

Programme Specification

MEnvSci Environmental Sciences (for continuing students' commencing before 2018-19 academic year) (2020-21)

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	Institution of Environmental Sciences (IES)
Final award	Master of Environmental Sciences (MEnvSci (Honours))
Name of award	Environmental Sciences
Interim Exit awards	Bachelor of Science with Honours (BSc (Hons)) Certificate of Higher Education (CertHE) Diploma of Higher Education (DipHE)
FHEQ level of final award	Level 7
UCAS code	F902
Programme code	6231
QAA Subject Benchmark or other external reference	Earth Sciences, Environmental Sciences And Environmental Studies 2014
Programme Lead	Dr Kate Parks

Programme Overview

Brief outline of the programme

These programmes are designed to provide for flexibly structured and coherent study that prepares you for employment in a variety of careers. The programmes require you to develop as an autonomous and reflective environmental scientist. Studying towards either programme fosters the development of an independent approach

to your work, in terms of both your learning and research, with more opportunities to do so on the longer MEnvSci programme.

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

The wide variety of teaching and learning methods employed in our environmental science programmes include lectures, seminars, field exercises, field courses and activities such as placements within industry. Several modules involve group exercises where you learn not only about the subject but also how to operate as an effective team, managing your time and assigning roles efficiently.

Assessment

The wide variety of teaching approaches inevitably leads to an equally wide breadth of assessment methods. Students will be assessed through coursework in the form of essays, reports, policy briefs, impact statements, ISO14001 audits, grant applications, literature reviews, journal articles and presentations, as well as practical and written exams, both unseen and open book.

Special Features of the programme

All Part I students must attend the week-long field course held around Exeter which teaches essential field skills. In addition, all MEnvSci students attend a field Course based around Swanage between their second and third years. This is also available as an option for BSc students. Among their choices, students may select from six curriculum innovation modules (coded UOSM below) provided that they comprise no more than 15 ECTS/30 CATS credits in any one year.

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 aims of the programmes are:

1. To provide you with a thorough understanding of the functioning and management of the environment, based on firm scientific foundations.
2. To give you the opportunity to develop an extensive and in-depth specialist knowledge and understanding in a chosen area of the environmental sciences, whilst maintaining a broader view of the environment on an interdisciplinary and multidisciplinary basis.
3. To provide you with extensive knowledge and understanding of the interactions of the environment and society.
4. To enable you to undertake an independent research project.
5. To produce graduates who can think critically about the environment in the contemporary world and are able to pursue independent study in the subject with enthusiasm.
6. To provide an education suitable for a wide variety of careers in the environment, including training for higher degrees.

7. To provide the key skills transferable to other disciplines so that you are capable of reaching your full potentials and play a full role in society including careers in academic and/or professional environmental fields, and in non-environmental science professions, industry and commerce.

Programme Learning Outcomes

Knowledge and Understanding

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

- A1. full appreciation of the need for multi-disciplinary and interdisciplinary approaches to advancing knowledge and solving problems in environmental science, drawing on the natural and the social sciences
- A2. deep understanding of the processes that shape the natural world at different temporal and spatial scales and their influence on and by human activities
- A3. strong familiarity with the terminology, nomenclature and classification systems used in environmental science
- A4. comprehensive understanding of appropriate methods for acquiring, interpreting and analysing environmental science information
- A5. deep understanding of the issues concerning the availability and sustainable use of the earth's resources
- A6. deep knowledge of the contribution environmental science makes to debate on environmental issues and how knowledge of these forms the basis for informed concern about the Earth and its people
- A7. comprehensive understanding of the contribution of environmental science to knowledge
- A8. familiarity with environmental science in the workplace and career paths open to environmental scientists

Teaching and Learning Methods

Acquisition of core knowledge and understanding is through lectures, seminars, tutorials, field and laboratory classes, workshops, and independent study and research. You are encouraged from an early stage to supplement and consolidate your understanding and knowledge by independent study. Strong emphasis is also placed on the importance of using the flexibility of the programme to build an individual portfolio of knowledge and skills and which reflects your particular interest(s) in the environment.

