Programme Specification

MSc programmes in Environmental Management 2020/21

SUBJECT TO REVALIDATION

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	1 year
Accreditation details	None
Final award	MSc Biodiversity and Conservation MSc Water Resources Management MSc Environmental Pollution Control MSc Integrated Environmental Studies MSc Environmental Monitoring and Assessment
Name of award	Master of Science
Interim Exit awards	Postgraduate Certificate Postgraduate Diploma
FHEQ level of final award	7
UCAS code	NA
QAA Subject Benchmark or other external reference	Quality Assurance Agency's Benchmark for Earth Sciences/ Environmental Sciences and Environmental Studies (ES3)/Quality Assurance Agency's National Qualifications Framework (NQF).
Programme Lead	Dr Patrick Osborne
Director of Programmes	Dr Patrick Osborne
Date Specification was written	08/04/2014
Date programme was validated	July 2014
Date specification last updated	June 2019

Programme Overview

Brief outline of the programme

The Environmental Management Programme is designed to provide you with a set of flexibly structured and coherent programmes of study and research that prepare you for employment as an environmental manager. We offer the choice of a generic programme (MSc Integrated Environmental Studies) with a range of options to select or more specialist pathways to your chosen career in Biodiversity and Conservation, Water Resources Management, Environmental Pollution Control or Environmental Monitoring and Assessment. Each programme encourages you to develop an autonomous and reflective approach to your work, and fosters the development of an enquiring and creative approach. Our degrees are intended to provide a means by which you can acquire an interdisciplinary knowledge and understanding of the environment to complement and supplement your previous experience in higher education and/or your career.

Learning and teaching

A wide variety of teaching and learning methods are employed in the Environmental Management Programme including lectures, seminars, field exercises and activities 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 maps onto an equally wide breadth of assessment methods. Students on the EMP will encounter 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.

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 Environmental Management programmes aim to:

- provide you with a thorough understanding of the functioning and management of the environment, based on firm interdisciplinary foundations
- give you the opportunity to develop 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
- provide you with knowledge and understanding of the interactions of the environment and society
- enable you to undertake a substantial research project during your year of study
- 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
- provide opportunities to recognise and develop the key skills necessary for graduates to be capable of reaching their full potentials and play a full role in society including careers in environmental and other professions, industry and commerce
- provide an education suitable for a wide variety of careers in the environment, with a view to employment following graduation.

Programme Learning Outcomes

The Environmental Management programmes provide opportunities for you to develop and demonstrate knowledge and understanding, skills and other attributes (below). The programmes are interdisciplinary and multidisciplinary, and provide opportunities for choice, but also feature a core of essential modules that provide an integrated set of learning outcomes mapped onto the benchmark statement for Earth Sciences, Environmental Sciences and Environmental Studies (ES3). Module choices relate to a major theme within environmental management and provide you with the content and context for your chosen career pathway. Selection of optional modules is guided by detailed documentation on the Programme Catalogue and through support from the Programme Lead and your Personal Tutor. In common with other programmes at Southampton, we allow students to change module choices within the first two weeks of each semester to maximise the match to your interests.

Knowledge and Understanding

Having successfully completed this programme you will gain:

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, field and laboratory classes, workshops and independent research. You are expected 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 provide you with the opportunity 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, reports, presentations, performance in practical sessions and the research project, and is stressed from the beginning of the programme. Summative assessment takes the form of unseen and open-book examinations and tests, presentations, project work and coursework.

Subject Specific Intellectual and Research Skills

Having successfully completed this programme you will be able to demonstrate knowledge and understanding of:

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 and Research skills are developed through lectures, seminars, workshops, discussion groups 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.

Assessment methods

Analysis and problem solving skills are assessed through unseen written examinations and problem-based exercises. Project design, experimental and research skills are assessed through coursework reports, project reports and oral presentations.

