

Programme Specification

Biology and Marine Biology (2017-18)

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided.

Awarding Institution	University of Southampton
Teaching Institution	University of Southampton
Mode of Study	Full-time
Duration in years	4
Accreditation details	None
Final award	Integrated Masters degree in Science
Name of award	Biology and Marine Biology
Interim Exit awards	Bachelor of Science with Honours (BSc (Hons))
	Bachelor of Science (Ordinary)
	Certificate of Higher Education (CertHE)
	Diploma of Higher Education (DipHE)
FHEQ level of final award	Level 7
UCAS code	7N16
Programme code	5867
QAA Subject Benchmark or other external reference	Biosciences 2007, Earth Sciences, Environmental Sciences And Environmental Studies 2007, Master's Degree Characteristics 2010
Programme Lead	Antony Jensen (acj)

Programme Overview

Brief outline of the programme

Our Master of Biology and Marine Biology programme combines modules from the Centre for Biological Sciences (CfBS) and from Ocean and Earth Science (OES) (based at the National Oceanography Centre Southampton (NOCS)). In Southampton you will undertake a balanced programme where you will gain the relevant skills and knowledge for a career in Biology and Marine Biology.

Your contact hours will vary depending on your module/option choices. Full information about contact hours is provided in individual module profiles.

Learning and teaching

To assist your learning, you will be provided with an extensive programme of lectures, tutorials, problem workshops, and laboratory classes. You will also be provided with support material and also informal assistance to guide your private study.

You will be assisted to acquire transferrable and generic skills through the formal teaching programme

Practical skills are developed through the learning and teaching programme. Experimental and fieldwork skills are developed through laboratory experiments, fieldwork and project work.

Throughout the programme you are encouraged to use additional recommended reading material for private study to consolidate the formal learning process, and to broaden and deepen your understanding.

Assessment

There are written examinations at the end of each semester to test your knowledge and understanding of material presented in lectures, tutorials and workshops.

Practical and transferrable work/skills are continuously assessed primarily through written reports, laboratory reports, coursework exercises, project reports and presentations.

Special Features of the programme

The blend of terrestrial and marine science within this programme provides a unique series of Fieldwork/boatwork opportunities. In Part 1 you will attend a 5-day field course in Andalusia (BIOL1001) looking at both terrestrial and marine biology and in Part 2 a 7-day intertidal marine biology field course, currently held at Dale Fort in South Wales (timetabled in SOES2030). You will be required to attend a 5 day residential habitat mapping field course at the end of Part 2 currently in Falmouth (timetabled in SOES3051). In Part 4, you have the option to take a 10-day tropical marine biology field course, currently at the Bermuda Institute of Ocean Sciences (BIOS).

Further information is available in the Student Handbooks and on the Academic Unit web pages: <http://www.southampton.ac.uk/oes/>. Details of the individual modules taken in each part are provided in the pathway guides.

Please note: As a research-led University, we undertake a continuous review of our programmes to ensure quality enhancement and to manage our resources. As a result, this programme may be revised during a student's period of registration; however, any revision will be balanced against the requirement that the student should receive the educational service expected. Please read our [Disclaimer](#) to see why, when and how changes may be made to a student's programme.

Programmes and major changes to programmes are approved through the University's [programme validation process](#) which is described in the University's [Quality handbook](#).

Educational Aims of the Programme

You will undertake a balanced programme where you will gain the relevant skills and knowledge for a career in Biology and Marine Biology.

The aims of this programme are to provide:

- A stimulating, informed learning environment through a wide range of interesting and contemporary courses, with flexibility of choice, but allowing you to increasingly focus as you progress from level to level.
- The opportunity to develop a knowledge and understanding of living organisms at several levels of biological organisation from the molecular, through cells and whole organisms, to ecosystems; and from an evolutionary perspective.
- An understanding of (marine) biological systems and processes in theory and practice.
- Exposure to a range of (marine) biological concepts.
- The opportunity to construct individual programmes of study within a coherent framework, including advanced concepts and techniques in biological topics of your choice.
- Training in relevant laboratory and field work skills.
- An opportunity to develop a range of transferable skills (information and communication technology, team working, written and oral communication, time management, planning, data collection, analysis and presentation), and the capacity to give a clear and accurate account of the subject.
- An opportunity for you to develop the ability to think critically and to show that you can pursue independent study.
- Independent research projects on (marine) biological topics.
- An education and training suitable for a wide variety of careers and to prepare you for higher degrees and careers in (marine) biological research.
- The capability for life-long learning, study and enquiry.

