of Earth System interactions as a framework for understanding the causes and consequences of climate change. The module will cover the key features of the earth, atmosphere and ocean, and their interactions. alongside the drivers and consequences for perturbing part of the Earth System. Past, contemporary and projections of climate change will be discussed, as well as the toolkit tools deployed by environmental scientists to detect climate change and show attribute it to be a consequence of human activities. The module will discuss also measures to mitigate against climate change, drawing on the United Nations Framework Convention on Climate Change (UNFCC) efforts .

OPTIONAL MODULES

ECOLOGY AND CONSERVATION (ENVS157)

Credits: 15 / Semester: semester 2

The zone of life on earth, or the 'biosphere', is a highly dynamic system responding to external pressures including changing human activities. The biosphere obeys a numbers of simple natural principles, but these often interact to create complex and sometimes unexpected responses. Using a wide range of examples we will explore these interactions between organisms and the environment. We will examine how species organise into communities, and how energy and other resources flow through ecosystems. We will explore how ecosystems respond to change, including gradual environmental shifts, sudden disturbance events and the effects of human activities. We will also learn how the key principles of ecology can be applied to conservation. We will assess the current state of the biosphere, and evaluate the major current threats. We will also look towards the future of ecosystems, including whether we can restore degraded habitats, and recreate "natural" landscapes.

ENVIRONMENTAL CHEMISTRY (ENVS153)

Credits: 15 / Semester: semester 2

This module will give students an understanding of the fundamental properties of elements and matter, either solid, liquid or gas, in the context of the environmental sciences. It will introduce the fundamentals of atomic structure, elements and molecules from simple inorganic to large organic ones and the bonding forces that hold them together. It will look at the basics of chemical reactions such as the processes of oxidation and reduction, the solubility of solids and gases in water and acid-base properties. Students will learn how to make quantitative predictions, for instance on the amount of products that will be produced based on balanced chemical reactions, and will see how basic chemistry can be used to explain many environmental properties. The module is taught through lectures, tutorial sessions and online formative quizzes with automated feedback. Assessment is through online tests and an open book final exam. This module is largely an introduction to chemistry and might therefore not be well suited for students who did A-level chemistry or equivalent.

ESSENTIAL MATHEMATICAL SKILLS (ENVS117)

Credits: 15 / Semester: semester 1

This module is designed to provide students without a A-Level GCE level (or equivalent) background in mathematics a foundation to their degree programme. The module covers pure maths, maths mechanics and statistics developing the required knowledge and skills to be able complete degree programmes in Ocean Sciences, Earth Sciences, Geography, Environmental Science and Marine Biology. The module is taught as weekly lectures following a ten-chapter book developed for the module by world leading experts in the fields. Lectures are supplemented with workshops where concepts can be discussed and skills improved. The module is assessed though online pop-quizzes and a formal written exam.

Any optional modules listed above are illustrative only and may vary from year to year. Modules may be subject to minimum student numbers being achieved and staff availability. This means that the availability of specific optional modules cannot be guaranteed.

YEAR TWO

Modules in year two will develop more specialist skills and knowledge in ocean sciences and physical geography. Optional modules provide further opportunities to focus on topics of environmental sciences that interest you.

COMPULSORY MODULES

CHANGING ENVIRONMENTS (ENVS214)

Credits: 15 / Semester: semester 1

The Earth is subject to a myriad of threats and stresses, ranging from a changing global climate to unprecedented scales of human impacts on ecosystems, so that a new geological time period, the Anthropocene was created. Placing future change in freshwater and coastal wetlands and lakes into a long-term context is a critical science, and without it, society cannot constrain the 'natural' baseline against which future changes could be judged. This module will provide a critical insight into the global changes currently impacting the Earth over decades to millennial timescales. We will introduce a series of contemporary environmental concerns, and teach how we can reconstruct climatic and environmental conditions, the landscapes and vegetation of the past. We will explore a wide variety of archives (lakes, freshwater and coastal wetlands, oceans) and develop an understanding of the key techniques used to trace environmental conditions (physical properties, biogeochemistry, biological indicators). We will assess how the drivers behind these changes will affect future landscapes and ecosystems.