Assessment Methods

Knowledge is assessed throughout the programme through a combination of formative methods (to provide you with constructive feedback to help you develop your skills and understanding) and summative methods (to assess your performance). Formative assessment takes the form of feedback on essays, practical reports and oral presentations, and is stressed during earlier stages of study. Formative assessment is delivered in part through informal assessment of work that does not contribute directly to your performance in modules (e.g. class debriefings on oral presentations). Summative assessment takes the form of unseen examinations and tests, multiple choice examinations, short answer papers, and various project work and coursework. You will also be given feedback on your work as part of summative assessment.

Subject Specific Intellectual and Research Skills

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

- B1. recognising, using and formulating subject-specific theories, paradigms, concepts and principles
- B2. analysing, synthesising and summarising information critically to a high standard, e.g. suitable for publication
- B3. collecting and integrating multiple lines of evidence to formulate, test and then generate new hypotheses
- B4. applying knowledge and understanding to complex real-world problems in unfamiliar contexts and within limited time-frames
- B5. carrying out assessments of the moral and ethical issues affecting investigations and appreciating the need for professional codes of conduct

Teaching and Learning Methods

Intellectual skills are developed through lectures, seminars, tutorials, workshops, discussion groups (verbal and internet), and laboratory and practical exercises. Independent reading from a wide range of sources (printed and electronic) covering a variety of issues (linked to formal module material and general environmental issues) also contributes to the development of your intellectual skills by exposing you to differing opinions and perspectives. Applications of theoretical concepts to real-life situations are explored and evaluated by compilation of a portfolio, including personal and professional skills portfolios, and experiential learning assessment.

Assessment Methods

A wide range of assessment methods is used to assess intellectual skills, including formal unseen examinations, coursework, oral & poster presentations, internet discussions, and peer assessment.

Transferable and Generic Skills

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

- C1. handling and integrating multiple information sources across multiple platforms, including working with databases in the broadest sense
- C2. communicating appropriately to a variety of audiences in written, verbal and graphical forms to a standard suitable for publication or public consumption to a standard suitable for publication or public consumption
- C3. appreciating issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and laboratory, and how to overcome them, and how to overcome them
- C4. preparing, processing, interpreting and presenting data, using appropriate qualitative and quantitative techniques and packages including geographic information systems to a level suitable for publication to a level suitable for publication
- C5. solving numerical problems using computer and non-computer-based techniques to a standard

comparable to that found in published research articles

- C6. using the internet rapidly, critically and effectively as a means of communication and a source of information
- C7. identifying individual and collective goals and responsibilities and performing in a manner appropriate to these roles
- C8. recognising and respecting the views and opinions of other team members, and dealing effectively with disputes that may arise
- C9. evaluating your own performance as an individual and a team member, and that of others within your team
- C10. developing the advanced skills needed for self-managed learning (e.g. handling multiple conflicting deadlines; responding rapidly and effectively to change; acquiring self-management and organisation skills)
- C11. identifying and working towards targets for personal, academic and career development (e.g. gaining memberships of professional bodies, doing work placements and volunteering)
- C12. developing an adaptable and flexible approach to study and work, especially to meet targets and deadlines, especially to meet targets and deadlines

Teaching and Learning Methods

Development of key skills is through training sessions, workshops, tutorials and through self-evaluation using pro-forma learning skills portfolios. Key skills are delivered through core subjects and are emphasized early in the programme to ensure that these skills are in place for use throughout later stages of study. Completion of the various tasks required in modules primarily aiming to deliver knowledge and understanding also contributes to development of these skills, for example, by self-reflection of feedback, organising time to meet deadlines, and use of ICT to produce written work and deliver oral or visual presentations. Written communication skills are practised in all modules. In addition to work done by individuals, tasks are also undertaken in groups in some modules, for which training is at an early stage in the programme (part I).

Assessment Methods

Skills are formatively assessed through written reports and oral presentations, practical and laboratory reports. Summative assessment is through unseen examinations, extended essays and completion of a research project, including an interim progress report, and work-based learning skills portfolios.

Subject Specific Practical Skills

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

- D1. planning, conducting, and reporting on environmental investigations at the level of competence expected of a junior researcher or consultant
- D2. collecting, recording and analysing data to an advanced level using up to date techniques in the field, laboratory and for statistical analysis
- D3. carrying out risk and ethics assessments to a high standard before undertaking field and laboratory investigations, and being aware of relevant health and safety regulations, and potential impact of investigations on the environment and people
- D4. referencing work to a very high, prescribed standard as expected in a manuscript sent for publication

Teaching and Learning Methods

Subject practical skills are developed early in the programme (part I) to ensure you have an appropriate level of competence, regardless of your previous training and experience. Skills are developed to a higher level in a compulsory field course (part III). Field courses focus on field techniques and practices, and on working safely. Skills acquired may underpin practical exercises and projects in optional modules and may underpin the final year research project. The use of published data and information is used to provide context and comparison for practical and research projects, along with use of secondary data.