Programme Learning Outcomes

Knowledge and Understanding

On successful completion of this programme a student will have knowledge and understanding of:

- A1. Fundamental knowledge & understanding of biology;
- A2. Core concepts, principles, themes, terminology, and classification systems in the disciplines covered.
- A3. Theory and practice of acquisition, analysis and interpretation of biological data across a range of biological applications.
- A4. A more detailed knowledge and advanced understanding within subject specific options selected from the range available such as:
- A5. Carrying out routine investigations as instructed, using appropriate methodologies and data analyses.
- A6. How the diversity of organisms on earth evolved, and how they are identified and classified.
- A7. Understand how the principles of genetics underlie much of the basis of modern molecular biology
- A8. How the chemistry and structure of the major biological macromolecules, including proteins and nucleic acids, determines their biological properties.
- A9. Use and interpretation of the outcome of a variety of statistical methods;
- A10. An ability to recognise the principal coastal and oceanic marine ecosystems at global, regional and local scales.

- A11. Key biological, physical and chemical processes operating in marine ecosystems.
- A12. The types of plants and animals inhabiting marine environments and their ecological adaptations to particular physico-chemical conditions.
- A13. The major attributes of the Earth environment, now and in the past.
- A14. The major events in the formation of the Earth and its environment.
- A15. The fundamental processes which determine the environment of the Earth.
- A16. The general functioning of the Earth as a system.
- A17. To describe the basic physiological and other functional characteristics of marine organisms.
- A18. How to relate the form and function of a marine organism to its habitat.
- A19. An appreciation of the main evolutionary trends that can be found in marine species.
- A20. Basic laboratory measurements.
- A21. An appreciation of the fundamental processes of phytoplankton photosynthesis and primary production in the ocean.
- A22. The main factors influencing phytoplankton production and carbon recycling in the surface ocean.
- A23. The acquisition of a basic introduction to practical methods for observing phytoplankton, quantifying their biomass and determining photosynthesis and respiration rates.
- A24. The key molecules involved in the fundamental biochemical processes occurring in living cells, including nucleic acid & protein function; gene structure and regulation.
- A25. Aspects of the cellular and sub-cellular processes of marine organisms, including cell apoptosis; damage and decay of cell components; oxidative & anaerobic metabolism.
- A26. Appreciation of these processes at a population and ecosystem-wide level, including the molecular basis of material cycles and primary production such as photosynthesis or chemosynthesis.
- A27. The principles and application of a range of molecular biological experimental research techniques to biological oceanographic studies.
- A28. Conduct a range of basic molecular biological and biochemical assays on nucleic acids and proteins and appropriately analyse laboratory data.
- A29. The distinction between and use of a range of library information and bioinformatic database services;
- A30. Basic ecological principles relating to shore ecology.
- A31. The use of keys to identify fauna and macroalgae.
- A32. How to design, plan and implement a research project based on intertidal community ecology.
- A33. An appreciation of water column sampling strategies in marine biology.
- A34. An ability to design and carry out a practical, pragmatic and effective field survey that collects quantified data suitable for statistical analysis to test a hypothesis.

Subject Specific Intellectual and Research Skills

On successful completion of this programme a student will be able to:

- B1. Formulate and test hypotheses by planning, conducting and reporting a significant programme of (marine) biological research.
- B2. Use a range of (marine) biological skills to conduct experiments and/or collect observational data.
- B3. Use computer software and statistics to record and analyse data and determine their importance and validity.
- B4. Analyse critically and solve complex (marine) biological problems.
- B5. Integrate your (marine) biological knowledge base with broader biological disciplines such as development, behaviour and evolution.
- B6. Independently integrate and critically evaluate (marine) biological data from a wide range of sources, including primary source material in ecological journals and experimentation.
- B7. Demonstrate a systematic understanding of how the boundaries of (marine) biological knowledge are advanced through research.
- B8. Conduct risk assessments concerning the use of equipment, and laboratory and field procedures.
- B9. Demonstrate broad expertise in defined areas of (marine) biology at the level of current research in the field.
- B10. Critically evaluate the data and methodology of current published research in (marine) biological sciences and present your conclusions.
- B11. Carry out literature searches and synthesis of material for written assignments.
- B12. Production of a thorough but concise scientific report describing the background, hypothesis being tested, aims/objectives of study, methodology, results, discussion of results and conclusions made from the data provided.
- B13. Plan, cost and/or produce a proposal for an advanced research project to be carried out in Part 4.

Transferable and Generic Skills

On successful completion of this programme a student will be able to:

- C1. Communicate/present effectively both verbally and in writing on a range of topics in (marine) biological sciences to both specialised and non-specialised audiences.
- C2. Work with, and within, a group towards defined outcomes.
- C3. Use information technology and other resources to find, extract and synthesise information.
- C4. Solve problems relating to qualitative and quantitative information.
- C5. Learn independently through critical enquiry.
- C6. Demonstrate you have the ability to undertake appropriate further training.
- C7. Manage resources and time.
- C8. Assess the wider significance of scientific results, including any commercial applications and present the group results as an executive summary report.
- C9. Deliver an oral presentation with appropriate visual aids and to appreciate the role of information technology in delivering presentations.

Teaching and Learning Methods

You will be taught through a combination of lectures, tutorials, practical classes, coursework fieldwork and projects. In Part 3 you will undertake an independent research project. In your final part you will take an advanced independent research-based project. Field courses will happen in each of Parts 1, 2 and 3, culminating in the shallow water mapping field course in June of part 3.

In addition to the methods described in the section above you will be supervised in practical classes and during both your Part 3 and Part 4 projects. In Part 4 of the programme you will be guided in critically reviewing topics using primary source literature.

You will be helped to acquire generic and transferrable skills through aspects of the formal teaching programme. In the early parts this will mainly be through tutorial and coursework, whilst in Parts 3 and 4 your project work will give you ample opportunity to further develop and practise many of the individual skills.

Throughout the programme you will undertake independent reading both to supplement and consolidate the taught material and to broaden your knowledge and understanding of biology and marine biology.

Assessment Methods

You are assessed by a combination of continuous assessment and written examinations at the end of each semester to test your knowledge and understanding of the lecture and tutorial material. Continuous assessment is based on performance in practical sessions, fieldwork and/or independent reading and synthesising.

Your subject specific skills will be assessed as described in the section above. Experimental and research skills are assessed through an appropriate combination of laboratory reports, project reports and presentations.

Programme Structure

The programme structure table is below:

Information about pre and co-requisites is included in individual module profiles.

This is an indicative list of options. We cannot guarantee to offer every option each year.

Part I

Typical course content

The programme is offered as a full-time course. The MSci Biology and Marine Biology programme normally lasts for four years.

Study is divided into four parts - each part normally corresponding to one year of full-time study. The programme is delivered in a semester pattern, each semester having 12 weeks for teaching and learning and 2-3 weeks for examinations.

The programme is divided into individual study modules at each part. Each study module is accredited as being worth a certain number of credit points to you on successful completion. Modules are normally worth 7.5 ECTS which is

equivalent to 150 hours of study. Normally up to 60 hours comprises contact teaching (lectures, practical sessions, tutorials, etc.), and the remainder of the time is for your own independent study. Modules are generally assessed at the end of each semester, but some are assessed entirely by coursework throughout the duration of the module. In Part 1 there are a number of core and compulsory modules, which lay a solid foundation in the basic discipline of this programme. More specialised training and options that enable diversification commence in Part 2.

In Parts 3 and 4, students are exposed to the forefronts of the discipline's knowledge, with the opportunity to conduct supervised original research.

The four-year programme is intended to develop research skills in a more inter-disciplinary context than is possible in a three-year degree structure. You will also be exposed to cutting edge research, participating in seminar presentations in wide-ranging and specialist topics.