CLIMATOLOGY (ENVS231)

Credits: 15 / Semester: semester 2

Understanding global climate systems is a key challenge for the coming century. However, these are complex systems which we continue to learn more about as research develops. This module covers a variety of topics which will develop students' ability to understand these systems. Topics include energy balance and transfer processes at the surface, clouds, rain formation, weather forecasting, monsoons, tropical cyclones, weather in the mid latitudes, and the regional climates. The module has a balance between theory, processes, impacts, and hands-on experimentation and data analysis.

GEOMORPHOLOGY: ICE, SEA AND AIR (ENVS252)

Credits: 15 / Semester: semester 2

The module explores the basic processes that have helped shape landforms across the world. Module is predominantly focused on glacial, aeolian, and coastal landforms. The module is divided into four components, each composed of four sessions. The module starts with an introduction to how geomorphic processes operate and forces that influence geomorphic change. This includes the magnitude and frequency of events, as well as the time and space scales over which the processes operate, covering glacial, aeolian and coastal geomorphology. The module is delivered through weekly in-person lectures, two days of fieldwork and a formative GIS practical. It is assessed through two pieces of coursework based on the field work and a written exam.

KEY SKILLS FOR ENVIRONMENTAL DATA ANALYSIS (ENVS202)

Credits: 15 / Semester: semester 1

The module provides a generic training in manipulating environmental datasets using the industry-standard Matlab software. Skills are provided in reading in data, manipulating and plotting the data, and interpreting the data signals. The assumption is that students have no experience in programming. The module begins with an introduction to Matlab – what it is, what it can do, how to operate it – and then develops a series of programming skills, each week using data collected in the staff's own research to provide real-world examples of the use of Matlab. The aim is to provide students with sufficient grasp of programming in Matlab to enable its use in subsequent project work, as well as providing the foundations in one of the key tools used in science and industry. The module is assessed by both coursework and a short final exam.

SAMPLING THE OCEAN (ENVS220)

Credits: 15 / Semester: semester 2

This module provides some of the fundamental skills required for surveying and sampling the ocean, either for research or for commercial environmental surveying work. The module covers the methods and skills used in oceanography for navigation and survey design, the measurement of physical parameters such as temperature, salinity and currents, and the measurement of biogeochemical parameters such as nutrients, phytoplankton and dissolved oxygen. Students are taught the importance of assessing data quality and instrument calibration, metadata and data banking. Laboratory work develops skills in the analyses for key oceanographic parameters (e.g. salinity, chlorophyll, dissolved oxygen and nutrients), and computer laboratories develop skills in sensor calibration, data quality control and data analysis. The module components are all relevant to the subsequent planning and sampling as part of the ENVS349 Sea Practical. Assessment is by two pieces of coursework.

OCEANOGRAPHY, PLANKTON AND CLIMATE (ENVS245)

Credits: 15 / Semester: semester 1

The ocean is a vital part of how Earth's climate works, absorbing, storing and transporting heat and carbon dioxide from the atmosphere. Microscopic plants and animals in the ocean, known as the plankton, are key to how the ocean works in Earth's climate system. From the tropics to the poles, we will look at how the ocean currents and tides are formed and how they control where and how much the plankton grow. Larger plankton are better at removing carbon from the atmosphere to the ocean depths, and we will consider why some regions of the ocean are better at supporting the plankton communities that are most efficient at removing atmospheric carbon dioxide. Processes that we will investigate include the formation of the major ocean gyres and tides, the effects of seasons and weather and how these change at different latitudes, oxygen and carbon dioxide exchange between the atmosphere and ocean and the fate of these gases in the sea, the sources of light and nutrients that the plankton need, and the importance of seasonal stratification and turbulence in controlling how and where the plankton can grow. You will learn how to analyse and report on ocean data that we have collected in our research, from the sub-tropical Atlantic to the polar seas. You will use simple computer simulations to investigate how the growth of plankton might change as our climate heats up. We will take a multidisciplinary approach to learning about the ocean, plankton and climate. Whatever your scientific background, we will provide you with the key knowledge of ocean biology, chemistry and physics that you need to understand why a planet needs an ocean in order to support a stable climate. Our teaching uses a combination of lectures, workshops and data analysis laboratories. The module is assessed by 3 pieces of coursework: analysis of data that we have collected during our research expeditions, use of a computer simulation to investigate plankton growth in a warmer climate, and a final quiz to test your knowledge of key concepts.

