Programme Specification

MSci Oceanography (2019-20)

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	Institute of Marine Engineering, Science and Technology (IMarEST)
Final award	Integrated Masters degree in Science
Name of award	Oceanography
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	F700
Programme code	4961
QAA Subject Benchmark or other external reference	Earth Sciences, Environmental Sciences And Environmental Studies 2007, Master's Degree Characteristics 2016
Programme Lead	Robert Marsh (rm12)

Programme Overview

Brief outline of the programme

Oceanography is the science that studies physical, chemical, geological and biological processes within the Earth's oceans. The oceans cover over 70 per cent of the Earth's surface and are fundamentally important to the human race as a source of food, energy, and minerals.

Oceanography has a diverse range of practical applications including predicting storm surges or tidal waves that threaten coastal regions, studying the processes that cause beach erosion, assessing how offshore engineering affects the environment and managing fisheries for long-term sustainability. A degree in oceanography will give you an understanding of a broad range of scientific disciplines, and how different aspects can be integrated to study a complex system. The mix of quantitative and descriptive areas is highly-prized by many different employers outside of marine science, as well as being increasingly important for subject-specific employment.

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

You will develop core knowledge and understanding, subject specific skills and general and transferable, graduate key skills via compulsory module and specialised option module lectures, tutor and student -led tutorials, student-led seminars and presentations, essay and report writing, use of the internet, guided independent study, group study and your own research. Experimental, research, experimental design, data processing and interpretive/analytical skills are further developed through laboratory and practical classes and fieldwork (including boat-work).

Assessment

To test your knowledge and understanding of material presented in the lectures and associated practicals, you will be assessed via a combination of written examinations, essays, group and individual oral presentations, poster presentations and short coursework assignments. Experimental, analytical and research skills are assessed through laboratory experiment write-ups, library based project work, research project reports, field notebooks, fieldwork/boat-work exercises and/or reports.

Special Features of the programme

Further information is available in the Student Handbooks and on the Academic Unit web pages: http://www.southampton.ac.uk/oes/

This programme involves mandatory fieldtrips or a period of study abroad. Some elements will be arranged by the University and some details for example visa requirements will be the responsibility of the student.

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

The spectrum of programmes within Ocean and Earth science are all scientifically exciting and challenging, as well as highly relevant to the modern world. Within this particular programme of study, we aim to develop and enhance your knowledge of and enthusiasm for oceanography. There is a natural and important synergy between geology and the scientific disciplines of marine biology, oceanography and physical geography, in particular as they apply to the natural environment. We offer the opportunity to study oceanography with one of these disciplines.

The overall ethos of the 4-year MSci programmes, compared with the 3-year BSc programmes, is to provide both a broader and in-depth knowledge base across the breadth of the subject, and to allow a greater emphasis on individual research skills.

Research carried out by academic staff provides direct and enthusiastic input into a challenging and stimulating teaching programme. There are also unique opportunities for you to undertake research projects with scientists outside Ocean and Earth Science based at the National Oceanography Centre Southampton.

The specific aims of these programmes are to:

· Provide you with a coherent programme of study which will offer you an extensive and in-depth knowledge and understanding of modern marine sciences and through flexibility of choice, to allow you to develop some degree of specialisation within fields and disciplines of choice.
· Provide you with a high-quality and intellectually stimulating experience of learning in a supportive environment.
· Equip you to undertake a successful career as a professional oceanographer in any field or a career in a wide range of other contexts.
· Provide you with a sound background and suitable qualification that would enable you to proceed to a more specialist higher degree at the MSc or PhD level.
· Develop your critical and analytical problem-solving powers, especially in relation to the marine sciences.
· Develop your intellectual, practical and fieldwork skills in the collection, analysis, interpretation and understanding of oceanographic/geographic/geological data.
· Develop your powers of observation, analysis and understanding in order that you can make decisions with appropriate acknowledgement of uncertainties.
· Enhance your interpersonal skills, in a wide range of contexts.
· Provide you with opportunities for shared multi-disciplinary learning in the marine sciences.
· Enable you to engage with life-long learning, study and enquiry, and to appreciate the value of education and research to society.
· Enable you to meet the academic requirements, in part, for registration as a Chartered Scientist and Chartered Marine Scientist with the Institute of Marine Engineering, Science and Technology (IMarEST).
· Enable you to engage with life-long learning, study and enquiry, and to appreciate the value of education and research to society. [MSci programme only].
· Give you the experience of undertaking an original project at the forefront of Earth or Marine science in a professional research environment. [MSci programme only].