Transferable and Generic Skills

Having successfully completed this programme you will be able to demonstrate knowledge and understanding of:

- 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

Transferable skills are developed through the learning and teaching activities. You will already possess a broad range of subject specific skills from your first degree and/or other experience. Development of further and more advanced key skills is through training sessions and workshops, including self-assessment of areas of strength and areas of need. Use of university skills development resources is also encouraged for any specific needs you may identify. 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 reflection on 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 many modules.

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 research projects. Team skills are developed in many modules and peer reviews of presentations may form an element of the assessment.

Subject Specific Practical Skills

Having successfully completed this programme you will be able to demonstrate knowledge and understanding of:

- 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/learning methods
Practical skills are developed through the learning and teaching programme, building on an assumed level of competence from your previous training and experience. Experimental and fieldwork skills are developed through laboratory experiments, fieldwork and project work.

Assessment
Practical skills are assessed through coursework reports, project reports, presentations and practical exams, including computer-based exercises.

Programme Structure

Typical course content

All students take four modules each worth 7.5 ECTS / 15 CATS in semester 1 and four modules each worth 7.5 ECTS / 15 CATS in semester 2, followed by the Advanced Research Project 30 ECTS / 60 CATS over the summer, finishing in September. Part time students would take two modules in each of semesters 1 and 2 in their first and second years, followed by the Advanced Research Project with a submission date in December in the second year.

Each pathway within the Environmental Management Programme comprises core modules that map onto the learning outcomes described by the ES3 benchmarking statement; compulsory modules that add essential content and context to your chosen pathway; and optional modules that enrich your learning experience in the way you wish. The MSc Integrated Environmental Studies is more flexible with no compulsory modules and a free choice of five options from a greater selection of topics on offer. Your Advanced Research Project must match the main theme of your chosen pathway.

The formal programme is of 12 months duration and 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. Project work is undertaken full-time from the end of semester 2 through the summer to the end of the academic year, although opportunities exist for starting project work as early as February.

Special Features of the programme

A special feature of the Environmental Management Programme is the replacement of the traditional dissertation with the Advanced Research Project written as a journal article (7000 word limit). This is a challenging, real-world exercise and very rewarding for students whose work is of sufficient standard to be submitted to a real journal and eventually published.

Additional Costs

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. Costs that students registered for this programme typically also have to pay for are included in Appendix 2.

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 and can be found in Appendix 2.

Progression Requirements

The programme follows the University's regulations for Progression, Determination and Classification of Results : Standalone Masters Programmes as set out in the University Calendar (http://www.calendar.soton.ac.uk/sectionIV/sectIV-index.html) and in particular at http://www.calendar.soton.ac.uk/sectionIV/progression-regs-standalonemasters.html and http://www.calendar.soton.ac.uk/sectionIV/credit-bearing-progs.html

Faculty specific regulations for Standalone Masters can be found here http://www.calendar.soton.ac.uk/sectionVIII/fee-sam.html

Intermediate exit points

You will be eligible for an interim exit award if you complete part of the programme but not all of it, as follows:

Qualification	Minimum overall credit in ECTS/CATS credits	Minimum ECTS/CATS credits required at level of award
Postgraduate Diploma	at least 60/120	45/90
Postgraduate Certificate	at least 30/60	20/40

Programme outcomes for different exit points

Level 7 You will have shown originality in the application of knowledge, and you will understand how the boundaries of knowledge are advanced through research. You will be able to deal with complex issues both systematically and creatively, and show originality in tackling and solving problems individually and as part of a team. You will have the qualities needed for employment in circumstances requiring sound judgement, personal responsibility and initiative, in complex and unpredictable professional environments.

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 Student Services Centre
- Enabling Services offering assessment and support (including specialist IT support) facilities if you have a disability, dyslexia, mental health issue or specific learning difficulties
- 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 Destinations, 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
- a range of personal support services : mentoring, counselling, residence support service, chaplaincy, health service
- 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 your programme.
- Introductory sessions for your 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

Career Opportunities

Career opportunities for EMP graduates are wide ranging and dependent on your specialisation including: environmental monitoring; modelling; water resource management and pollution control; carbon management; sustainable waste management; sustainable energy; wildlife conservation and ecological management; consultancy; and academic research.