A full list of the modules available for each part under each programme and module profiles are provided on the academic unit's website at: <http://www.southampton.ac.uk/oes/undergraduate/courses.page> and <http://www.southampton.ac.uk/biosci/undergraduate/courses.page>

Part I Compulsory

The following modules are compulsory (i.e. the minimum qualifying mark of 25% is required) and must be taken:

Students will also take, as a formative requirement, the chart-work components of SOES1003 and an MCA approved first aid course as well as a survival at sea course.

Code	Module Title	ECTS	Type
SOES1008	Earth and Ocean System 2017-18	7.5	Compulsory
BIOL1001	Experimental and Field Biology 2017-18	7.5	Compulsory
SOES1006	Introduction to Marine Ecology 2017-18	7.5	Compulsory
BIOL1004	Patterns of Life 2017-18	7.5	Compulsory

Part I Core

The following module is core (i.e. a minimum pass mark of 40% is required) and must be taken:

Code	Module Title	ECTS	Type
BIOL1020	Core Skills in the Life Sciences 2017-18	7.5	Core

Part I Optional

Choose one of the following two modules:

Code	Module Title	ECTS	Type
SOES1011	Introduction to Functional Marine Biology 2017-18	7.5	Optional
BIOL1012	Systems Physiology 2017-18	7.5	Optional

Part I Optional List 1

In addition, choose two more modules from the following:

Please note: If BIOL1010 is taken in Part 1, then SOES2026 cannot be taken in Part 2.

Code	Module Title	ECTS	Type
BIOL1005	Cell Biology & Genetics 2017-18	7.5	Optional
BIOL1003	Ecology & Evolution 2017-18	7.5	Optional
BIOL1010	Macromolecules of Life 2017-18	7.5	Optional

Part II

Part II Compulsory

The following modules are compulsory (i.e. the minimum qualifying mark of 25% is required):

Module SOES2026 is also compulsory if BIOL1010 was not taken in Part 1

Code	Module Title	ECTS	Type
SOES2030	Dale Field Marine Biology Fieldwork Skills 2018-19	7.5	Compulsory
BIOL2001	Evolution 2018-19	7.5	Compulsory
SOES2006	Phytoplankton and Primary Production 2018-19	7.5	Compulsory

Part II Core

The following module is core (i.e. a minimum pass mark of 40% is required) and must be taken:

Code	Module Title	ECTS	Type
BIOL2008	Quantitative Methods in Biological and Environmental Science 2018-19	7.5	Core

Part II Optional

From the following list, choose three/four further modules (depending on whether you have to take SOES2026). Your choice must include at least one BIOL module and at least one SOES module.

Code	Module Title	ECTS	Type
BIOL2018	Adaptive Physiology 2018-19	7.5	Optional
BIOL2039	Animal Behaviour 2018-19	7.5	Optional
BIOL2003	Animal Reproduction and Development 2018-19	7.5	Optional
BIOL2013	Bioinformatics & DNA 2018-19	7.5	Optional
BIOL2002	Cell Biology 2018-19	7.5	Optional
SOES2024	Coastal and Estuarine Oceanography I 2018-19	7.5	Optional
SOES2027	Coastal and Estuarine Oceanography II 2018-19	7.5	Optional
SOES2017	Ecological Processes in the Marine Benthos 2018-19	7.5	Optional
BIOL2038	Environmental Microbiology 2018-19	7.5	Optional
BIOL2010	Flow of Genetic Information 2018-19	7.5	Optional
SOES2026	Introduction to Marine Molecular Biology 2018-19	7.5	Optional
SOES2011	Marine Vertebrates 2018-19	7.5	Optional
BIOL2040	Neural Basis of Behaviour 2018-19	7.5	Optional
BIOL2014	Neuroscience 2018-19	7.5	Optional
BIOL2007	Plant Development and Function 2018-19	7.5	Optional
BIOL2004	Pure and Applied Population Ecology 2018-19	7.5	Optional

Part III

Part III Compulsory

You must take SOES3051 plus ONE compulsory module of independent study:

Code	Module Title	ECTS	Type
BIOL3061	Field Research Project 2019-20	15	Compulsory
BIOL3034	In-depth Research Project 2019-20	15	Compulsory
SOES3035	Oceanography and Marine Biology Research Training 2019-20	15	Compulsory
SOES3051	Shallow Water Survey Techniques 2019-20	7.5	Compulsory