RESEARCH AND CAREER SKILLS (ENVS204)

Credits: 15 / Semester: whole session

This module aims to develop research and careers skills required by marine biologists, ocean scientists and environmental scientists as they prepare for their final year of study. These aims are achieved through blended learning approach including: interactive tutorials, workshops, and the School of Environmental Sciences careers week. Students will focus on developing skills in critiquing and reading the scientific literature, assessed through a literature review essay. Students will also be introduced to the process of scientific research, learning how to analyse and synthesise real scientific data, create professional display items and write a research report, which is assessed, in standard scientific format. Students will develop knowledge of careers in their field and enhance their employability taking part in an assessment centre exercise and job video interview, which is assessed.

OPTIONAL MODULES

CATCHMENT HYDROLOGY (ENVS217)

Credits: 15 / Semester: semester 1

The study of catchment hydrology is concerned with water above and below the land surface, its various forms, and its circulation and distribution in time and space within drainage catchments; it is based on fundamental knowledge of the hydrological cycle and its governing factors. Understanding the hydrological cycle is fundamental to physical geography. All life is supported by water and all earth systems incorporate fluxes of water to some extent. The module covers the main hydrological processes operating in drainage catchments in terms of their measurement, operation and controlling factors. The module provide 'hands-on' experience of both observing hydrology and modelling hydrological systems, with an emphasis on applied learning, which might be useful in a vocational sense in the future. The module will aim to deliver excellent training in the knowledge required to work in a wide variety of environmentally-facing careers, including those with the EA, Natural England or DEFRA, as well as Environmental Consultancies.

MARINE POLLUTION (ENVS232)

Credits: 15 / Semester: semester 2

Students are taught how marine systems are changing due to globally increasing water temperatures and increasing carbon dioxide concentrations in the atmosphere, which are affecting the chemistry, physics and ultimately biology of the marine systems at unprecedented rates. These changes are expected to accelerate in the coming decades. Localised anthropogenic stressors such as excess nutrients, plastic debris, trace metals (e.g. mercury, copper), marine heatwaves and/or other emerging contaminants affecting coastal and open ocean waters are covered. Students will gain an understanding of the causes and processes that drive marine pollution issues as well as techniques used to monitor, remediate and/or regulate those issues. Assessment is done through group work, coursework and a final in-person exam.

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YEAR THREE

Year three provides the opportunity to conduct an independent research project in oceanography/geography and to engage in sampling activities at sea during a three-day research cruise. Optional modules are available in physical geography, oceanography and environmental sciences.

COMPULSORY MODULES

CONTEMPORARY ISSUES IN OCEAN AND CLIMATE SCIENCES (ENVS366)

Credits: 15 / Semester: semester 2

This research-led module aims to promote interest, awareness and understanding of current important research topics within Ocean and Climate Sciences. It also aims to develop generic skills such as team working and communication skills. The module considers recent reports such as the IPCC (Intergovernmental Panel on Climate Change) and the associated 2019 SROCC (Special Report on Oceans and Cryosphere in a Changing Climate), with students working with one of the lead IPCC authors based in Liverpool. Students will also attend the bi-weekly Ocean and Climate Sciences research seminars that are given by invited national and international experts on a range of subjects related to the marine and climate system. Assessment is by individual oral presentations by students presenting what they have learnt from recent research papers of particular interest to them, and a group presentation on a research topic of current importance (e.g. as highlighted in the latest SROCC report). A final in-person exam is focused around a recent high-impact scientific paper provided to the students.

