UNIVERSITY OF LIVERPOOL

BSc (Hons)

Ocean and Climate Sciences

UCAS code F700

Entry requirements	Study mode	Duration	
A level: ABB	Full-time	3 years	Apply by: **13 January 2027** Starts on: **27 September 2027**

About this course

Our Ocean and Climate Science programme takes an interdisciplinary approach to understanding the marine environment. With fieldwork opportunities embedded in each year of the course and our strong links to the National Oceanography Centre, Liverpool is an excellent place to study Ocean and Climate Science.

Introduction

The ocean plays a vital role in regulating Earth's climate by controlling the movement of heat and carbon around the planet. Understanding these processes is essential for addressing global challenges such as climate change, sea-level rise, and ecosystem change. The Ocean and Climate Science BSc at Liverpool takes a multidisciplinary approach, combining physical, chemical and biological perspectives to explore how the ocean and climate system interact.

You will develop a strong understanding of ocean circulation, climate processes, marine ecosystems and biogeochemical cycles, supported by practical training in quantitative and data-driven approaches to marine science. Learning takes place through lectures, laboratory work, computer-based analysis and field activities, including

opportunities for sea-based practical experience and an independent research project in your final year.

Liverpool offers a unique environment for studying ocean science. The programme benefits from close links with scientists at the National Oceanography Centre Liverpool, who contribute guest lectures. The degree is accredited by the Institute of Marine Engineering, Science and Technology (IMarEST), supporting pathways into careers in marine science, environmental consultancy, policy and research.

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

- How the atmosphere and the oceans transport heat
- How the climate is changing
- How nutrients and carbon are cycled over the globe
- The effects of ocean acidification
- How life operates in the dynamic ocean environment.

Accreditation

Our degree is one of only a handful in the UK to be accredited by the Institute of Marine Engineering, Science and Technology (IMAREST), opening up opportunities for students and graduates of our programmes.

Accreditation in detail

Institute of Marine Engineering, Science and Technology

IMarEST - The Institute of Maring Engineering, Science and Techonology - is the international professional body for all marine professionals.

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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

Ocean and Climate Science BSc (Hons), Marine Biology BSc (Hons) and Marine Biology and Oceanography BSc (Hons) share a common first year, assuming no prior marine science background. First-year modules introduce key concepts in marine biology, ocean science, and climate systems while developing essential scientific and transferable skills. Fieldwork opportunities provide hands-on experience of marine and ocean environments. The common and inclusive first year allows flexibility to transfer between programmes at the end of year one.

We'll provide module details shortly.

Programme details and modules listed are illustrative only and subject to change. As part of our commitment to continuous improvement, we are currently reviewing all of our programmes. This may include refining study pathways, strengthening links with employers, integrating generative AI, developing students' research skills, and enhancing alignment with our research strengths. The course content currently shown on this page reflects the programme as it is running in September 2026. This page will be updated for students beginning in September 2027 by 1 September 2026 at the latest.

Year two

Year two develops practical, analytical, and numerical skills through fieldwork, laboratory training, and applied oceanography. Alongside this, students deepen their understanding of topics such as the ocean carbon cycle and environmental pressures on marine systems. Students also gain experience using industry-standard software and take part in a residential field course, providing valuable hands-on experience. Further optional modules are available.

We'll provide module details shortly.

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Year three

Year three emphasises research and critical analysis through an independent research project and tutorials exploring current topics in marine biology and ocean and climate science, while also developing employability skills and supporting continuing professional development. Students are also introduced to ocean dynamics and sea level and to applied data analysis, building the analytical and scientific expertise needed for careers in marine science, environmental management, or further study. Further optional modules are available.

We'll provide module details shortly.

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Teaching and assessment

How you'll learn

Teaching takes place primarily on campus through a combination of lectures, tutorials, workshops, laboratory classes, computer practicals, field classes, group projects and supervised independent work. Laboratory and field-based learning are an important

part of the programme, with field activities taking place in a range of environments, including on board a research ship.

You will typically receive around 15 hours of timetabled teaching per week, studying four modules per semester. A typical module may include two one-hour lectures each week alongside laboratory, field or computer-based practical sessions. In addition to scheduled teaching, you will spend time in independent study, including reading, preparation for classes, coursework and revision.

Tutorials are a key part of the programme, with small groups of around 5–7 students meeting regularly with an academic member of staff. These sessions support your academic development and provide opportunities to discuss study skills, careers, current research and topical issues in marine science.

As you progress through the degree, you will increasingly engage with current research, develop critical thinking skills and undertake more independent study. In year three, you will complete an independent research project, supervised by a member of academic staff, which may involve fieldwork, laboratory work or data analysis.

