

Programme Specification

BSc Environmental Management with Business 2017/18

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

Awarding Institution University of Southampton Teaching Institution University of Southampton

Duration 3 years

Mode of study Full time

Accreditation details Institution of Environmental Sciences to be sought

Final award Bachelor of Science (Hons)

Name of award Environmental Management with Business

Interim Exit awards Certificate of Higher Education

Diploma of Higher Education Bachelor of Science (Ordinary)

FHEQ level of final award Level 6 UCAS code F750

QAA Subject Benchmark or other From the ES3 benchmark document,

external reference FHEQ/QAA Level 6 descriptors

Director of Programme Dr Patrick Osborne Programme Coordinator/Lead Malcolm Hudson

Date specification was written 04/04/2014
Date programme was validated July 2014
Date specification last updated August 2017

Programme Overview

Brief outline of the programme

This new programme will focus on combining the critical skills of an environmental scientist, with the business skills of a management specialist, to create highly employable graduates able to pursue rewarding careers in the growing field of environmental management and consultancy.

Students will gain a detailed understanding of the core areas of environmental science throughout the three years of study. This expertise will be combined with the development of business management skills through the study of appropriate management modules that will enable the graduates to have the full suite of theoretical and practical skills necessary to become an environmental professional.

In Part I students will complete modules that address core environmental science processes, field research and quantitative methods, along with an introduction to management. Part II ensures, through half of all modules being core, that students gain a critical understanding of the environmental impacts from business and industry, legislation, and the development of project management skills. Optional modules will allow students to blend environmental science and management modules to create a portfolio of skills that reflect their interests and career aspirations. Semester one of Part III involves a core practical module on consultancy delivered in partnership with a range of contributors from environmental consultancies and other organisations. Optional modules will allow students to advance their understanding of environmental science and management, and to focus on their area of expertise.

The final semester of the programme in Part III is spent on placement where the students complete a practical independent research project in partnership with the placement organisation. Students have the opportunity to continue working with the organisation (subject to satisfactory outcomes) upon completion of the course.

Learning and teaching

We are committed to providing students with opportunities to enjoy an exciting, challenging and stimulating learning experience. This programme will adopt a combination of traditional and action-based pedagogies. Examples of the teaching techniques employed in this degree programme include class lectures, recorded keynote lectures for a flipped classroom, discussion sessions, consultancy group role-playing, management practicals, site visits, and field-work. The teaching techniques applied across the programme are designed to enable students to develop the critical knowledge, skills and experience necessary to become a sought after environmental professional upon graduation.

Assessment

Students will be assessed on a formative and summative basis through coursework and unseen examination throughout the programme. The coursework will be varied and can consist of a mixture of the following depending on the modules selected:

- individual essays
- · practical reports
- · group development project reports
- · individual consultancy research reports
- 'academic journal style' papers
- · individual oral presentations
- group conference presentations
- practical exercises

The programme will also include unseen written examinations where this is deemed to be the most appropriate method of assessing the knowledge and understanding of students in a particular subject area. The examination formats will contain multiple choice (level 4 only), short answer and extended essay-based questions.

All students will receive feedback on assessed work, thus facilitating their development and learning. Individuals who have specific learning differences, such as dyslexia, are able to access additional support in completing their work through the usual university services. Personal tutors will be able to guide students to the appropriate support, and the programme lead will also be to guide students to the correct services in the event of a personal tutor not being available.

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 <u>Disclaimer</u> 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 University of Southampton has a commitment to excellence and innovation in learning and teaching whilst producing skilled and employable graduates. This programme is based in the Faculty of Engineering and the Environment, and contains modules from the Southampton Management School as well as across many of the other faculties of the University.

As befitting a world class university, the module content and teaching on the programme is research-led and associated with the interdisciplinary work of the University's Strategic Research Groups (USRGs), such as Sustainability Science, Energy, as well as Faculty led research groups such as the Centre for Environmental Sciences, Strategy and Innovation Research Group,

Sustainable Waste Management, Centre for Strategic Innovation, Global Environmental Change and Earth Observation amongst others.

This programme provides students with a carefully constructed programme of study that will address the core components of environmental science and management whilst allowing students to develop the skills and experience necessary to enjoy a rewarding career as an environmental management professional. Students are encouraged to be creative, adaptive, and challenging whilst employing an interdisciplinary and practice-based approach to their formal and informal learning.