Part III Optional

From the following list, choose a further FIVE modules. Your choice must include at least TWO BIOL modules and at least TWO SOES modules:

Code	Module Title	ECTS	Type
BIOL3009	Applied Ecology 2019-20	7.5	Optional
BIOL3051	Applied Plant Biology 2019-20	7.5	Optional
BIOL3053	Biodiversity and Conservation 2019-20	7.5	Optional
BIOL3057	Biofilms and Microbial Communities 2019-20	7.5	Optional
BIOL3006	Cellular and Genetic Aspects of Animal Development 2019-20	7.5	Optional
SOES3041	Communicating and Teaching in the Undergraduate Ambassador Scheme 2019-20	7.5	Optional
BIOL3001	Current Topics of Cell Biology 2019-20	7.5	Optional
SOES3017	Marine Fisheries Ecology 2019-20	7.5	Optional
SOES3031	Marine Molecular Biology 2019-20	7.5	Optional

BIOL3013	Molecular Recognition 2019-20	7.5	Optional
BIOL3003	Plant Cell Biology 2019-20	7.5	Optional
SOES3005	Sediments: Modern and Ancient 2019-20	7.5	Optional
BIOL3010	Topics in Ecology and Evolution 2019-20	7.5	Optional
BIOL3070	Tropical Ecology field course 2019-20	7.5	Optional
SOES3013	Zooplankton Ecology and Processes 2019-20	7.5	Optional

Part IV

Part IV Compulsory

You must take BIO6053 plus ONE compulsory module of advanced independent study:

BIOL6013 or BIOL6069 must be taken if SOES3035 (or its equivalent SOES3052) is taken in Part 3

SOES6071 must be taken if BIOL3034 is taken in Part 3.

Code	Module Title	ECTS	Type
BIOL6069	Advanced Field Research Project 2020-21	30	Compulsory
BIOL6013	Advanced Research Project 2020-21	15	Compulsory
BIOL6053	Current Research 2020-21	7.5	Compulsory
SOES6071	MSci Advanced Independent Research Project 2020-21	30	Compulsory

Part IV Optional

From the following list, choose a further three further modules (22.5 ECTS). Your choice must include at least one BIOL module and at least one a SOES module:

Code	Module Title	ECTS	Type
BIOL6052	Advanced Quantitative Methods 2020-21	7.5	Optional
BIOL6010	Applied Ecology 2020-21	7.5	Optional
BIOL6066	Biodiversity and Conservation 2020-21	7.5	Optional
SOES6007	Biogeochemical Cycles in the Earth system 2020-21	7.5	Optional
BIOL6025	Cellular and Genetic Aspects of Animal Development 2020-21	7.5	Optional
BIOL6021	Current Topics in Cell Biology 2020-21	7.5	Optional
SOES6008	Deep Sea Ecology 2020-21	7.5	Optional
SOES6062	Ecological Marine Parasitology 2020-21	7.5	Optional
SOES6021	Ecological Modelling 2020-21	7.5	Optional
SOES6027	Global Ocean Monitoring 2020-21	7.5	Optional
SOES6051	Reproduction in Marine Invertebrates 2020-21	7.5	Optional
BIOL6029	Topics in Ecology and Evolution 2020-21	7.5	Optional
SOES6052	Tropical Marine Biology Field Course 2020-21	7.5	Optional

Progression Requirements

The programme will follow the University's regulations for [Progression, Determination and Classification of Results: Undergraduate and Integrated Masters Programmes](#) or the University's regulations for [Progression, Determination and Classification of Results: Standalone Masters Programmes](#) as set out in the General Academic Regulations in the University Calendar: <http://www.calendar.soton.ac.uk/sectionIV/sectIV-index.html>

Appendix 1: Learning Outcomes and Assessment Methods mapping

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2017/18	MSci Biology and Marine Biology	Knowledge and Understanding																																		Subject Specific Intellectual and Research Skills														Transferrable and Generic Skills																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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Support for student learning

There are facilities and services to support your learning some of which are accessible to students across the University and some of which will be geared more particularly to students in your particular Faculty or discipline area.