SEA PRACTICAL (ENVS349)

Credits: 30 / Semester: semester 1

Measurements made at sea are a key activity in oceanographic research. This module introduces the collection of data and samples including navigation, meteorological parameters, temperature and salinity, currents, dissolved oxygen, nutrients, chlorophyll and plankton. We will use the Field Studies Council Site at Millport in Scotland, where students will gain experience of sampling at sea and use skills developed in the second year to calibrate and analyse their data. Laboratory work, analysing water samples for nutrients and plankton, will take place in Millport and in the Central Teaching Laboratories in Liverpool. The Sea Practical introduces students to the way in which professional ocean scientists work in both research and commercial surveying. It involves collecting data and samples at sea, analysing samples in the laboratory, processing and analysing data using computer software, assessing, and reporting on the data and its quality, and finally presenting the methods, results and interpretation in an accurate and comprehensive report. By following professional ways of working, it provides students with both subject-specific and generic employability skills. Research integrity is an integral component of this module. The module is assessed by a group presentation on components of the data analysis and quality, a record and laboratory book, and a scientific report/paper addressing a key question arising from the data collected off Millport.

INDEPENDENT RESEARCH PROJECT (ENVS306)

Credits: 30 / Semester: whole session

This module consists of a two-semester dissertation research project, carried out individually by a student with supervision by a member of academic staff. Projects can be field-, laboratory- or desk-based studies on a predefined project and the student will learn about project design, data collection, analysis and interpretation of results.

OPTIONAL MODULES

GEOGRAPHIC DATA SCIENCE (ENVS363)

Credits: 15 / Semester: semester 1

This module will introduce students to the nascent field of Geographic Data Science (GDS), a discipline established at the intersection between Geographic Information Science (GIS) and Data Science. The course covers how the modern GIS toolkit can be integrated with Data Science tools to solve practical real-world problems. Core to the set of employable skills to be taught in this course is an introduction to programming tools for GDS in R and Python. The programme of lectures, guided practical classes and independent study illustrate how and why GDS is useful for social science applications.

GLOBAL CARBON CYCLE (ENVS335)

Credits: 15 / Semester: semester 2

Increasing amounts of carbon dioxide in the atmosphere are having a profound impact on our Earth system. This module will introduce students to the fundamental theory behind the global carbon cycle. Students will see how carbon is partitioned between the atmosphere, land and ocean in the contemporary and past Earth system, understand how the ocean stores 50 times more carbon than the atmosphere, and consider the impact of increasing carbon dioxide on the organisms living on land and in the ocean. Teaching is through lectures, workshops focusing on key components of the carbon cycle, and guided reading. Assessment is by two pieces of coursework.

INTRODUCTION TO QUATERNARY MICROPALAEONTOLOGY (ENVS342)

Credits: 15 / Semester: semester 2

This module intends to give a holistic insight of a number of marine and terrestrial microfossils that are conventionally used for reconstructing past environmental conditions for the Quaternary period, including recent past. Microfossils are biological indicators that can help to either qualitatively and/or quantitatively estimate environmental conditions such as atmospheric temperature and precipitation (pollen), sea-surface conditions (foraminifera, diatoms, radiolarians, dinoflagellate cysts), salinity (ostracods, diatom), pH (diatoms), sea-ice cover (diatoms, dinoflagellate cysts), etc. These conditions are of paramount importance for modelling past climate conditions and the data derived from microfossil assemblages enable to better calibrate models, which in turn, are essential to forecast future climate. In addition, microfossil assemblages help to understand the natural evolution of our environment as well as measuring the amplitude of human activities over time.

OCEAN DYNAMICS (ENVS332)

Credits: 15 / Semester: semester 1

Ocean dynamics addresses how the ocean and atmosphere circulate. Fundamental questions are addressed, such as how heat, salt, and dissolved substances are transported, how jets and weather systems emerge on our planet, why there are western boundary currents in the ocean, and how seafloor topography shapes the ocean circulation. Students will improve their understanding of how the ocean and atmosphere behave, including comparing the importance of different physical processes in the climate system. The module is delivered via lectures and formative workshops to gain skills at problem solving. There is significant mathematical content, requiring familiarity with calculus and algebra. The module is assessed through two online tests and an essay.