Programme Learning Outcomes

Knowledge and Understanding

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

A1. The need for both a multidisciplinary and an interdisciplinary approach in advancing knowledge and understanding of Earth and Marine systems, drawing, as appropriate, from the natural sciences.

A2. The processes which shape the natural world at different temporal and spatial scales, and their influence on and, conversely, their modification by human activities.

A3. The terminology, nomenclature and classification systems used and developed within the marine and Earth sciences.

A4. Methods of acquiring, interpreting and analysing all relevant forms of scientific information with a critical understanding of the appropriate contexts for their use.

A5. Issues concerning the availability and sustainability of resources, for example, the different value sets relating to the Earth's resources as commodities and/or heritage.

A6. The contribution of Marine and Earth scientific expertise to debates on environmental issues and how knowledge of these forms the basis for informed concern about the Earth and its people.

A7. The contribution of your subject to the development of knowledge about the world we live in.

A8. The relevance of knowledge and skills acquired on your programme of study to professional activity, environmental impact and the world of work.

Subject Specific Intellectual and Research Skills

On successful completion of this programme you will be able to:

B1. The fundamentals of each major discipline (chemistry, physics, biology and geology) applied to the marine sciences.

B2. The processes and interactions (chemical, biological, physical, geological) which shape the marine world at different temporal and spatial scales.

B3. The core concepts in biological, chemical and physical processes operating in the marine environment.

B4. The physical processes responsible for shaping coastal and estuarine environments and in moving sediment.

B5. A detailed understanding of coastal and deep sea oceanography.

B6. Collection of quantitative data from the biological and physical marine environment.

B7. The structure and functioning of, and interactions between, the lithosphere, hydrosphere, atmosphere and biosphere.

B8. The implications of climate change on the marine environment, and the role of marine systems in climate change.

B9. The range of mathematical and statistical methods applied to the biological and physical marine sciences.

B10. An awareness of human impact and exploitation on the biological and physical environment and its natural resources, and the resulting feedback on human societies.

Transferable and Generic Skills

On successful completion of this programme you will be able to:

C1. Recognise and use oceanographic (and geological/geographical/ocean chemical/ocean physical where applicable) specific theories, paradigms, concepts and principles.

C2. Critically analyse, synthesise and summarise information, including prior research.

C3. Collect and integrate several lines of evidence to formulate and test hypotheses.

C4. Apply knowledge and understanding to address familiar and unfamiliar problems, including collection and documentation of oceanographic (and geological/geographical where applicable) information in the field, experimental design of field surveys and sampling programmes.

C5. Recognise the moral and ethical issues of investigations and appreciating the need for professional codes of conduct.

C6. Plan, design, conduct and report, both verbally and in writing, on investigations, including the use of secondary data.

C7. Collect record and analyse primary data using appropriate techniques in the field and laboratory.

C8. Undertake field and laboratory investigations in a responsible and safe manner, paying due attention to risk assessment, rights of access, relevant health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders.

C9. Locate, retrieve, read, use and reference the geological (and oceanographic/geographical where applicable) work of others in an appropriate manner.

C10. Produce and interpret geological maps and other aids to visualisation.

C11. Plan and execute a field based geological research project [MSci students only].

C12. Communicate effectively to a variety of audiences in written, verbal and graphical forms.

C13. Select and use the appropriate method and means of communication for a range of different situations.

C14. Absorb and respond to a variety of information sources (e.g., textual, numerical, verbal, graphical).

C15. Write a research proposal. [MSci programme only]

C16. Appreciate issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and in the laboratory.

C17. Prepare process, interpret and present data, using appropriate qualitative and quantitative techniques, univariate and multivariate statistical analyses and computer software packages, including geographic information systems.

C18. Develop computing and data analysis skills in a wide range of relevant oceanographic (and where relevant geological/geographical) techniques.

C19. Solve numerical problems using both computer and non-computer-based techniques.

C20. Critically use the Internet as a means of communication and as a source of information.

C21. Identify individual and collective goals and responsibilities and perform in an appropriate manner.

C22. Appreciate the concepts of experimental learning in groups and team performance.

C23. Recognise and respect the views and opinions of other team members.

C24. Evaluate performance as an individual and as a team member.

C25. Develop the skills necessary for self-managed and life-long learning (e.g. working independently, time management and organisation skills).

C26. Identify and work toward targets for personal, academic and career development.