The University provides:

- library resources, including e-books, on-line journals and databases, which are comprehensive and up-to-date; together with assistance from Library staff to enable you to make the best use of these resources
- high speed access to online electronic learning resources on the Internet from dedicated PC Workstations onsite and from your own devices; laptops, smartphones and tablet PCs via the Eduroam wireless network. There is a wide range of application software available from the Student Public Workstations.
- computer accounts which will connect you to a number of learning technologies for example, the Blackboard virtual learning environment (which facilitates online learning and access to specific learning resources)
- standard ICT tools such as Email, secure filestore and calendars.
- access to key information through the MySouthampton Student Mobile Portal which delivers timetables, Module information, Locations, Tutor details, Library account, bus timetables etc. while you are on the move.
- IT support through a comprehensive website, telephone and online ticketed support and a dedicated helpdesk in the Hartley Library.
- Enabling Services offering support services and resources via a triage model to access crisis management, mental health support and counselling. Support includes daily Drop In at Highfield campus at 13.00 – 15.00 (Monday, Wednesday and Friday out of term-time) or via on-line chat on weekdays from 14.00 – 16.00. Arrangements can also be made for meetings via Skype.
- assessment and support (including specialist IT support) facilities if you have a disability, long term health problem or Specific Learning Difficulty (e.g. dyslexia).
- the Student Services Centre (SSC) to assist you with a range of general enquiries including financial matters, accommodation, exams, graduation, student visas, ID cards
- Career and Employability services, advising on job search, applications, interviews, paid work, volunteering and internship opportunities and getting the most out of your extra-curricular activities alongside your degree programme when writing your CV
- Other support that includes health services (GPs), chaplaincy (for all faiths) and 'out of hours' support for students in Halls and in the local community, (18.00-08.00)
- A Centre for Language Study, providing assistance in the development of English language and study skills for non-native speakers.

The Students' Union provides

- an academic student representation system, consisting of Course Representatives, Academic Presidents, Faculty Officers and the Vice-President Education; SUSU provides training and support for all these representatives, whose role is to represent students' views to the University.
- opportunities for extracurricular activities and volunteering
- an Advice Centre offering free and confidential advice including support if you need to make an academic appeal
- Support for student peer-to-peer groups, such as Nightline.

Associated with your programme you will be able to access through the Centre for Biological Sciences and Ocean and Earth Science:

- An induction programme at the start of the course, which will provide orientation, information on modules, courses, library and computer facilities.
- Programme and module guides/information. Hard copies are available, but are mainly published on the web: www.southampton.ac.uk/oes/ and www.blackboard.soton.ac.uk.
- Two large computer clusters at the NOCS for dedicated use by undergraduate students, with extra computer resources for M-level students. Additional computer clusters are available for your use on the other University campuses, as well as at the Halls of Residence.
- Access to the specialist Library facilities (the National Oceanography Library is one of the best subject focused libraries in the world) and academic skill packages.
- Training on Ocean and Earth Science's research vessels, which are fully equipped for boatwork practicals and project work in the local estuary and coastal waters and in our shore-side laboratory and aquarium facilities.
- Equipment to support your field work, including laptop computers, GPS, specialised shipboard data acquisition systems deployed from the 22m research vessel RV Callista.
- A research-led environment at the NOCS, which provides a high quality learning environment for students.

- A wide range of well-equipped laboratories and aquaria which are available for student project work, and specific study rooms.
- Academic and pastoral support from members of staff. Our tutorial system aims to provide personalised pastoral and academic care for all students. You will be allocated a member of the academic staff from Biology and one from OES as your personal tutor and they will be charged with your guidance throughout your undergraduate career. Your Biology Tutor will hold formal tutorials in year 1 and your OES tutor in year 2 but you can see either tutor informally in either year. You can also approach the Programme Leader for Biology and Marine Biology, or either Academic Unit's Senior Tutor if necessary.
- Access to all administrative and academic material on the CfBS, Programme and individual module web sites and/or Blackboard (<http://www.blackboard.soton.ac.uk>).
- Access to all academic staff through an appointment system and e-mail.
- Access to administrative staff in the Faculty Student Offices during the normal working day.

