UNIVERSITY OF LIVERPOOL

BSc (Hons)

Marine Biology with Oceanography

UCAS code C1F7

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

From microscopic algae to giant whales, most of our planet's life is found in the oceans. As a marine biologist, you will learn about the behaviour, physiology, and ecology of marine organisms.

Introduction

Life first emerged in the ocean and has spread throughout this dynamic environment. The distribution, growth and success of marine organisms is affected by the interaction of biological, chemical and physical processes operating in the ocean.

You will discover how individuals, populations and communities respond to environmental drivers such as temperature and food availability, as well as to the challenges presented by a changing climate and human interaction. You will also gain the varied skills necessary to examine the marine environment and relay your findings to audiences from the general public through to government bodies.

You will study the interaction between the biology of marine organisms, the composition and properties of seawater and the physical processes operating in the oceans.

There is a strong emphasis on marine sustainability and ecosystem management, marine biogeochemistry, the climate system and numerical skills. Training at sea, in the field, and in the laboratory in years one, two and three will provide you with the

essential skills required to be a successful marine scientist including practical experience of data collection and processing, analysis and interpretation.

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

- Evolutionary processes
- Laboratory and field techniques
- Diversity of live in the marine environment
- Human threats to ecosystems
- Quantitative skills
- Coastal biodiversity
- Analysis of environmental data
- Conducting independent research

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

The required modules in year one provide grounding in ocean sciences and marine biology, as well as developing essential and transferrable skills. Optional modules are available in biology and ecology. There are fieldwork opportunities in ocean sciences and marine biology in year one.

Students will be pre-registered for ENVS128 Quantitative Skills for Ecology and Marine Biology. Students wanting to take a more advanced maths module can switch to ENVS117 Essential Mathematical Skills.

Modules

Compulsory modules	Credits
CLIMATE, ATMOSPHERE AND OCEANS (ENVS111)	15
LABORATORY AND FIELD TECHNIQUES FOR ECOLOGISTS (ENVS171)	15
LIFE IN THE SEAS AND OCEANS (ENVS121)	15
MARINE ECOSYSTEMS: DIVERSITY, PROCESSES AND THREATS (ENVS122)	15
STUDY SKILLS (OCEAN AND CLIMATE SCIENCES) (ENVS103)	15
QUANTITATIVE SKILLS FOR ECOLOGY AND MARINE BIOLOGY (ENVS128)	15

Optional modules	Credits
ESSENTIAL MATHS (ENVS117)	15

Optional modules	Credits
LIVING WITH ENVIRONMENTAL CHANGE (ENVS119)	15
ENVIRONMENTAL CHEMISTRY (ENVS153)	15
ECOLOGY AND CONSERVATION (ENVS157)	15
INTRODUCTION TO CLIMATE CHANGE AND MITIGATION (ENVS189)	15

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

Year two

In year two, there is an emphasis on the development of practical, analytical and numerical skills through training in fieldwork, laboratory skills and practical oceanography. There is an opportunity for students to be trained in the industry standard software used in ocean sciences, Matlab, or R software used in much of the biological sciences.

There are fieldwork opportunities in ocean sciences and marine biology in year two.

Modules

Compulsory modules	Credits
STUDYING UK COASTAL MARINE BIODIVERSITY (ENVS241)	15
MARINE ECOPHYSIOLOGY, ECOLOGY AND EXPLOITATION (ENVS251)	15
MARINE POLLUTION (ENVS232)	15
SAMPLING THE OCEAN (ENVS220)	15
RESEARCH AND CAREER SKILLS (ENVS204)	15

Compulsory modules	Credits
UNDERSTANDING MARINE AND TERRESTRIAL SPATIAL ECOLOGY USING GIS (ENVS255)	15
OCEANOGRAPHY, PLANKTON AND CLIMATE (ENVS245)	15
STATISTICS FOR ENVIRONMENTAL SCIENTISTS (ENVS222)	15

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

Year three

In year three, there is an emphasis on the development of skills in research and critical analysis through the independent research project and tutorials covering current hot topics in ocean and climate sciences. Students are introduced to the fundamentals of the global carbon cycle and select options to suite their interests in either marine biology or ocean sciences.

There are fieldwork opportunities in ocean sciences and marine biology in year three.