The primary educational aim of the programme is to produce graduates who are skilled and employable environmental professionals capable of contributing to a green and sustainable economy. This aim will be achieved through the following objectives:

- 1. to enable students to develop a thorough understanding of the functioning and management of the environment, based on firm scientific foundations
- 2. to enable students to critically assess and analyse holistic environmental and sustainability issues from the perspective of the business community
- 3. to enable students to develop specialist knowledge and skills in the application of management skills for solving environmental problems
- 4. to enable students to explain complex environmental science and management issues in clear terms and communicate about them effectively and succinctly, both orally and in writing
- 5. to enable students to engage with scientific and numerical data, and to develop an understanding of social impacts and management considerations from a non-scientific perspective
- 6. to enable students to develop their problem solving skills as part of a team and on an individual basis
- 7. to enable students to develop professionally focused transferable skills which will be useful to future employers (e.g. team work, presentation, information technology, negotiation) via a combination of group work and individual activities
- 8. 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
- 9. to develop graduates that are capable of reaching their full potential and playing a full role in society including careers in environmental and non-environmental professional fields

Programme Learning Outcomes

Knowledge and Understanding

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

- A1 the need for both a multi-disciplinary and an interdisciplinary approach in advancing knowledge and understanding of Earth systems, drawing, as appropriate, from the natural and the social sciences
- A2 the processes which shape the natural world at different temporal and spatial scales and their influence on and by human activities
- A3 the terminology, nomenclature and classification systems used in environmental science
- A4 methods of acquiring, interpreting and analysing environmental science 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 environmental science to debate on environmental issues and how knowledge of these forms the basis for informed concern about the Earth and its people
- A7 the contribution of environmental science to the development of knowledge of the world we live in
- A8 the applicability of environmental science to the world of work
- A9 general management issues which may include: ethics, organisational structures, entrepreneurship, innovation, strategy, and finance

Teaching and Learning Methods

Teaching and learning techniques employed in this degree programme include class lectures, recorded keynote lectures for a flipped classroom, discussion sessions, consultancy group role-playing, management practicals, site visits, and field-work. Students will be encouraged from an early stage to supplement and consolidate their understanding and knowledge by independent study. The teaching techniques applied across the programme are designed to enable students to develop the critical knowledge, skills and experience necessary to become a sought after environmental professional upon graduation.

Assessment methods

Students will be assessed on a formative and summative basis through coursework and unseen examination throughout the programme. The coursework will be varied and can consist of a mixture of the following examples depending on the modules selected: individual essays, practical reports, group development project reports, individual consultancy research reports, 'academic journal style' papers, individual oral presentations, group conference presentations, practical exercises. The programme will also include unseen written examinations where this is deemed to be the most appropriate method of assessing the knowledge and understanding of students in a particular subject area. The examination formats will contain multiple choice (level 4 only), short answer and extended essay-based questions. Individual feedback will be given on all summative assessments.

Subject Specific Intellectual and Research Skills

Having successfully completed this programme you will be able to:

- B1 recognise and use subject-specific theories, paradigms, concepts and principles
- B2 analyse, synthesise and summarise information critically, including prior research
- B3 collect and integrate several lines of evidence to formulate and test hypotheses
- B4 apply knowledge and understanding to complex and multidimensional problems in familiar and unfamiliar contexts
- B5 recognise the moral and ethical issues of investigations and appreciating the need for professional codes of conduct.
- B6 demonstrate the interrelationship between the economy, society and environment in the context of sustainability
- B7 explore the economic, social and environmental consequences of political, professional and business decision making

Teaching and Learning Methods

Subject specific intellectual and research skills require more focused and detailed teaching methods. Discussion seminars and supervision sessions provide a forum in which students can discuss and evaluate key environmental science and management issues, solutions and consequences of decisions in smaller open environments and in greater depth.

Subject specific learning in some modules involves student presentations in formative and assessed conference environments. The research, production and delivery of a presentation is an excellent learning tool for students and requires exploration of knowledge that goes deeper and beyond traditional lectures. Students develop a more sophisticated understanding of a subject area through the process of having to explain concepts and data analysis to an audience, whilst the requirement to rapidly compose balanced and well-informed answers to probing questions leads to even greater understanding at a subject specific level. Scientific and management research skills will be developed through practical laboratory, computer and field sessions where appropriate, supported by lectures and workshops. Intellectual skills will be developed through lectures, seminars, tutorials, workshops, discussion groups (both face-to-face and online).