FLUVIAL ENVIRONMENTS (ENVS372)

Credits: 15 / Semester: semester 2

Fluvial processes are found all over the world and are some of the most important in sculpting the Earth's surface and producing landforms. This module examines fundamental concepts and recent ideas relating to fluvial geomorphology, building on study throughout your educational career. A key point about studying fluvial environments is to understand how the system functions, its links and interactions. It is important to look at all the main components of the system, to understand the dynamics and controls on water and sediment flux and how these produce different types of landforms. The amounts of water and sediment can vary with the environmental conditions and thus study of the drivers of these systems such as climate and human activities and how they have changed over time is essential for being able to interpret the current landscape. Understanding of the present functioning of fluvial systems is essential for any environmental management since rain and runoff are ubiquitous and floods are a major natural hazard.

COASTAL ENVIRONMENTS: SPATIAL AND TEMPORAL CHANGE (ENVS376)

Credits: 15 / Semester: semester 1

This module considers the evolution and response of coastal environments to marine and riverine processes and their variations in relation to past, present and future climate change. Attention is given to physical processes and inter-relationships acting along coastlines and coastal changes in response to sea level rise, variations in storms activity, wave climate and sediment supply. Consideration is also given to coastal management and climate change adaptation and mitigation measures. Topics will be investigated through a combination of lectures, field trips and development of a project aimed at identifying optimum coastal protection schemes for real case studies.

CARBON, NUTRIENTS AND CLIMATE CHANGE MITIGATION (ENVS381)

Credits: 15 / Semester: semester 1

This module looks at the cycling of carbon and greenhouse gases, and how their emissions drive climatic warming, via a range of different topics. These include ecosystems (e.g. peatlands, freshwaters), societal change (e.g. how did Covid 19 affect carbon emissions?), greenhouse gas accounting and policy (e.g. Net Zero, Representative Concentration Pathways), and Negative Emissions Technologies (e.g. enhanced weathering, direct air capture). By drawing together this diverse range of topics the module will equip students with a broad knowledge of why the climate is warming, and how this warming might be reversed. The module will involve both individual and group work, workshops, group presentations/debates, and engagement with the most current scientific literature and social media and science communication. Students taking this module must be willing to engage in quantitative analyses of carbon and nutrient cycling and its importance to climate mitigation strategies.

Any optional modules listed above are illustrative only and may vary from year to year. Modules may be subject to minimum student numbers being achieved and staff availability. This means that the availability of specific optional modules cannot be guaranteed.

HOW YOU'LL LEARN

Teaching takes place through lectures, practicals, workshops, seminars, tutorials and computer based learning, with an emphasis on learning through doing. The award-winning £23 million Central Teaching Laboratories provides a state-of-the-art facility for undergraduate practical work.

Students value the learning opportunities provided by field classes, including the rapid feedback on performance. You will typically receive at least 15 hours of formal teaching each week. Between 30 and 100 hours of fieldwork and hands-on activities are provided each year depending on the discipline.

A typical module might involve two or three one-hour lectures each week, and often a three-hour laboratory or computer-based practical as well. Tutorials typically involve groups of 4-7 students meeting with a member of staff at least every two weeks in year one and two. In year three, you will undertake an honours project, which is a piece of independent research (field, laboratory, or data analysis) on a topic of your choice, supervised by a member of staff. In years three and four students meet with their project supervisor on a weekly or more frequent basis. As you progress through your degree, you will be increasingly challenged to engage with current debates, think critically, and study independently.

A number of the School's degree programmes involve laboratory and fieldwork. The fieldwork 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, coursework submissions in the form of essays, scientific papers, briefing notes or lab/field notebooks, oral and poster presentations and contributions to group projects.

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.

Careers and employability

Geography is a subject that bridges the social and physical sciences. Those studying geography develop transferable knowledge and skills which open up a wide range of career opportunities.

By the time you graduate you will have developed core research skills in human geography, including surveying, interviewing and innovative community liaison techniques stand students in good stead for a range of employment destinations.

You can explore the following work experience opportunities:

- Internships during the course of their degree.
- Work-based dissertation which combines the final year independent research project with a placement in industry.