Assessment Methods

Formative assessment of knowledge acquired is through formal written reports, oral presentations, inspection of field notebooks and inspection of the risk assessments completed prior to undertaking field surveys. Summative assessment is primarily made through written reports assessments on completion of projects.

Programme Structure

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.

Typical course content

The programme is offered only on a full-time basis. The programme leads to an honours degree in Master of Environmental Science (4 years). Optional modules comprise a larger part of the programmes in subsequent years and build around a suite of core Environmental Science modules. Your knowledge and understanding are thus orientated around an area of specialization, aligned with your pathway. The learning outcomes delivered by modules are detailed in the curriculum map. You will qualify to progress through your degree programme on satisfactory achievement at each level of study as outlined briefly below; regulations regarding progression as follows:

- a) The Regulations of the University of Southampton as detailed in the Calendar (<http://www.calendar.soton.ac.uk/>)
- b) The specific regulations of the Faculty of Engineering and the Environment
- c) Any programme specific amendments to the Faculty rules

Teaching is delivered on a semester pattern, each semester being of 14 weeks duration. The last two weeks of each semester are generally set aside for examinations. A compressed summary of the programmes is shown in the table below. All modules are 7.5 ECTS/15 CATS credit points unless otherwise stated.

****Please note that Part I of this programme (for all pathways) is no longer active. Modules within this part consist of those when last active (2018-19 entrants)***

Part	Master of Environmental Sciences (Honours)
*Part I	Four core modules (common to all pathways) plus four pathways specific compulsory modules
	<i>Exit award: Certificate of Higher Education</i>
Part II	Four core modules (common to all pathways), one pathway-specific compulsory modules plus three options

	<i>Exit award: Diploma in Higher Education</i>
Part III	One core module (common to all pathways)
	Five pathway-related modules (compulsory or optional depending on pathway)
	Environmental Field Studies (core) Advanced Quantitative Methods (core)
	<i>Exit award: BSc (honours) Environmental Sciences</i>
Part IV	<i>Work-based Learning (core)</i>
	<i>Advanced research project (30 ECTS/ 60 CATS, core)</i>
	Three pathway-related modules (compulsory or optional depending on pathway)
	<i>Final Award: MEnvSci (honours) Environmental Sciences</i>

MEnvSci Aquatic Environments & Resources

Part I when last active (for 2018/19 entrants) consisted of:

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL1003	Ecology & Evolution	7.5/15	Comp	2	4
ENVS1004	Environmental Science: Concepts and Communication	7.5/15	Core	Full year	4
ENVS1005	Quantitative Methods	7.5/15	Core	1	4
ENVS1006	Environmental Science: Research and Applications	7.5/15	Core	Full year	4
ENVS1007	Environmental Field Techniques and Applications	7.5/15	Core	2	4
GEOG1002	Dynamic Landscapes	7.5/15	Comp	1	4
SOES1006	Introduction to Marine Ecology	7.5/15	Comp	2	4
SOES1008	Earth & Ocean Systems	7.5/15	Comp	1	4

Part II Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS2003	Freshwater Ecosystems	7.5/15	Comp	1	5
ENVS2006	Environmental Impact Assessment	7.5/15	Core	2	5
ENVS2007	Environmental Pollution	7.5/15	Core	1	5
ENVS2008	GIS for Environmental Scientists	7.5/15	Core	1	5
ENVS2014	Environment and Sustainability	7.5/15	Core	2	5

Part II Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL2004	Pure and Applied Population Ecology	15	O	1	5