Methods for evaluating the quality of teaching and learning

You will have the opportunity to have your say on the quality of the programme in the following ways:

- Completing student evaluation questionnaires for each module of the programme.
- Acting as a student representative on various committees, e.g. Staff Student Liaison Committees, OES Educational and Quality Committee, Faculty Programmes Committee, OR providing comments to your student representative to feedback on your behalf.
- Serving as a student representative on Faculty Programmes Scrutiny Groups for programme validation.
- Taking part in programme validation meetings by joining a panel of students to meet with the Faculty Programmes Scrutiny Group.

The ways in which the quality of your programme is checked, both inside and outside the University, are:

- Regular module and programme reports which are monitored by the Faculty.
- Programme validation, normally every five years.
- External examiners, who produce an annual report.
- A national Research Assessment Exercise (our research activity contributes directly to the quality of your learning experience).
- Institutional Review by the Quality Assurance Agency.

Further details on the University's quality assurance processes are given in the [Quality Handbook](#).

Criteria for admission

The University's Admissions Policy applies equally to all programmes of study. The following are the typical entry criteria to be used for selecting candidates for admission. The University's approved equivalencies for the requirements listed below will also be acceptable.

IB/Alternative qualifications

We are pleased to receive applications from candidates (including mature candidates) with equivalent national and international qualifications. The degree subject requirements are shown in the A-level table on the website at: http://www.southampton.ac.uk/oes/undergraduate/apply/entry_requirements.page?#qualifications.

Applicants studying the International Baccalaureate should ideally take two of our preferred subjects at HL (taking A-level requirements into account) and maths at SL.

International applications

International applicants should refer to the General Entry Requirements – visit our International Office website at <http://www.southampton.ac.uk/international/> or the NARIC website at <http://ecctis.co.uk/naric/> for further information on qualifications.

English Language Proficiency

All programmes at the University of Southampton are taught and assessed in the medium of English (other than those in modern foreign languages). Therefore, all applicants must demonstrate they possess at least a minimum standard of English language proficiency. Our minimum standard entry requirements are an IELTS Band C, i.e.

Qualification	Grades	Subjects required	Subjects not accepted	EPQ Alternative offer (if applicable)	Contextual Alternative offer (if applicable)
GCSE	C or above if you did not take it at AS or A level	Maths and English			
A Level	AAB	To include A in Biology and any two from science subjects Chemistry, Environmental Studies, Geography, Geology, Maths and Physics.			

Mature applicants

Studying for a degree later in life can be extremely rewarding and mature students are often among our most successful.

We are pleased to receive applications from mature candidates with equivalent national and international qualifications. For more information, please view the 'Entry Requirements' at http://www.southampton.ac.uk/oes/undergraduate/apply/entry_requirements.page?#qualifications

Recognition of Prior Learning (RPL)

The University has a [Recognition of Prior Learning Policy](#)

Students are accepted under the University's recognition of prior learning policy; however, each case will be reviewed on an individual basis.

English Language Proficiency

The table below sets out the English proficiency requirements for this programme in terms of the IELTS test. We accept a range of other English proficiency tests including TOEFL and Cambridge Advanced/Proficiency. For full

details of the recognised tests and the equivalent requirements in those tests please see www.southampton.ac.uk/admissions-language.

Overall	Reading	Writing	Speaking	Listening
6.5	5.5	5.5	5.5	5.5

Career Opportunities

With an MSci Biology and Marine Biology degree you could be expected to find work in the following areas:

- Postgraduate degrees
- Teacher training
- Conservation and the environment
- Industry
- Journalism
- CEFAS
- IFCA's
- Natural England
- Wildlife Trusts
- Environmental Consultancy
- Universities

External Examiner(s) for the programme

Name: Dr Kerry Howell - Plymouth University

Students must not contact External Examiner(s) directly, and external examiners have been advised to refer any such communications back to the University. Students should raise any general queries about the assessment and examination process for the programme with their Course Representative, for consideration through Staff: Student Liaison Committee in the first instance, and Student representatives on Staff: Student Liaison Committees will have the opportunity to consider external examiners' reports as part of the University's quality assurance process.