We consider applications from prospective students with disabilities on the same basis as all other applicants, and reasonable adjustments will be considered to ensure equitable access to teaching and field activities.

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 notebooks, oral and poster presentations and contributions to group projects. Coursework is designed around the types of problems encountered and the skills needed in commercial, research and public sector jobs. Emphasis is placed on good laboratory practice and maintaining useful lab notebooks in the context of scientific integrity and scientific data management.

Liverpool Learning Framework

At Liverpool, we take a distinctive approach to education through the Liverpool Learning Framework. This means teaching that is engaging, inclusive and designed to help you succeed during your studies and beyond.

You'll develop specialist subject knowledge alongside the skills employers value most, including:

- Digital fluency

- Confidence
- Global citizenship

Our curriculum is characterised by the three Liverpool Hallmarks:

- Research-connected teaching - learning informed by the latest ideas and discoveries
- Active learning - taking part, applying knowledge and learning by doing
- Authentic assessment - assessments designed around real-world tasks and challenges

We also embed key priorities across our curriculum, including AI literacy, employability, and sustainability, helping you prepare for the future and make a positive impact in the world.

We’re committed to creating a supportive and inclusive learning environment where every student can thrive.

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Careers and employability

We produce highly employable ocean and climate scientists, trained in industry-relevant skills and modern equipment and software, who can apply their knowledge to a wide range of fields, including modelling, environmental consultancy and monitoring, aquaculture, pollution and further research.

Our graduates have a diverse range of careers in areas such as: environmental consultancy, administration, academia, the media, teaching, local and national government and international banking. Examples of recent graduate careers in the sector include: Environmental Data Analyst, Field Surveyor, Oceanographer, Consultant, European Marine Energy Centre, Marine Advisor at Natural England. Many choose to continue their studies at master's or PhD level on topics such as the impact of benthic fishing on blue carbon, marine planning and upwelling dynamics around the Galapagos.

After completing this course, the employability options are extensive and include:

- Government agencies (e,g, Environment Agency, Met Office, UK Hydrographic Office)
- Environmental consultancy and management
- Climate research
- Accountancy and Finance
- Education
- Renewable energy 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 - £10,050
Year in industry fee - £2,010
Year abroad fee - £1,508 (applies to year in China)

International fees

Full-time place, per year - £32,000
Year in industry fee - £1,955
Year abroad fee - £16,000 (applies to year in China)

The UK fees shown are for the academic year 2027/28. The international fees shown are for the academic year 2026/27 and will be subject for change for the academic year 2027/28. Please be advised that tuition fees may increase each year for both UK and international students. For UK students, this will be subject to the government's regulated fee limits.

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. You can find information on the general and subject-specific costs you could expect to incur on our study costs webpage.

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Entry requirements

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

A levels

ABB
including two sciences.

Applicants with the Extended Project Qualification (EPQ) are eligible for a reduction in grade requirements. For this course, the offer is **BBB** from A levels, 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, Environmental and Marine Sciences (4 year route including a Foundation Year at Carmel College) BSc (Hons)
- Chemical Sciences BSc (Hons) (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

Accepted science subjects:
Applied ICT

Biology (and Human Biology)
Chemistry
Computer Science
Economics
Electronics
Environmental Science
Further Mathematics
Geography
Geology
ICT
Life and Health Sciences
Mathematics
Psychology
Physics
Statistics.

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

32 points overall and no score less than 4 and including 5 in two HL science subjects, or pass the IB Diploma with 6,5,5 in three Higher Level subjects (including two HL science subjects).

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

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Welsh Baccalaureate Advanced

B in the Welsh Baccalaureate, plus AB at A level in two science subjects.

Access

Pass Access to HE Diploma in a relevant subject with 45 Level 3 credits with 33 at Distinction (including 15 credits in two different science subjects) and 12 at Merit.

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.

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.

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

If you took a TOEFL test on or before 20 January 2026, you'll need 78 overall, with minimum scores of listening 17, writing 17, reading 17 and speaking 19. If you took a TOEFL test from 21 January 2026 onwards, when a new scoring system was introduced, you'll need 4 overall, with 4 or above in all components. TOEFL Home Edition not accepted.

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

International Baccalaureate English A: Literature or Language & Literature

Grade 4 at Standard Level or grade 4 at Higher Level

International Baccalaureate English B

Grade 6 at Standard Level or grade 5 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 or online

Your most recent IELTS score	Pre-sessional English course length	On campus or online
5.5 overall, with no component below 5.0	10 weeks	On campus or online
5.0 overall, with no component below 5.0	12 weeks	Online
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.

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