Students can also continue their studies at postgraduate level and PhD study with opportunities to apply for funding from a range of organisations, including the ESRC (Economic and Social Research Council) and NERC (Natural Environment Research Council).raphy is a subject that bridges the social and physical sciences. Those studying geography develop transferable knowledge and skills which open up a wide range of career opportunities.

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WORK EXPERIENCE OPPORTUNITIES

We encourage students to undertake work experience and internships during the course of their degree. Our students can also select a work-based dissertation, which combines the final year independent research project with a placement in industry.

Students can also continue their studies at postgraduate level and PhD study with opportunities to apply for funding from a range of organisations, including the ESRC (Economic and Social Research Council) and NERC (Natural Environment Research Council).

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	£1,850
Year abroad fee	£1,385

International fees	
Full-time place, per year	£29,100
Year in industry fee	£1,850
Year abroad fee	£14,550

The UK full-time tuition fee, international course fee and fee for the year abroad for international students shown are correct for 2025/26 entry. We are currently awaiting confirmation of whether the year abroad fee for UK students, as well as the year in industry fee will change, so the fees shown are for 2024/25. 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 fees and funding.

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 lab coat, food and drink during compulsory field courses, and dissertation expenses.

Find out more about the <u>additional study costs</u> that may apply to this course.

SCHOLARSHIPS AND BURSARIES

We offer a range of scholarships and bursaries that could help pay your tuition and living expenses.

We've set the country or region your qualifications are from as United Kingdom. <u>Change it</u> here

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UNDERGRADUATE GLOBAL ADVANCEMENT SCHOLARSHIP

International students

If you're a high-achieving international student starting an undergraduate degree with us from September 2024, you could be eligible to receive a fee discount of up to £5,000. You'll need to achieve grades equivalent to AAA in A levels. Most of our undergraduate degrees are eligible, with the exception of clinical programmes in Medicine and Dental Surgery.

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THE LIVERPOOL BURSARY

Home students

If you're a UK student joining an undergraduate degree and have a household income below £35,000, you could be eligible for a Liverpool Bursary worth up to £2,000 for each year of undergraduate study.

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ASYLUM SEEKERS SCHOLARSHIP

Home students

<u>Apply for an Asylum Seekers Scholarship and you could have your tuition fees paid in full and receive help with study costs. You'll need to have applied for asylum in the UK, or be the dependant of an asylum seeker, and be joining an eligible undergraduate degree.</u>

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CARE LEAVERS' OPPORTUNITY BURSARY

Home students

If you've spent 13 or more weeks in Local Authority care since age 14, you could be eligible for a bursary of £3,000 per year of study. You'll need to be a UK student joining an eligible undergraduate degree and be aged 28 or above on 1 September in the year you start.

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COWRIE FOUNDATION SCHOLARSHIP

Home students

Are you a UK student with a Black African or Caribbean heritage and a household income of £25,000 or less? You could be eligible to apply for a Cowrie Foundation Scholarship worth up

to £8,000 for each year of undergraduate study.

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ESTRANGED STUDENTS BURSARY

Home students

If you're a UK student identified as estranged by Student Finance England (or the equivalent UK funding body), you could be eligible for a bursary of £1,000 for each year of undergraduate study.

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GENESYS LIFE SCIENCES SCHOLARSHIP

• Home students

<u>Joining a School of Biosciences degree and have a household income of less than £25,000?</u>
<u>If you're a UK student, you could apply to receive £4,500 per year for three years of your undergraduate course.</u>

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GRADUATE ASSOCIATION HONG KONG & TUNG UNDERGRADUATE SCHOLARSHIPS

- International students
- Hong Kong

If you're an undergraduate student from Hong Kong who can demonstrate academic excellence, you may be eligible to apply for a scholarship worth £10,000 in partnership with the Tung Foundation.

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KAPLAN DIGITAL PATHWAYS EXCELLENCE SCHOLARSHIP

• International students

Completed a Kaplan Digital Pathways Foundation Certificate? We're offering a £5,000 fee discount off the first year of undergraduate study for a maximum of two high achieving students joining one of our non-clinical degrees from an online Kaplan Foundation Certificate.