BIOL2039	Animal Behaviour	15	O	2	5
CHEM1008	Environmental Chemistry 1	15	O	1	4
ENVS2012	Environmental Instrumentation	15	O	1	5
GEOG2007	Remote Sensing for Earth Observation	15	O	1	5
GEOG2032	Global Climate Change: Science, Impacts and Policy	15	O	2	5
GEOG2037	Global Water Resources	15	O	1	5
GEOG2039	Concepts and Methods for Environmental Management	15	O	1	5
GEOG2040	Coastal Landscapes and Human Interactions	15	O	2	5
PHYS2015	Introduction to Energy in The Environment	15	O	2	5
SOES2006	Phytoplankton and Primary Production	15	O	2	5
SOES2017	Ecological Processes in The Marine Benthos	15	O	2	5
SOES2018	Geochemistry	15	O	1	5
SOES2024	Coastal and Estuarine Oceanography I	15	O	1	5
SOES2027	Coastal and Estuarine Oceanography 2	15	O	2	5
UOSM2001	Business Skills for Employability	15	O	2	5
UOSM2011	The Management of Risk and Uncertainty	15	O	2	5
UOSM2022	Social Enterprise	15	O	1	5

Part III Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS3011	Environmental Field Studies	7.5/15	Core	NS/ 1	6
ENVS3013	Environmental Law and Management	7.5/15	Core	1	6

Part III Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL3009	Applied Ecology	15	O	1	6
BIOL3053	Biodiversity and Conservation	15	O	1	6
BIOL3056	Global Change Biology: from molecules to ecosystem services	15	O	2	6
CENV3059	Water and Wastewater Engineering 1	15	O	2	6
ENVS3014	Sustainable Resource Management	15	O	1	6
ENVS3017	The Sustainability Professional	15	O	1	6
ENVS3020	Air Quality and Env Pollution	15	O	2	6
ENVS3021	Advanced GIS and Spatial Analysis	15	O	2	6
GEOG3020	Glaciers and Glaciation	15	O	1	6

GEOG3023	River Basin Management and Restoration	15	O	2	6
GEOG3047	Complex Social-ecological systems: Past, present and future	15	O	1	6
GEOG3068	Biogeography	15	O	1	6
SESG3019	UG Ambassador Scheme	15	O	1	6
SOES3008	Environmental and Engineering Geology	15	O	2	6
SOES3011	Biogeochemical Cycles in the Earth System	15	O	1	6
SOES3013	Zooplankton Ecology and Processes	15	O	1	6
SOES3014	Coastal Sediment Dynamics	15	O	1	6
SOES3015	Palaeoclimate Change	15	O	2	6
SOES3017	Marine Fisheries Ecology	15	O	2	6

Part IV Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS6009	Advanced Research Project	30/60	Core	Full year	7
ENVS6010	Work-Based Learning	7.5/15	Core	1	7

Part IV Optional Modules

Note that a maximum of 15 ECTS/CATS of optional modules at level 7 are permitted.

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
CENV6084	Coastal & Maritime Engineering and Energy	15	O	1	7
CENV6085	Waste Resource Management	15	O	2	7
CENV6090	Energy Resources and Engineering	15	O	2	7
CENV6154	Groundwater Hydrology and Contamination	15	O	1	7
CENV6158	Water & Wastewater Engineering	15	O	2	7
CENV6162	Water Resources Planning and Management	15	O	1	7
CENV6172	River and Fisheries Restoration	15	O	2	7
ENVS6011	Environmental Management Systems	15	O	2	7
SOES6007	Biogeochemical Cycles in the Earth System	15	O	1	7
SOES6011	Modelling Coastal Processes	15	O	2	7
SOES6023	Environmental Radioactivity & Radiochemistry	15	O	2	7

MEnvSci Biodiversity and Conservation

*Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL1003	Ecology & Evolution	7.5/15	Comp	2	4
ENVS1004	Environmental Science: Concepts and Communication	7.5/15	Core	Full year	4
ENVS1005	Quantitative Methods	7.5/15	Core	1	4
ENVS1006	Environmental Science: Research and Applications	7.5/15	Core	Full year	4
ENVS1007	Environmental Field Techniques and Applications	7.5/15	Core	2	4
GEOG1002	Dynamic Landscapes	7.5/15	Comp	1	4
SOES1006	Introduction to Marine Ecology	7.5/15	Comp	2	4
SOES1008	Earth & Ocean Systems	7.5/15	Comp	1	4

Part II Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL2004	Pure and Applied Population Ecology	7.5/15	Comp	1	5
ENVS2006	Environmental Impact Assessment	7.5/15	Core	2	5
ENVS2007	Environmental Pollution	7.5/15	Core	1	5
ENVS2008	GIS for Environmental Scientists	7.5/15	Core	2	5
ENVS2014	Environment and Sustainability	7.5/15	Core	1	5