These career routes might be fulfilled by working for large international consultancies, local environmental consultancies, research organisations, environmental regulators, non-governmental organisations, academia, local authorities, and government bodies amongst many others in this diverse and personally rewarding field.

External Examiners(s) for the programme

Name Dr Diane Purchase
Institution. Middlesex 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 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 (at http://www.southampton.ac.uk/studentservices/academic-life/faculty-handbooks.page and at http://www.southampton.ac.uk/engineering/postgraduate/taught_courses/emp.page

Revision History

1. Minor revisions (including title) 10 July 2007 (SCK)
2. New Brand added July 2008
3. Updated to reflect University restructuring June 2011 AB.
4. Revisions approved by Senate 19 June 2013 as part of new programme validation process
5. Minor changes made to form guidance on completion of Intended Learning Outcomes, and Learning outcomes and Assessment Mapping document template, for clarity; and changes to wording of support for student learning section, altering to second person throughout – agreed with the Chair and to be reported to UPC October 2013
6. R E Stanton June 2014, proofing of template
7. Update to Programme Overview (CMA changes) – September 2015
8. CQA textual updates August 2016
9. Director of Programmes module updates/CQA textual updates April2017
10. Updated to reflect 201819 version and removal of Admissions Criteria – CQA March 2018
11. Annual update – CQA June 2019

APPENDIX 1
PROGRAMME STRUCTURE

The information in this appendix is liable to change in minor ways from year to year. It is accurate at the time of writing. For the
latest information, see the programme handbook issued in September each year.

Students on all programmes must take the MSc Research Project 30 ECTS/60 CATS points (which is core and level 7).

MSc Biodiversity and Conservation

Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL6028	Global Change Biology	7.5/15	Comp	2	7
BIOL6066	Biodiversity and Convervation	7.5/15	Comp	1	7
ENVS6003	Freshwater Ecosystems	7.5/15	Core	1	7
ENVS6028	Environmental Impact and Assessment	7.5/15	Core	1	7
ENVS6034	Advanced Quantitative Methods	7.5/15	Core	2	7

Part I Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Semester	Level
BIOL6010	Applied Ecology	7.5/15	1	7
CENV6141	Bioenergy	7.5/15	2	7
CENV6172	River and Estuary Restoration	7.5/15	2	7
ENVS6036	Advanced GIS and Spatial Analysis	7.5/15	2	7
ENVS6006	Environmental Pollution	7.5/15	1	7
ENVS6030	Environmental Law and Management	7.5/15	1	7
ENVS6032	Geographical Information Systems for Environmental Consultants	7.5/15	1	7
SOES6008	Deep Sea Ecology	7.5/15	1	7

MSc Environmental Monitoring and Assessment

Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS3014	Sustainable Resource Management	7.5/15	Comp	1	7
ENVS6011	Environmental Management Systems	7.5/15	Core	2	7
ENVS6028	Environmental Impact and Assessment	7.5/15	Core	1	7
ENVS6030	Environmental Law & Management	7.5/15	Comp	1	7
ENVS6034	Advanced Quantitative Methods	7.5/15	Core	2	7

Part I Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Semester	Level
CENV6084	Coastal & Maritime Engineering and Energy	7.5/15	1	7
CENV6085	Water Resource Management	7.5/15	2	7
CENV6090	Energy Resources and Engineering	7.5/15	2	7
CENV6123	Coastal Flood Defence and Management	7.5/15	2	7
CENV6141	Bioenergy	7.5/15	2	7
CENV6172	River and Fisheries Restoration	7.5/15	2	7
ENVS3020	Air Quality and Environmental Pollutions	7.5/15	2	7
ENVS6036	Advanced GIS and Spatial Analysis	7.5/15	2	7
ENVS6032	Geographical Information Systems for Environmental Consultants	7.5/15	1	7