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NOLAN SCHOLARSHIPS

Home students

<u>Do you live in the Liverpool City Region with a household income of £25,000 or less? Did neither of your parents attend University? You could be eligible to apply for a Nolan Scholarship worth £5,000 per year for three years of undergraduate study.</u>

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RIGBY ENTERPRISE AWARD

• Home students

Are you a UK student with a household income of £25,000 or less? If you've participated in an eligible outreach programme, you could be eligible to apply for a Rigby Enterprise Award worth £5,000 per year for three years of your undergraduate degree.

ROLABOTIC SCHOLARSHIP

Home students

Are you a UK student with a household income of £25,000 or less? Did neither of your parents attend University? You could be eligible to apply for a ROLABOTIC Scholarship worth £4,500 for each year of your undergraduate degree.

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SPORT LIVERPOOL PERFORMANCE PROGRAMME

Home and international students

<u>Apply to receive tailored training support to enhance your sporting performance. Our athlete support package includes a range of benefits, from bespoke strength and conditioning training to physiotherapy sessions and one-to-one nutritional advice.</u>

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TECHNETIX BROADHURST ENGINEERING SCHOLARSHIP

• Home students

<u>Joining a degree in the School of Electrical Engineering, Electronics and Computer Science? If you're a UK student with household income below £25,000, you could be eligible to apply for £5,000 a year for three years of study. Two awards will be available per academic year.</u>

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UNIVERSITY OF LIVERPOOL INTERNATIONAL COLLEGE EXCELLENCE SCHOLARSHIP

International students

Completed a Foundation Certificate at University of Liverpool International College (UoLIC)? We're offering a £5,000 fee discount off the first year of undergraduate study to some of the highest achieving students joining one of our non-clinical degrees from UoLIC.

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UNIVERSITY OF LIVERPOOL INTERNATIONAL COLLEGE FIRST CLASS SCHOLARSHIP

International students

We're offering a £1,000 fee discount for years 2 and 3 of undergraduate study to eligible students progressing from University of Liverpool International College. You'll need to be studying a non-clinical subject and get an average of 70% or above in year 1 of your degree.

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UNIVERSITY OF LIVERPOOL INTERNATIONAL COLLEGE IMPACT PROGRESSION SCHOLARSHIPS

• International students

If you're a University of Liverpool International College student awarded a Kaplan Impact Scholarship, we'll also consider you for an Impact Progression Scholarship. If selected, you'll receive a £3,000 fee discount off the first year of your undergraduate degree.

YOUNG ADULT CARER'S (YAC) BURSARY

• Home students

If you're a young adult and a registered carer in the UK, you might be eligible for a £1,000 bursary for each year of study. You'll need to be aged 18-25 on 1 September in the year you start your undergraduate degree.

Entry requirements

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

Your qualification	Requirements About our typical entry requirements
A levels	ABB including two science subjects (acceptable science subjects: Mathematics, Further Mathematics, Physics, Chemistry, Biology, Geology, Geography, Applied Science, Environmental Science, Psychology, Marine Science)
	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 including two sciences.
	You may automatically qualify for reduced entry requirements through our <u>contextual offers scheme</u> .
	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) Geography BSc (Hons) (4 year route including a foundation year at Carmel College) BSc (Hons)
GCSE	4/C in English and 4/C in Mathematics
Subject requirements	Including two sciences. Acceptable sciences: Mathematics, Further Mathematics, Physics, Chemistry, Biology, Geology, Geography, Applied Science, Environmental Science, Psychology, Marine Science. For applicants from England: For science A levels that include the separately graded practical endorsement, a "Pass" is required.
International Baccalaureate	33 points including 5 at Higher Level in two science subjects, no score below 4.

Your qualification	Requirements About our typical entry requirements
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 ABB including two sciences
Welsh Baccalaureate Advanced	Accepted at Grade B with AB at two science A levels
Access	Applications considered. 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 Mathematics and English grade C / 4 also required
International qualifications	Many countries have a different education system to that of the UK, meaning your qualifications may not meet our entry requirements. Completing your Foundation Certificate, such as that offered by the <u>University of Liverpool International College</u> , means you're guaranteed a place on your chosen course.

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.

THE ORIGINAL

REDBRICK