Modules

Compulsory modules	Credits
GLOBAL CARBON CYCLE (ENVS335)	15
SEA PRACTICAL (ENVS349)	30
INDEPENDENT RESEARCH PROJECT (ENVS306)	30

Optional modules	Credits
KEY SKILLS FOR ENVIRONMENTAL DATA ANALYSIS (ENVS202)	15

Optional modules	Credits
CONTEMPORARY ISSUES IN MARINE SCIENCES (ENVS301)	15
SURVIVING THE MARINE ENVIRONMENT (ENVS310)	15
OCEAN DYNAMICS (ENVS332)	15
INTRODUCTION TO QUATERNARY MICROPALAEONTOLOGY (ENVS342)	15
CONSERVING THE MARINE ENVIRONMENT (ENVS361)	15
CONTEMPORARY ISSUES IN OCEAN AND CLIMATE SCIENCES (ENVS366)	15

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

Teaching and assessment

How you'll learn

Teaching strategies include a mix of lectures, tutorials, workshops, field classes, research vessel cruises, laboratory work, computer sessions, group projects and individual work under supervision. You will typically receive around 15 hours of formal teaching each week, as well as about 60 hours on residential field courses each year. You will study four modules per semester. A module might involve two one-hour lectures each week, and a laboratory or computer-based practical as well. Tutorials are an integral part of our approach, involving groups of 5-7 students meeting regularly with a member of academic staff to discuss study skills, careers, current research and topical issues.

As you progress through your degree, you are increasingly challenged to engage with current debates, to think critically and to study independently. You will do an ‘Honours Project’ throughout year three, which is a piece of independent research (field, lab or data analysis) on a topic of your choice, supervised by a member of academic staff. If you opt for the four-year integrated master’s programmes, you will spend 50% of your final year on a master’s project working closely within a research group on an area which may well generate publishable results.

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

How you're assessed

Assessment matches the learning objectives for each module and may take the form of written exams, 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 Hallmarks

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

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

- Digital fluency
- Confidence
- Global citizenship

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

- Research-connected teaching
- Active learning
- Authentic assessment

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

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Careers and employability

We produce highly employable marine biologists, trained in industry-relevant skills and modern equipment and software, and who can apply their knowledge to a wide range of fields including conservation, aquaculture, pollution and environmental monitoring.

Our graduates have a diverse range of careers in the following areas which include: the media, environmental consultancy, administration, academia, teaching, local and national government and international banking. Examples of recent graduate careers in the sector include: fisheries observers, surveyor, seabird research assistant, turtle conservation field leader, field assistant on mammal surveys, rangers and conducting environmental surveys for construction work. Many choose to continue their studies at master's or PhD level on topics such as fish assemblages in mangroves, marine ecosystem responses to climate change and carbon sequestration in soils.

Recent employers

- Joint Nature Conservation Committee (JNCC)
- United Utilities
- Fairbanks Environmental
- Wildlife Sense
- Earth and Marine Environmental Consultants
- International Pole and Line Foundation

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Fees and funding

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

Tuition fees

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

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

International fees

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

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

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

Additional costs

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This includes the cost of a lab coat, food and drink during compulsory field courses, and dissertation expenses.

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.

Compulsory field courses:

The School will usually cover the cost of accommodation and travel for year one, two, and three field courses. Students will cover the cost of sustenance.

Overseas trip costs will be paid up front by students (approximately £0-2,000 depending on location), but a basic allowance of £200 can be claimed back from the School.

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.

Find out more about additional study costs.

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Entry requirements

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

A levels

ABB including Biology and one other 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.

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)
- Biological Sciences (with a Foundation Year) BSc (Hons)

T levels

T levels are not currently accepted.

GCSE

4/C in English and 4/C in Mathematics

Subject requirements

Acceptable sciences for A level: Mathematics, Further Mathematics, Physics, Chemistry, Geology, Geography, Applied Science (Double Award), Environmental Science/Studies*, Economics, Computer Science.

*Not in combination with each other

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 points including 5 at Higher Level in Biology and one other science, no score below 4.

Irish Leaving Certificate

H1, H2, H2, H2, H3, H3 including H2 or above in Biology and a second science

Scottish Higher/Advanced Higher

Not accepted without Advanced Highers at ABB including Biology and 1 other science

Welsh Baccalaureate Advanced

Accepted at Grade B with AB at A levels including Biology and 1 other science

Access

45 Level 3 credits in graded units in a relevant Diploma, including 30 at Distinction and a further 15 with at least Merit. 15 Distinctions are required in each of Biology and a second science. GCSE Mathematics and English at grade C/4 also required.

International qualifications

Select your country or region to view specific entry requirements.

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

English language requirements

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

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

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

IELTS

6.0 overall, with no component below 5.5

TOEFL iBT

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

TOEFL Paper

Grade 6 at Standard Level or grade 5 at Higher Level

Duolingo English Test

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

Pearson PTE Academic

59 overall, with no component below 59

LanguageCert Academic

65 overall, with no skill below 60

Cambridge IGCSE First Language English 0500

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

Cambridge IGCSE First Language English 0990

Grade 4 overall, with Merit in speaking and listening

Cambridge IGCSE Second Language English 0510/0511

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

Cambridge IGCSE Second Language English 0993/0991

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

Cambridge ESOL Level 2/3 Advanced

169 overall, with no paper below 162

LanguageCert

Grade 4 at Standard Level or grade 4 at Higher Level

Pre-sessional English

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

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

Pre-sessional English in detail

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

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

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

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

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

Alternative entry requirements

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

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