Part II Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL2001	Evolution	15	O	2	5
BIOL2007	Plant Development and Function	15	O	2	5
BIOL2039	Animal Behaviour	15	O	1	5
BIOL2040	Neural Basis of Behaviour	15	O	2	5
ENVS2003	Freshwater Ecosystems	15	O	1	5
ENVS2012	Environmental Instrumentation	15	O	1	5
GEOG2006	Quaternary Environmental Change	15	O	1	5
GEOG2007	Remote Sensing for Earth Observation	15	O	1	5
GEOG2032	Global Climate Change: Science, Impacts and Policy	15	O	1	5
GEOG2039	Concepts and Methods for Environmental Management	15	O	1	5
GEOG2040	Coastal Landscapes and Human Interactions	15	O	2	5
PHYS2015	Introduction to Energy in The Environment	15	O	2	5
SOES2006	Phytoplankton and Primary Production	15	O	2	5
SOES2017	Ecological Processes in The Marine Benthos	15	O	2	5
SOES2024	Coastal and Estuarine Oceanography I	15	O	1	5

SOES2027	Coastal and Estuarine Oceanography 2	15	O	2	5
UOSM2001	Business Skills for Employability	15	O	2	5
UOSM2011	The Management of Risk and Uncertainty	15	O	2	5
UOSM2022	Social Enterprise	15	O	1	5

Part III Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL3009	Applied Ecology	7.5/15	Comp	1	6
ENVS3011	Environmental Field Studies	7.5/15	Core	NS/ 1	6
ENVS3013	Environmental Law and Management	7.5/15	Core	1	6

Part III Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL3010	Topics in Ecology and Evolution	15	O	2	6
BIOL3051	Applied Plant Biology	15	O	2	6
BIOL3053	Biodiversity and Conservation	15	O	1	6
BIOL3056	Global Change Biology: from molecules to ecosystem services	15	O	2	6
ENVS3014	Sustainable Resource Management	15	O	1	6
ENVS3017	The Sustainability Professional	15	O	1	6
ENVS3020	Air Quality and Env Pollution	15	O	2	6
ENVS3021	Advanced GIS and Spatial Analysis	15	O	2	6
GEOG3047	Complex Socio-Ecological Systems	15	O	1	6
GEOG3068	Biogeography	15	O	1	6
SESG3019	UG Ambassador Scheme	15	O	1	6
SOES3008	Environmental and Engineering Geology	15	O	2	6
SOES3013	Zooplankton Ecology and Processes	15	O	1	6

Part IV Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS6009	Advanced Research Project	30/60	Core	Full year	7
ENVS6010	Work-Based Learning	7.5/15	Core	1	7

Part IV Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
CENV6085	Waste Resource Management	15	O	2	7

CENV6090	Energy Resources and Engineering	15	O	2	7
CENV6158	Water & Wastewater Engineering	15	O	2	7
CENV6172	River and Fisheries Restoration	15	O	2	7
ENVS6003	Freshwater Ecosystems	15	O	1	7
ENVS6011	Environmental Management Systems	15	O	2	7
SOES6007	Biogeochemical Cycles in the Earth System	15	O	1	7
SOES6011	Modelling Coastal Processes	15	O	2	7
SOES6022	Microfossils, Environments and Time	15	O	1	7

MEnvSci Environmental Change

*Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL1003	Ecology & Evolution	7.5/15	Comp	2	4
ENVS1004	Environmental Science: Concepts and Communication	7.5/15	Core	Full year	4
ENVS1005	Quantitative Methods	7.5/15	Core	1	4
ENVS1006	Environmental Science: Research and Applications	7.5/15	Core	Full year	4
ENVS1007	Environmental Field Techniques and Applications	7.5/15	Core	2	4
GEOG1001	The Earth System	7.5/15	Comp	2	4
GEOG1002	Dynamic Landscapes	7.5/15	Comp	1	4
SOES1008	Earth & Ocean Systems	7.5/15	Comp	1	4

Part II Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS2006	Environmental Impact Assessment	7.5/15	Core	2	5
ENVS2007	Environmental Pollution	7.5/15	Core	1	5
ENVS2008	GIS for Environmental Scientists	7.5/15	Core	2	5
ENVS2014	Environment and Sustainability	7.5/15	Core	1	5
GEOG2032	Global Climate Change	7.5/15	Comp	1	5