MSc Environmental Pollution Control

Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS3014	Sustainable Resource Management	7.5/15	Comp	1	7
ENVS3020	Air Quality & Environmental Pollution	7.5/15	Core	2	6
ENVS6006	Environmental Pollution	7.5/15	Core	1	7
ENVS6030	Environmental Law & Management	7.5/15	Comp	1	7
ENVS6034	Advanced Quantitative Methods	7.5/15	Core	2	7

Part I Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Semester	Level
CENV6084	Coastal & Maritime Engineering and Energy	7.5/15	1	7
CENV6085	Water Resource Management	7.5/15	2	7
CENV6090	Energy Resources and Engineering	7.5/15	2	7
CENV6123	Coastal Flood Defence and Management	7.5/15	2	7
CENV6158	Water & Wastewater Engineering	7.5/15	2	7
CENV6172	River and Estuary Restoration	7.5/15	2	7
ENVS6003	Freshwater Ecosystems	7.5/15	1	7
ENVS6011	Environmental Management Systems	7.5/15	2	7
ENVS6032	Geographical Information Systems for Environmental Consultants	7.5/15	1	7

MSc Integrated Environmental Studies

Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS6028	Environmental Impact and Assessment	7.5/15	Core	1	7
ENVS6034	Advanced Quantitative Methods	7.5/15	Core	2	7

Part I Core/Optional Modules Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Semester	Level
BIOL6066	Biodiversity and Convervation	7.5/15	1	7
BIOL6028	Global Change Biology	7.5/15	2	7
CENV6084	Coastal & Maritime Engineering and Energy	7.5/15	1	7
CENV6085	Water Resource Management	7.5/15	2	7
CENV6090	Energy Resources and Engineering	7.5/15	2	7
CENV6123	Coastal Flood Defence and Management	7.5/15	2	7
CENV6126	Coastal Morphodynamics	7.5/15	1	7
CENV6141	Bioenergy	7.5/15	2	7
CENV6172	River and Fisheries Restoration	7.5/15	2	7
ENVS3014	Sustainable Resource Management	7.5/15	1	7
ENVS3020	Air Quality & Environmental Pollution	7.5/15	2	7
ENVS6036	Advanced GIS and Spatial Analysis	7.5/15	2	7
ENVS6003	Freshwater Ecosystems	7.5/15	1	7
ENVS6006	Environmental Pollution	7.5/15	1	7
ENVS6011	Environmental Management Systems	7.5/15	2	7
ENVS6030	Environmental Law and Management	7.5/15	1	7
ENVS6032	Geographical Information Systems for Environmental Consultants	7.5/15	1	7

MSc Water Resources Management

Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
ENVS6003	Freshwater Ecosystems	7.5/15	Core	1	7
ENVS6006	Environmental Pollution	7.5/15	Comp	1	7
ENVS6034	Advanced Quantitative Methods	7.5/15	Core	2	7

Part I Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Semester	Level
CENV6084	Coastal & Maritime Engineering and Energy	7.5/15	1	7
CENV6126	Coastal Morphodynamics	7.5/15	1	7
CENV6085	Water Resource Management	7.5/15	2	7
CENV6123	Coastal Flood Defence and Management	7.5/15	2	7
CENV6158	Water & Wastewater Engineering	7.5/15	2	7
CENV6172	River and Estuary Restoration	7.5/15	2	7
ENVS3014	Sustainable Resource Management	7.5/15	1	7
ENVS6011	Environmental Management Systems	7.5/15	2	7
ENVS6032	Geographical Information Systems for Environmental Consultants	7.5/15	1	7
ENVS6030	Environmental Law & Management	7.5/15	1	7
GEOG6009	River Basin Management	7.5/15	2	7

Appendix 2:

Learning outcomes and Assessment Mapping

A key feature of our MSc programmes is the inclusion of ES3 benchmark learning outcomes on core modules. Although MSc students from an environmental background would have been expected to cover these at undergraduate level, some students (particularly from overseas) may not have had this experience. Their inclusion here ensures that all our MSc graduates have exposure to key skills that we consider essential to the definition of environmental science, albeit on a necessarily reduced level compared with an undergraduate degree.