External examiners do not have a direct role in determining results for individual students, and students wishing to discuss their own performance in assessment should contact their Personal Academic Tutor in the first instance.

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. More detailed information can be found in the programme handbook.

Appendix 1:

Students are responsible for meeting the cost of essential textbooks, and of producing such essays, assignments, laboratory reports and dissertations as are required to fulfil the academic requirements for each programme of study. In addition to this, students registered for this programme also have to pay for:

Additional Costs

Type	Details
Clothing	Lab coats and safety spectacles: Students will receive a lab coat, dissection kit and waterproof notebook during Induction. If these are lost the student must replace them at their own expense. Field course clothing: You will need to wear suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source. Wet Suits: You will need to purchase a suitable wet suit and associated snorkelling equipment if participating on SOES6052.
IT	Data Storage: Students are expected to provide their own data storage device Software Licenses: Will be provided by the University where appropriate Hardware: It is advisable that students provide their own laptop or personal computer, although shared facilities are available across the University campus.
Stationery	You will be expected to provide your own day-to-day stationery items, e.g. pens, pencils, notebooks, etc. Any specialist stationery items will be specified under the Additional Costs tab of the relevant module profile.
Textbooks	Where a module specifies core texts these should generally be available on the reserve list in the library. However, students may prefer to buy their own copies. These can be purchased from any source. Some modules suggest reading texts as optional background reading. The library may hold copies of such texts, or alternatively you may wish to purchase your own copies. Although not essential reading, you may benefit from the additional reading materials for the module.
Approved Calculators	Candidates may use calculators in the examination room only as specified by the University and as permitted by the rubric of individual examination papers. The University approved models are Casio FX-570 and Casio FX-85GT Plus. These may be purchased from any source and no longer need to carry the University logo.
Equipment and Materials	For compulsory residential field courses, accommodation and travel are provided (for Independent Geology Mapping a fixed amount is provided to cover these costs for the least expensive area). You are usually expected to cover the costs of food and drink, although some courses may include meals. For optional field courses, students are asked to make a contribution to the travel and/or accommodation costs. Details are provided in the table below. Please note that if a field course is compulsory for your degree programme and you later move from that degree programme to one where that field course is optional, you will be charged for the cost of that field course. To provide an example: students on the MSci Marine Biology programme undertaking the field course to Bermuda will be charged the full cost of the

	field course if they later choose to transfer to the BSc Marine Biology degree programme. In addition to the field courses mentioned in this booklet, there are also one-day field courses associated with specific modules; students are expected to cover food and drink costs for these days, but transport is arranged and paid for by the department. As the department arranges transport, should students wish to make their own way to or from field courses, then they must meet these costs themselves. Marine Biology and Oceanography · Marine Biology students will receive a lab coat, dissection kit and waterproof notebook during Induction. · Oceanography students will receive a lab coat and waterproof notebook during Induction. Insurance (travel, medical, personal property and baggage) · Students are automatically insured whilst on University organised field courses undertaken as part of their official studies, including field courses in the UK involving an overnight stay.
Printing and Photocopying Costs	Coursework such as essays, projects and dissertations may be submittable online. However, some items will require submission as a printed copy, including some items where it is not possible to submit online. The University printing costs for taught students are currently: A4 - 5p per side (black and white) or 25p per side (colour) A4 - 4.5p double sided (black and white) or 24p double sided (colour) A3 - 10p per side (black and white) or 50p per side (colour) A3 - 9.5p double sided (black and white) or 48p double sided (colour) Please remember that we are unable to refund any credit that has not been used by the end of your course, so please consider this when topping up your printing/copy account. You will be given a printing allowance towards the costs of printing lecture handouts or you may choose to use digital versions only during lectures. The University Print Centre also offer a printing and copying service as well as a dissertation/binding service.

In some cases you'll be able to choose modules (which may have different costs associated with that module) which will change the overall cost of a programme to you. Details of such costs will be listed in the Module Profile. Please also ensure you read the section on additional costs in the University's Fees, Charges and Expenses Regulations in the University Calendar available at www.calendar.soton.ac.uk.