Part II Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
CHEM1008	Environmental Chemistry 1	15	O	1	4
DEMO2008	Population and Reproductive Health	15	O	2	5
DEMO2010	Population in Developing Societies	15	O	1	5
ENVS2003	Freshwater Ecosystems	15	O	1	5
ENVS2012	Environmental Instrumentation	15	O	1	5
GEOG2006	Quaternary Environmental Change	15	O	1	5
GEOG2007	Remote Sensing for Earth Observation	15	O	1	5

GEOG2037	Global Water Resources	15	O	2	5
GEOG2039	Concepts and Methods for Environmental Management	15	O	1	5
GEOG2040	Coastal Landscapes and Human Interactions	15	O	2	5
PHYS2015	Introduction to Energy in The Environment	15	O	2	5
SOES2003	Geohazards and Earth Resources	15	O	2	5
SOES2018	Geochemistry	15	O	1	5
SOES2024	Coastal and Estuarine Oceanography I	15	O	1	5
SOES2027	Coastal and Estuarine Oceanography 2	15	O	2	5
UOSM2001	Business Skills for Employability	15	O	2	5
UOSM2011	The Management of Risk and Uncertainty	15	O	2	5
UOSM2022	Social Enterprise	15	O	1	5

Part III Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS3011	Environmental Field Studies	7.5/15	Core	NS/1	6
ENVS3013	Environmental Law and Management	7.5/15	Core	1	6

Part III Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL3056	Global Change Biology: from molecules to ecosystem services	15	O	2	6
ENVS3014	Sustainable Resource Management	15	O	1	6
ENVS3017	The Sustainability Professional	15	O	1	6
ENVS3020	Air Quality and Env Pollution	15	O	2	6
ENVS3021	Advanced GIS and Spatial Analysis	15	O	2	6
GEOG3020	Glaciers and Glaciation	15	O	1	6
GEOG3047	Complex Socio-ecological systems: Past, present and future	15	O	1	6
GEOG3057	Adapting to Climate Change and Weather Hazards	15	O	1	6
GEOG3068	Biogeography	15	O	1	6
SESG3019	UG Ambassador Scheme	15	O	1	6
SOES3008	Environmental and Engineering Geology	15	O	2	6
SOES3011	Biogeochemical Cycles in the Earth System	15	O	1	6
SOES3014	Coastal Sediment Dynamics	15	O	1	6
SOES3015	Palaeoclimate Change	15	O	2	6

Part IV Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS6009	Advanced Research Project	30/60	Core	Full year	7
ENVS6010	Work-Based Learning	7.5/15	Core	1	7

Part IV Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
CENV6084	Coastal & Maritime Engineering and Energy	15	O	1	7
CENV6085	Waste Resource Management	15	O	2	7
CENV6090	Energy Resources and Engineering	15	O	2	7
CENV6112	Transport, Energy and the Environment	15	O	1	7
CENV6158	Water & Wastewater Engineering	15	O	2	7
CENV6162	Water Resources Planning and Management	15	O	1	7
CENV6172	River and Fisheries Restoration	15	O	2	7
ENVS6003	Freshwater Ecosystems	15	O	1	7
ENVS6011	Environmental Management Systems	15	O	2	7
SOES6007	Biogeochemical Cycles in the Earth System	15	O	1	7
SOES6011	Modelling Coastal Processes	15	O	2	7
SOES6022	Microfossils, Environments and Time	15	O	1	7
SOES6023	Environmental Radioactivity & Radiochemistry	15	O	2	7

MEnvSci Sustainable Environmental Management

*Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL1003	Ecology & Evolution	7.5/15	Comp	2	4
ENVS1004	Environmental Science: Concepts and Communication	7.5/15	Core	Full year	4
ENVS1005	Quantitative Methods	7.5/15	Core	1	4
ENVS1006	Environmental Science: Research and Applications	7.5/15	Core	Full year	4
ENVS1007	Environmental Field Techniques and Applications	7.5/15	Core	2	4
GEOG1001	The Earth System	7.5/15	Comp	2	4
GEOG1002	Dynamic Landscapes	7.5/15	Comp	1	4
SOES1008	Earth & Ocean Systems	7.5/15	Comp	1	4