C27. Develop an adaptable and flexible approach to study and work

Subject Specific Practical Skills

On successful completion of this programme you will be able to:

D1. Plan, design, conduct and report, both verbally and in writing, on investigations, including the use of secondary data.

D2. Collect, record and analyse primary data using appropriate techniques in the field and laboratory.

D3. Undertake field and laboratory investigations in a responsible and safe manner, paying due attention to risk assessment, rights of access, relevant health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders.

D4. Locate, retrieve, read, use and reference the marine biological work of others in an appropriate manner.

D5. Produce and interpret geological maps and other aids to visualisation.

Programme Structure

The programme structure table is below:

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

Where optional modules have been specified, the following is an indicative list of available optional modules, which are subject to change each academic year. Please note in some instances modules have limited spaces available.

Part I

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 (15 CATS) 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 compulsory modules, which lay a solid foundation in the basic discipline of this programme. A compulsory Mathematics module is also taken, depending on your mathematical background. More specialised training and options that enable diversification commence in future years.

In Parts 3 and 4 students are exposed to the forefronts of oceanographic knowledge, with the opportunity to conduct supervised original research. If studying for an MSci, in Part 4 you will undertake a major research project which may involve external stakeholders and in which you will play a significant role in the design stage.

The MSci programmes are intended to develop research skills, and computational and quantitative skills in a more multi-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. There will be an opportunity to choose modules from a wide range of master's level options.

If you are registered on an MSci programme and you choose to withdraw at the end of Part 3 and graduate with a BSc, you will be liable for any costs committed by the University; for MSci-specific field courses (up-coming or completed) and to make the same contribution as BSc students for field trips related to modules that are compulsory for MSci students but optional for BSc students.

Part I Compulsory

The following modules are compulsory and must be taken:

Code	Module Title	ECTS	Type
SOES1008	Earth and Ocean System	7.5	Compulsory
SOES1006	Introduction to Marine Ecology and Evolution	7.5	Compulsory
SOES1005	Introduction to Ocean Biogeochemistry	7.5	Compulsory
SOES1013	Key Skills for Marine Scientists	7.5	Compulsory
SOES1004	Physical Oceanography I	7.5	Compulsory

Part I Optional

ONE of the following must be taken, depending on your Mathematical background.

If you have GCSE Mathematics or AS-Level Mathematics (Grade C or below) or equivalent, you MUST select SOES 1010.

If you have AS-Level Mathematics (Grade A or B) or A Level Mathematics (Grade C or below) or equivalent please select MATH 1004.

If you have A-Level Mathematics (Grade A or B) or equivalent please select MATH 1008.

If you have the International Baccalaureate, Standard Level Maths at grade 6 or higher you may consider selecting MATH 1004. If you have Standard Level Maths below grade 6 you should select SOES 1010.

If you are uncertain as to selection please contact the Programme Leader or the Student Office on sosoes@soton.ac.uk.

Code	Module Title	ECTS	Type

MATH1004	Introductory Mathematics for Chemists and Oceanographers	7.5	Optional
MATH1008	Mathematical Methods for Scientists 1a	7.5	Optional
SOES1010	Quantitative Earth and Ocean Sciences	7.5	Optional

Part I Optional Module

Module(s) totalling 7.5 ECTS must be chosen from the list below.

Code	Module Title	ECTS	Type
SOES1002	Dynamic Earth	7.5	Optional
GEOG1002	Dynamic Landscapes	7.5	Optional
SOES1001	Earth Materials	7.5	Optional
BIOL1003	Ecology & Evolution	7.5	Optional
CHEM1045	Fundamentals of Inorganic Chemistry I for non-chemists	3.75	Optional
CHEM1041	Fundamentals of Organic Chemistry I for non-chemists	3.75	Optional
CHEM1043	Fundamentals of Physical Chemistry I for non-chemists	3.75	Optional
BIOL1010	Macromolecules of Life	7.5	Optional
MATH1009	Math Methods for Scientist 1b	7.5	Optional
BIOL1004	Patterns of life and their evolution	7.5	Optional
SOES1015	Quantitative Methods in Marine Sciences	7.5	Optional
GEOG1001	The Earth System	7.5	Optional

Part II

Part II Compulsory

The following modules are compulsory and must be taken:

Code	Module Title	ECTS	Type
SOES2024	Coastal and Estuarine Oceanography I	7.5	Compulsory
SOES2027	Coastal and Estuarine Oceanography II	7.5	Compulsory
SOES2018	Geochemistry	7.5	Compulsory
SOES2025	Methods in Oceanography	7.5	Compulsory
SOES2010	Physical Oceanography II	7.5	Compulsory
SOES2006	Phytoplankton and Primary Production	7.5	Compulsory

