

BSc (Hons)

## **Marine Biology**

UCAS code C160

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

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.

Contemporary marine biology requires a broad set of skills, including field work, writing and presentation, and data analysis. In your first two years of study, you will develop these core skills and, in year three, you will take advanced modules in areas of interest to you to further develop your overall understanding and growing expertise.

You can choose modules from across the School of Environmental Sciences, as well as selected modules from across the university such as the School of Life Sciences. In each year there are topics such as climate change and ocean physics, population ecology, physiology, conservation, and animal behaviour.

Our research-led teaching approach allows our students to engage with up-to-the-minute science and policy in lectures, practical work, and in their independent research projects in year three. This is an opportunity to explore fields or skills of interest, often working on unanswered questions in marine science. Recent projects include investigating physiological data on how cormorants stay warm while diving in frigid Arctic waters, building mathematical models of coral reefs, and looking at the impacts of a wind farm on benthic communities.

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 environments and onboard seagoing vessels. 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

- 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
- Marine science with a global perspective

#### **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

Compulsory modules develop the essential skills required to be a Marine Biologist and build a foundation of knowledge on the physical and biological environments. Three optional modules allow you to focus a little more on the subjects that interest you.

## **Modules**

Compulsory modules	Credits
LABORATORY AND FIELD TECHNIQUES FOR ECOLOGISTS (ENVS171)	15
LIFE IN THE SEAS AND OCEANS (ENVS121)	15
MARINE ECOSYSTEMS: DIVERSITY, PROCESSES AND THREATS (ENVS122)	15
QUANTITATIVE SKILLS FOR ECOLOGY AND MARINE BIOLOGY (ENVS128)	15
STUDY SKILLS (ECOLOGY AND MARINE BIOLOGY) (ENVS104)	15

Optional modules	Credits
LIVING WITH ENVIRONMENTAL CHANGE (ENVS119)	15
CLIMATE, ATMOSPHERE AND OCEANS (ENVS111)	15
ECOLOGY AND CONSERVATION (ENVS157)	15
FROM INDIVIDUALS TO ECOSYSTEM (BIOS104)	15

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

#### Year two

Year two develops more specialist knowledge of Marine Biology, while allowing you to take a wide range of options in areas that interest you. You choose three optional modules.

## **Modules**

Compulsory modules	Credits
STUDYING UK COASTAL MARINE BIODIVERSITY (ENVS241)	15
MARINE ECOLOGY FIELD STUDIES (ENVS278)	15
MARINE ECOPHYSIOLOGY, ECOLOGY AND EXPLOITATION (ENVS251)	15
RESEARCH AND CAREER SKILLS (ENVS204)	15
STATISTICS FOR ENVIRONMENTAL SCIENTISTS (ENVS222)	15

Optional modules	Credits
ANIMAL BEHAVIOUR (LIFE211)	15
COMPARATIVE ANIMAL PHYSIOLOGY (LIFE212)	15
OCEANOGRAPHY, PLANKTON AND CLIMATE (ENVS245)	15
MARINE POLLUTION (ENVS232)	15
UNDERSTANDING MARINE AND TERRESTRIAL SPATIAL ECOLOGY USING GIS (ENVS255)	15

Optional modules	Credits
EVOLUTIONARY BIOLOGY (LIFE213)	15
POPULATION AND COMMUNITY ECOLOGY (LIFE214)	15

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

#### **Year three**

The core compulsory modules focus on research skills and include your independent research project. A wide choice of specialist research-led modules from right across the University allows you to focus on the subjects which interest you the most. You choose four optional modules.

## **Modules**

Compulsory modules	Credits
CONTEMPORARY ISSUES IN MARINE SCIENCES (ENVS301)	15
MARINE BIOLOGY HONOURS FIELD CLASS (ENVS303)	15
INDEPENDENT RESEARCH PROJECT (ENVS306)	30

Optional modules	Credits
SURVIVING THE MARINE ENVIRONMENT (ENVS310)	15
COASTAL ENVIRONMENTS: SPATIAL AND TEMPORAL CHANGE (ENVS376)	15
MARINE PLANNING THEORY AND PRACTICE (ENVS341)	15

Optional modules	Credits
INTEGRATIVE COMPARATIVE ANIMAL PHYSIOLOGY (LIFE339)	15
CURRENT TOPICS IN ANIMAL BEHAVIOUR (LIFE322)	15
GLOBAL CARBON CYCLE (ENVS335)	15
CONSERVATION BIOLOGY (LIFE326)	15
CURRENT SKILLS AND TOPICS IN EVOLUTIONARY BIOLOGY (LIFE324)	15
CONSERVING THE MARINE ENVIRONMENT (ENVS361)	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 usually 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.

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 docks to coastal 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 methods are tailored to the specific needs of each module and are designed to reflect student progression from year to year. Authentic assessment is embedded in our programmes, ensuring that you are prepared for the types of problems encountered, and have the skills needed, in commercial, research and public sector jobs. Assessment methods include written exams, assessed essays, laboratory and computer practicals, field assignments including field notebooks, poster presentations, research reports, scientific papers, group work, and oral presentations. In your third year you will complete a dissertation selected from a range of topics. This is your opportunity to develop skills as an independent academic researcher, supported on a one-to-one basis by an expert in the field.

## **Liverpool Hallmarks**

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

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

- Digital fluency
- Confidence
- Global citizenship

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

- Research-connected teaching
- Active learning
- Authentic assessment

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



## Careers and employability

We produce highly employable marine biologists, trained in industryrelevant 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
- 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 include:

- 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 costs for a lab coat, geological field kit, and sustenance during compulsory field trips.

Students should expect to cover the following additional 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 and two field courses. Students will cover the cost of sustenance.

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

In year three, the School will cover the cost of accommodation and meals for the field course. Students are required to pay for travel to the destination (£30-210 depending on the student's home location).

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:

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

Biology and one other science (Mathematics, Further Mathematics, Economics, Physics, Chemistry, Geography, Geology, Environmental Science/Studies/Technology\*, Applied Science (Double Award), Computer Science) at A level.

\*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 a relevant subject.

Relevant subjects considered include: Animal Management, Countryside Management, Applied Science, Marine Biology, and Ecology.

If the BTEC you are taking is not listed here, please contact us to check its acceptability for this programme.

Please note that BTEC Forensic Science pathway is not acceptable for this programme.

#### International Baccalaureate

33 including 6 at higher level Biology, plus another Science at Higher Level grade 5, no score less than 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,including 30 at Distinction and a further 15 with at least Merit. 15 Distinctions in Biology and one other science are typically required. Acceptable science subjects are Mathematics, Physics, Chemistry, Geography or Geology. GCSE Mathematics and English 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 <u>University of Liverpool International College</u>, 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 <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.

#### **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 <u>Pre-sessional English entry requirements</u> for IELTS 6.0 overall, with no component below 5.5, for further details.

## **Alternative entry requirements**

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

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