

MSc

Environment and Climate Change

Study mode

Duration

Apply by: 29 August 2025

Full-time

12 months

Starts on: **22 September 2025**

About this course

The global impacts of climate change are one of the biggest threats facing the world today. Develop your understanding of climate change and the processes which contribute to contemporary environmental problems and threaten to transform our environment.

Introduction

You will gain the skills and techniques to allow you to reconstruct recent environmental change, along with methods of contemporary monitoring and the context for predicted possible future consequences.

Through a mix of lectures, independent group study, coursework field work and laboratory work, you will develop your analytical research skills so you'll be able to to conduct first-class research in the field of environment and climate change.

Facilities that you will use during your master's have recently benefited from substantial investment, meaning you will have access to state-of-the-art facilities and equipment. Studying Environment and Climate Change at master's level will allow you to draw upon staff expertise from across the School of Environmental Sciences.

Who is this course for?

This programme is perfect for graduates with a degree in an environmental subject (or relevant experience) who want to develop climate change research and influence sustainability policy at all levels.

What you'll learn

- An understanding of the principles of palaeoenvironmental reconstruction as a means of obtaining information about long-term environmental processes
- The methods of construction, applications of and strengths and weaknesses of global climate models as well as manipulating climatic time-series
- An understanding of the Earth's atmospheric and oceanic systems at various temporal and spatial scales
- The main drivers of environmental change during the Quaternary and the Holocene (the present interglacial period)
- The impacts of long-term human activities on the terrestrial and marine environment
- Training in the use of advanced laboratory techniques such as magnetic, biogeochemical, sedimentological, environmental modelling techniques and microfossils
- Independent thinking, critical insights, leadership, team work and a sound understanding of environmental issues (from global to local). Knowledge of regulations and policies at local government level.

∧ Back to top

Course content

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

Semester one

In semester one, you will undertake four modules that will introduce you to studying Environment and Climate Change at master's level. Including learning how to conduct in-depth research, how to present your findings, understanding quantitative research methods, how to navigate the political response to climate change, and techniques in soil and sediment sampling.

You'll get time in the laboratory to learn a number of techniques to support your time on the course, along with time out in the field developing your knowledge of environments such as lakes, peat-bogs, wetland, salt-marshes, and fluvial settings.

Please see below for semester one modules. Select the next tab to view semester two modules.

Modules

Compulsory modules	Credits
FIELD SKILLS IN ENVIRONMENTAL SCIENCE (ENVS425)	15
RESEARCH IN ANTHROPOCENE ENVIRONMENTS (ENVS485)	15
POLITICS OF THE ENVIRONMENT (ENVS525)	15
QUANTITATIVE RESEARCH METHODS IN ENVIRONMENTAL SCIENCES (ENVS433)	15

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

Semester two

In semester two, you'll get more chances to work in the field, in the lab, in the classroom, and with your peers as you learn about modes of operation, micropalaeontology, urban air pollution, and timescales of variation and drivers of the global climate system.

You'll also get the opportunity to work with us to develop the skills you will need to undertake your dissertation: project management, developing a research hypothesis, conducting a literature review, and more.

Modules

Compulsory modules	Credits
MONITORING URBAN AIR POLLUTION (ENVS666)	15
INTRODUCTION TO QUATERNARY MICROPALAEONTOLOGY (ENVS542)	15
ANALYSING CLIMATE PROCESSES AND VARIABILITY (ENVS475)	15
PROJECT DESIGN AND MANAGEMENT (ENVS484)	15

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

Final project

Your final semester is all about planning, researching and writing your dissertation. You will use all of the skills and knowledge you gained in previous modules to develop a full-scale research project that mimics the kind of content you may be producing beyond your master's – whether it's in the style of a consultancy report, journal article, scientific report or classic dissertation.