Part II Optional

Students, who have studied SOES1010 or MATH1004 in Part 1, must take the following module:

Code	Module Title	ECTS	Type
SOES2036	Quantitative Methods in Marine Science	7.5	Optional

Part II Optional Modules

For students who have to take SOES2036 from above: ONE module must be chosen from the list below:

For all other students: TWO modules must be taken from the list below:

Code	Module Title	ECTS	Type
SOES2017	Marine Benthos Ecology	7.5	Optional
MATH2015	Mathematical Methods for Scientists	7.5	Optional
SOES2032	Palaeobiology	7.5	Optional
SOES2036	Quantitative Methods in Marine Science	7.5	Optional
SOES2003	Geohazards and Earth Resources	7.5	Optional

Part III

Part III Compulsory

The following modules are compulsory and must be taken:

Code	Module Title	ECTS	Type
SOES3018	Applied Oceanography and Fieldwork	7.5	Compulsory
SOES3035	Oceanography and Marine Biology Research Training	15	Compulsory
SOES3009	Shelf Seas and Shelf Edge Dynamics	7.5	Compulsory
SOES6070	Advanced Oceanography Fieldwork	7.5	Compulsory

Part III Optional

FOUR modules

must be chosen from the list below:

Code	Module Title	ECTS	Type
SOES3011	Biogeochemical Cycles in the Earth System	7.5	Optional
SOES3014	Coastal Sediment Dynamics	7.5	Optional
SOES3041	Communicating and Teaching in the Undergraduate Ambassadors Scheme	7.5	Optional
SOES3042	Computational Data Analysis for Geophysicists and Ocean Scientists	7.5	Optional
SOES3008	Environmental and Engineering Geology	7.5	Optional
SOES3010	Large Scale Ocean Processes and Climate	7.5	Optional
SOES3015	Palaeoclimate Change	7.5	Optional
SOES3013	Zooplankton Ecology and Processes	7.5	Optional

Part IV

Part IV Compulsory

Code	Module Title	ECTS	Type

SOES6070	Advanced Oceanography Fieldwork	7.5	Compulsory
SOES6074	Contemporary Topics in Oceanography and Marine Biology	7.5	Compulsory
SOES6071	MSci Advanced Independent Research Project	30	Compulsory

Part IV Optional

TWO modules must be chosen from the list below. Please note prerequisite knowledge may be required for some modules, see the university website for full details.

Code	Module Title	ECTS	Type
SOES6004	Applied and Marine Geophysics	7.5	Optional
SOES6007	Biogeochemical Cycles in the Earth System	7.5	Optional
SOES6006	Climate Dynamics	7.5	Optional
SOES6025	Computational Data Analysis for Geophysicists and Ocean Scientists	7.5	Optional
SOES6008	Deep Sea Ecology	7.5	Optional
SOES6021	Ecological Modelling	7.5	Optional
SOES6023	Environmental Radioactivity and Radiochemistry	7.5	Optional
SOES6047	Global Climate Cycles	7.5	Optional
SOES6073	Global Ocean Carbon Cycle, Ocean Acidification and Climate	7.5	Optional
SOES6017	Introductory Remote Sensing of the Ocean	7.5	Optional
SOES6005	Large Scale Ocean Processes and Climate	7.5	Optional
SOES6022	Microfossils, Environment and Time	7.5	Optional
SOES6011	Modelling Coastal Processes	7.5	Optional
SOES6024	Seafloor Exploration and Surveying 2	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*** as set out in the General Academic Regulations in the University Calendar:
http://www.calendar.soton.ac.uk/sectionIV/sectIV-index.html

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:

· A personal tutor system - our tutorial system aims to provide personalised pastoral and academic care for all students. You will be allocated a member of the academic staff as your personal academic tutor on arrival at University, and he/she will be charged with your guidance throughout your undergraduate career. You will also have a shadow tutor for contact if your personal academic tutor is absent. You can also approach the Programme Leader for Oceanography, or the Academic Unit's Senior Tutor if necessary.
· 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 integrated Masters students. Additional computer clusters are available for your use on the other University campuses, as well as at the Halls of Residence.
· Teaching staff via email and personal contact.
· Support from the administrative staff of the Student Office, which is readily available during the normal working day.
· Training on the Ocean and Earth Science's research vessel, which is fully equipped for boat-work 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.
· A research-led environment at the NOCS, which provides a high quality learning environment for students.
· A wide range of well-equipped laboratories which are available for student project work, and specific study rooms.
· Close collaboration between Ocean and Earth Science and staff from the Natural Environment Research Council's NOCS provides additional support for student learning, particularly with regard to independent research projects.
· Specialised teaching labs and lecture theatre at the NOCS.