MSc Programme Learning Outcomes defined by core modules

		Knowledge and Understanding								**Subject-specific Intellectual Skills**					**Transferable/Generic Skills**											**Subject-specific Practical Skills**			
Module code	**Module title**	**A1**	**A2**	**A3**	**A4**	**A5**	**A6**	**A7**	**A8**	**B1**	**B2**	**B3**	**B4**	**B5**	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**	**C8**	**C9**	**C 10**	**C 11**	**C 12**	**D1**	**D2**	**D3**	**D4**
ENVS6034	Advanced Quantitative Methods	x	x	x	x			x		x	x	x	x		x	x	x	x	x	x							x	x		x
ENVS6003	Freshwater Ecosystems	x	x	x	x	x	x	x	x	x	x	x	x		x			x		x				x	x	x	x	x	x	x
ENVS6006	Environmental Pollution	x	x	x	x		x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x
ENVS6011	Env Management Systems	x	x		x	x	x	x	x	x	x		x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x
ENVS6035	MSc Research Project	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x	x	x	x	x	x	x
ENVS3020	Air Quality & Environmental Pollution	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x
ENVS6028	Env Impact Assessment	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x			x	x	x	x	x	x	x	x		x	x

MSc Programme Assessment Methods for the core modules defining the learning outcomes

Module Code	Module Title	Coursework 1	Coursework 2	Exam 1
ENVS6034	Advanced Quantitative Methods	Practical short answer test 50%	Practical long answer test 50%	
ENVS6003	Freshwater Ecosystems	Critical review 50%	Open book exam questions 50%	
ENVS6006	Environmental Pollution	Open book test 25%	Open book test 25%	Unseen 2 hours 50%
ENVS6011	Env Management Systems	Group EMS manual 70%	ISO14001 certification audit 30%	
ENVS6012	EMP Advanced Research Project	Final report 100%		
ENVS3020	Air Quality & Env Pollution	Data analysis report 50%		Unseen 2 hours 50%
ENVS6028	Env Impact Assessment	Group scoping report 60%		Unseen 2 hours 40%

Appendix 3:

Additional Costs

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 typically also have to pay for the items listed in the table below.

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.

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
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.
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.
T**extbooks**		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. 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.
Equipment and Materials	Design equipment and materials:	Standard construction/modelling materials will be provided where appropriate, unless otherwise specified in a module profile. For customisation of designs/models calling for material other than standard construction/ modelling materials, students will bear the costs of such alternatives.
Clothing	Lab Coats	
	Protective Clothing: Hard hat; safety boots; hi-viz vest/jackets;	
	Fieldcourse clothing:	You will need to wear suitable clothing when attending fieldcourses, e.g. waterproofs, walking boots. You can purchase these from any source.

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
Printing and Photocopying Costs		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.
Fieldwork: logistical costs	Accommodation:	
	Insurance	
	Travel costs	
	Immunisation/vaccination costs	
	Other:	ENVS6003 (Biodiversity and Conservation/Water Resource Management pathways) 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. **https://www.southampton.ac.uk/courses/modules/envs6003.page** ENVS6028 (Integrated Environmental Studies/Biodiversity and Conservation/Environmental Monitoring and Assessment pathways) 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. **https://www.southampton.ac.uk/courses/modules/envs6028.page** ENVS6030 (Environmental Pollution Control and Environmental Assessment and Monitoring pathways) 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. **https://www.southampton.ac.uk/courses/modules/envs6030.page**
Optional Visits (e.g. museums, galleries)		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.
Anything else not covered elsewhere		ENVS6011 (Environmental Monitoring and Assessment) The cost of travel to site visits will be covered by the University **https://www.southampton.ac.uk/courses/modules/envs6011.page**