Modules

Compulsory modules	Credits
DISSERTATION - ENVIRONMENTAL SCIENCES (ENVS490)	60

Teaching and assessment

How you'll learn

You will be taught through a mixture of lectures, practical classes, fieldwork, private study, and supervised project work. At the start of the first semester you will participate in a week-long residential field class in the UK, and in both semesters, lectures are supplemented by regular laboratory and computer practical classes.

During the course, you will develop key study skills, presentation skills, data handling and analysis skills, and group work. The combination of modules is designed to promote independent thinking, critical insight, leadership, team work and to give you a sound understanding of environmental issues (from global to local). The teaching strategy is designed to place a strong emphasis on data analysis and evidence synthesis.

How you're assessed

Assessment methods are diverse across the modules and include exams, assessed essays, laboratory and computer practicals, field assignments, group work, reports, oral presentations and dissertations. A few modules are fully assessed by a series of practical reports.

When possible, you will create assessments that simulate the sort of work you might produce when conducting research beyond master's level such as consultancy reports, academic posters, abstracts and presentations, and dissertations which could be written as an academic paper or scientific/consultancy report.

In your third semester you will undertake your dissertation where you will be assessed on how well you demonstrate the ability to describe and interpret findings, synthesize different information sources to form coherent arguments and relate research outcomes.

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.

∧ Back to top

Careers and employability

You'll have lots of choice when you graduate from this programme. Not only is the world of PhD, teaching and post-doctoral research open to you but previous graduates have gone on to work in a wide variety of positions in the field of Environmental Science.

Previous graduates have gone on to have positions in many areas, such as:

- Environmental Consultancy
- Hydrologist
- Technical Chemist
- County Council Waste Recycling Officer
- National Parks Manager
- Geotechnical Engineer
- Technologist Environmental Advisor
- Policy Officer
- Clean Water Scientist
- Waste Management Consultant
- Environmental Risk Assessor
- Marine Resource Manager
- Trainee Weather Forecaster.

Career support from day one to graduation and beyond

Career planning From education to employment

Networking events

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 - £12,500

International fees

Full-time place, per year - £28,300

Fees stated are for the 2025-26 academic year.

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

- You can pay your tuition fees in instalments.
- All or part of your tuition fees can be <u>funded by external sponsorship</u>.
- International applicants who accept an offer of a place will need to <u>pay a</u> tuition fee deposit.

If you're a UK national, or have settled status in the UK, you may be eligible to apply for a Postgraduate Loan worth up to £12,167 to help with course fees and living costs. **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 could include buying a laptop, books, or stationery.

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

Entry requirements

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

Postgraduate entry requirements

We accept a 2:2 honours degree from a UK university, or an equivalent academic qualification from a similar non-UK institution. This degree should be in a relevant subject.

Non-graduates with very extensive professional experience and/or other prior qualifications may also be considered.

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 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.

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>specific qualifications.

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.

TOEFL IBT

88 overall, with minimum scores of listening 19, writing 19, reading 19 and speaking 20. TOEFL Home Edition not accepted.

Duolingo English Test

125 overall, with writing not less than 125, speaking and reading not less than 115, and listening not below 110

Pearson PTE Academic

61 overall, with no component below 59

LanguageCert Academic

70 overall, with no skill below 65

PSI Skills for English

B2 Pass with Merit in all bands

INDIA Standard XII

National Curriculum (CBSE/ISC) - 75% and above in English. Accepted State Boards - 80% and above in English.

WAEC

C6 or above

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
6.0 overall, with no component below 6.0	6 weeks	On campus
6.0 overall, with no component below 5.5	10 weeks	On campus and online options available
6.0 overall, with no more than one component below 5.5, and no component below 5.0	12 weeks	On campus and online options available
5.5 overall, with no more than one component below 5.5, and no component below 5.0	20 weeks	On campus
5.0 overall, with no more than one component below 5.0, and no component below 4.5	30 weeks	On campus
4.5 overall, with no more than one component below 4.5, and 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 6.5 overall, with no component below 6.0, for further details.

∧ Back to top

Generated: 27 Mar 2025, 14:00

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