The Partner Institutions [Oceanography with Study Abroad/Oceanography with French] will provide:

· Specialist support from the equivalent International Office. Staff will normally assist with a number of arrangements: housing, registration, health care, mandatory insurance, authorisation for employment, as well as information on academic requirements, campus and community life, Immigration Service regulations and finances.
· Arrangements for Enrolment (orientation): All international students are normally required to attend special orientation and general orientation programmes. The programmes are designed to expedite practical matters such as establishing records, arranging for registration, etc. Administrative staff will normally help with housing arrangements, tax questions, and the adjustments and acclimatisation to the Institution.
· A Personal Tutor. All students will have a tutor (normally the Programme Leader) who shall be responsible for providing academic advice, regular formative feedback on progress and reporting on your progress with the equivalent Southampton Programme Leader.
· Access to Library, IT, special needs facilities: You will have access to the library, IT and special needs facilities. Additionally, you will have access to sports facilities; international student clubs, etc. [Please note there may be a charge for this].
· Student resource centres: provides such facilities as a math tutor, writing tutor, technology instructor, and a computer support specialist. Also in the centre, you will find computers, laptops, digital cameras, computer projectors and other multimedia resources for use in course projects.

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 Education and Quality Committee and Faculty Programmes Committee, OR providing comments to your student representative to feedback on your behalf.
· Serving as a student representative on Faculty Scrutiny Groups for programme validation.
· Taking part in programme validation meetings by joining a panel of students to meet with the Faculty Scrutiny Group.
· Joining a panel of students to meet with the External Examiners.

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.
· Accreditation carried out by the Institute for Marine Engineering, Science and Technology (IMarEST).
· 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.*

Career Opportunities

The strength and prestige of our degree will open doors to a wide spectrum of employers who recognise graduates of our Ocean and Earth Science programme as well-qualified scientists with excellent personal and transferable skills in numeracy, communication and team working. Our graduates with degrees in oceanography are acknowledged as having a greater level of independence and self-reliance than comparable graduates.

· Civil engineering and construction
· Exploration geophysics/geophysical survey projects
· Seismology
· Conservation

- Fisheries
- Marine pollution
- Mining sector
- Government laboratory work
- Teaching
- Research Laboratories
- Postgraduate study
- Environmental sciences
- Water quality management
- Environmental resource management
- Environmental coastal management

Careers in mainstream journalism or specialist scientific publishing are also attainable for graduates with degrees in oceanography with physical geography.

A degree in Oceanography with French gives you enormous scope for career development with International oceanographic research projects, particularly those involving French-speaking countries worldwide.

A period of study abroad such as a period of study in the USA, can be especially relevant and could help you to stand out when it comes to applying for jobs.

External Examiner(s) for the programme

Name: Dr Mark Alan Brandon - Open University

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	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.
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 FX85GTX Casio FX85GT Casio FX570 – all models Plus the older approved FX83ES GT and Plus models These may be purchased from any source.
Equipment and Materials	Field 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. SOES3020: Tenerife Field Course As this is an overseas field course which requires the department to make early flight bookings to minimise costs, students who pre-register for this module will be liable for the full flight costs if they subsequently opt not to take the module. SOES3025: Independent Geology Mapping Precise costs depend on specific arrangements made by students and on individual destinations. The department undertakes to cover the costs for accommodation and travel up to the cost of the least expensive destination, and currently provides £500 per student. SOES6052: Tropical Field Course This field trip is optional and open only to MSci Marine Biology and MSci Biology with Marine Biology students. Students are expected to fund their travel and to provide their own snorkelling equipment, including 3mm-thick wetsuit. The total cost is currently expected to be no more than £800-900. The department provides full board, IT and lab facilities and course-related travel whilst on Bermuda. Where a student contribution is made, invoices will be issued approximately 2 weeks prior to the start of a field course and payment will be due within 7 days. Laboratory Equipment and Materials: Oceanography students will receive a lab coat and waterproof notebook during Induction.
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 - 4p per side (black and white) or 18p per side (colour) A4 - 7p double sided (black and white) or 35p double sided (colour) A3 - 8p per side (black and white) or 50p per side (colour) A3 - 14p 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. They also provide a large format printing service, e.g. Academic posters.

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.