Part II Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS2006	Environmental Impact Assessment	7.5/15	Core	2	5
ENVS2007	Water Pollution	7.5/15	Core	1	5
ENVS2008	GIS for Environmental Scientists	7.5/15	Core	2	5
ENVS2014	Environment and Sustainability	7.5/15	Core	1	5
SOES2003	Geohazards and Earth Resources	7.5/15	Comp	2	5

Part II Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL2001	Evolution	15	O	2	5
BIOL2004	Pure and Applied Population Ecology	15	O	1	5
DEMO2008	Population and Reproductive Health	15	O	2	5
DEMO2010	Population in Developing Societies	15	O	1	5
ENVS2003	Freshwater Ecosystems	15	O	1	5
ENVS2012	Environmental Instrumentation	15	O	1	5
GEOG2006	Quaternary Environmental Change	15	O	1	5
GEOG2007	Remote Sensing for Earth Observation	15	O	1	5
GEOG2032	Global Climate Change: Science, Impacts and Policy	15	O	1	5
GEOG2039	Concepts and Methods for Environmental Management	15	O	1	5
GEOG2040	Coastal Landscapes and Human Interactions	15	O	2	5
PHYS2015	Introduction to Energy in The Environment	15	O	2	5
UOSM2001	Business Skills for Employability	15	O	2	5
UOSM2011	The Management of Risk and Uncertainty	15	O	2	5
UOSM2022	Social Enterprise	15	O	1	5
UOSM2026	Ethics in Science, Engineering and Technology: Jekyll and Hyde	15	O	2	5

Part III Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS3011	Environmental Field Studies	7.5/15	Core	NS/ 1	6
ENVS3013	Environmental Law and Management	7.5/15	Core	1	6
ENVS3014	Sustainable Resource Management	7.5/15	Comp	1	6

Part III Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL3009	Applied Ecology	15	O	1	6
BIOL3056	Global Change Biology: from molecules to ecosystem services	15	O	2	6
CENV3059	Water and Wastewater Engineering 1	15	O	2	6
ENVS3020	Air Quality and Env Pollution	15	O	2	6
ENVS3021	Advanced GIS and Spatial Analysis	15	O	2	6
ENVS3017	The Sustainability Professional	15	O	1	6
GEOG3005	Palaeoecology and Conservation	15	O	1	6
GEOG3023	River Basin Management and Restoration	15	O	2	6

GEOG3047	Complex Socio-ecological systems: Past, present and future	15	O	1	6
GEOG3057	Adapting to Climate Change and Weather Hazards	15	O	1	6
SESG3019	UG Ambassador Scheme	15	O	1	6
SOES3008	Environmental and Engineering Geology	15	O	2	6

Part IV Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS6009	Advanced Research Project	30/60	Core	Full year	7
ENVS6010	Work-Based Learning	7.5/15	Core	1	7
ENVS6011	Environmental Management Systems	7.5/15	Comp	2	7

Part IV Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
CENV6084	Coastal & Maritime Engineering and Energy	15	O	1	7
CENV6085	Waste Resource Management	15	O	2	7
CENV6090	Energy Resources and Engineering	15	O	2	7
CENV6112	Transport, Energy and the Environment	15	O	1	7
CENV6148	Energy Performance Assessment of Buildings	15	O	2	7
CENV6158	Water & Wastewater Engineering	15	O	2	7
CENV6162	Water Resources Planning and Management	15	O	1	7
CENV6172	River and Fisheries Restoration	15	O	2	7
ENVS6003	Freshwater Ecosystems	15	O	1	7

SOES6011	Modelling Coastal Processes	15	O	2	7
SOES6023	Environmental Radioactivity & Radiochemistry	15	O	2	7

Progression Requirements

The programme will follow the University's regulations for [Progression, Determination and Classification of Results: Undergraduate and Integrated Masters Programmes](http://www.calendar.soton.ac.uk/sectionIV/sectIV-index.html) 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.

In the Faculty and your Discipline you will be able to access:

- Coursebooks for each year of the programme.
- Introductory sessions for all years of the programme.
- Library information retrieval seminar.
- Small group tutorials in Part of the programmes.

- Personal tutors to assist you with personal problems and to advise on academic issues (contact maintained during periods of studying abroad). A senior tutor is also available.
- Access to academic staff through an open door policy as well as timetabled tutor meetings, appointment system and e-mail.
- Research seminars and invited lectures.
- Faculty Student Office for the administration of your programme.
- Examples of past Advanced Research Project reports to help guide your own work

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, Faculty Programmes Committee OR providing comments to your student representative to feed back 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

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](#).

Career Opportunities

Students will gain a detailed understanding of the core areas of environmental science throughout the three or four years of study. Potential career routes include specialising in environmental management, sustainability, carbon management, water management, biodiversity and waste management, leading to jobs in large international consultancies, local environmental consultancies, research organisations, environmental regulators, non-governmental organisations, schools and academia (e.g. MSc and PhD degrees), local authorities, and government bodies among others. For students who decide that they do not wish to pursue a career in environmental science, they will find that their broad training and exposure to key skills provides an excellent springboard for other professions.

External Examiner(s) for the programme

Name: Dr Karen Anderson - University of Exeter

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
Stationery	You will be expected to provide your own day-to-day stationary 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	<p>Where a module specifies core texts these should generally be available on the reserve list in the library. However due to demand, students may prefer to buy their own copies. These can be purchased from any source.</p> <p>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.</p>
Other	<p>ENVS1004 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs1004_environmental_science_concepts_and_communication.page?</p> <p>ENVS1006 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs1006_environmental_science_research_and_applications.page?</p> <p>ENVS1007 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs1007_environmental_field_techniques_and_applications.page?#overview</p> <p>ENVS2003 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing</p>

	<p>when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs2003_freshwater_ecosystems.page?</p> <p>ENVS2006 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs2006_environmental_impact_assessment.page?</p> <p>ENVS2008 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs2008_gis_for_environmental_scientists.page?</p> <p>ENVS3011 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs3011_environmental_field_studies.page?</p> <p>ENVS3013 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs3013_environmental_law_and_management.page?</p> <p>ENVS3014 The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University. Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments. http://www.southampton.ac.uk/engineering/undergraduate/modules/envs3014_sustainable_resource_management.page?</p>
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	<p>ENVS3016</p> <p>The cost of travel, accommodation and required safety equipment, along with breakfast and dinner if required, will be paid for by the University.</p> <p>Costs to you: You will need to provide and wear your own suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source and costs will vary depending on your preference. You will be expected to purchase your own lunch and any additional refreshments.</p> <p>http://www.southampton.ac.uk/engineering/undergraduate/modules/envs3016_natural_resource_governance.page?</p>
Approved Calculators	<p>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.</p>
Anything else not covered elsewhere	<p>FEEG3003 Individual Project</p> <p>In addition to the experimental, computational and workshop resources available, reasonable expenses for travel and materials of up to £80 may be reclaimed through the Faculty Student Office.</p> <p>http://www.southampton.ac.uk/engineering/undergraduate/modules/feeg3003_individual_project.page</p> <p>ENVS6009</p> <p>Projects may require additional support other than that provided by the Faculty or their supervisor (e.g. travel and subsistence, consumables); each student is eligible for up to £300 to pay for such costs.</p> <p>http://www.southampton.ac.uk/engineering/undergraduate/modules/envs6009_advanced_research_project.page?</p> <p>ENVS6011 (Environmental Monitoring and Assessment)</p> <p>The cost of travel to site visits will be covered by the University</p> <p>http://www.southampton.ac.uk/engineering/undergraduate/modules/envs6011_environmental_management_systems.page?</p>
Optional Visits (e.g. museums, galleries)	<p>Some modules may include additional optional visits. You will normally be expected to cover the cost of travel and admission, unless otherwise specified in the module profile</p>
Field course clothing	<p>You will need to wear suitable clothing when attending fieldcourses, e.g. waterproofs, walking boots. You can purchase these from any source.</p>
Design equipment and materials	<p>Standard construction/modelling materials will be provided where appropriate, unless otherwise specified in a module profile.</p> <p>For customisation of designs/models calling for material other than standard construction/ modelling materials, students will bear the costs of such alternatives.</p>
Printing and Photocopying Costs	<p>In some cases, coursework and/or projects may be submitted electronically. Where it is not possible to submit electronically students will be liable for printing costs, which are detailed in the individual Module Profile.</p> <p>FEEG3003</p> <p>Students are responsible for the printing costs of their poster for the Poster Presentation Day. This may range from approximately £5 - £20.</p> <p>http://www.southampton.ac.uk/engineering/undergraduate/modules/feeg3003_individual_project.page</p>

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.