An important component of subject specific learning is self-study. All modules contain reading lists and staff work with students to guide them to appropriate sources in addition to the materials uncovered by students themselves. Many modules contain comprehensive learning and guided self-study resources that are available on edshare, module websites, and/or blackboard. Independent reading will develop both intellectual skills (through reading of a wide range of relevant sources linked to formal module material and general environmental issues) and subject specific research skills. These skills will be developed in the early phases of the programme via formative assignments and group work. In the latter phases of the programme

students will have the opportunity to apply their skills in individual research and management work through the final year research project.

Assessment methods

Assessment of subject specific intellectual and research skills is also approached through a combination of formative assessments to provide ongoing feedback to develop subject-specific knowledge and understanding, and summative assessments where constructive feedback and quantified marks are provided in accordance with university progression and graduation requirements.

Greater use is made of formative assessments through subject-specific feedback from class exercises, discussions, seminars, and project progress presentations. The summative assessment remains important in monitoring the level of understanding of subject-specific material and leads to the award of marks for work for progression and graduation purposes. This is again applied through a combination of coursework (e.g. journal papers, practical reports, data analysis, presentations) and unseen written examinations.

Transferable and Generic Skills

Having successfully completed this programme you will be able to:

- C1 receiving and responding to a variety of information sources (eg textual, numerical, verbal, graphical)
- C2 communicating appropriately to a variety of audiences in written, verbal and graphical forms
- C3 appreciating issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and laboratory
- C4 preparing, processing, interpreting and presenting data, using appropriate qualitative and quantitative techniques and packages including geographic information systems
- C5 solving numerical problems using computer and non-computer-based techniques
- C6 using the internet critically 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
- C9 evaluating performance as an individual and a team member
- C10 developing the skills necessary for self-managed and lifelong learning (eg working independently, time management and organisation skills)
- C11 identifying and working towards targets for personal, academic and career development
- C12 developing an adaptable and flexible approach to study and work
- C13 delivering presentations in a formal professional setting, under replicated industrial conditions
- D1 planning, conducting, and reporting on environmental investigations, including the use of secondary data
- D2 collecting, recording and analysing data using appropriate techniques in the field and laboratory
- D3 undertaking 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 referencing work in an appropriate manner

Teaching and Learning Methods

Generic higher education level skills are embedded throughout the constituent modules of the degree programme. Written communication skills are enhanced through lectures, seminars, tutorials, workshops, and discussion groups (online). Verbal communication skills are developed through discussion groups (face-to-face), seminars, group work, formative presentations. Information Technology skills are addressed through module coursework in terms of report production, data analysis, and module specific IT skills. Interpersonal communication and teamwork skills are addressed through the group presentations, reports, and consultancy projects.

Assessment methods

Assessment of transferable and generic skills is addressed through formative assessments to provide ongoing feedback to help guide the development of your 'softer skills' that are of increasing importance in the professional world. This will take place through in-class group exercises, discussions, seminars, and project progress presentations.

Written communication skills are assessed through reports, journal papers, essays, and unseen written examinations. Verbal communication skills are assessed through discussions, seminars, group work, and summative presentations. Information Technology skills are assessed through module coursework in terms of report production, data analysis, and module specific tasks. Interpersonal communication and teamwork skills are assessed through group presentations, reports, and consultancy projects

Overall assessment of transferable and generic skills is addressed through summative assessments via a combination of coursework (e.g. assessed presentations, journal papers, practical reports, data analysis), unseen written examinations, and the final year independent research project.

Programme Structure

Typical course content

In Part I the students will complete modules that address core environmental science processes, field research and quantitative methods, along with an introduction to management. Core environmental science knowledge and understanding will be covered with modules on the earth's physical, biological and chemical systems and cycles. Students will be introduced to relevant field, laboratory and analytical methods and tools in the context of environmental science research. Visits to local study sites will give the opportunity to practice these skills in the field, whilst the residential field-trip will include a student-led group research project where all the knowledge, research and field skills are put into practice.

Part II will have half the provision as core modules to ensure critical understanding of the environmental impacts from business and industry, legislation, and the development of project management skills. The four optional modules will allow students to blend two selected environmental science modules and two management modules to create a portfolio of skills that reflect their interests and career aspirations.

Semester one of Part III will involve a core practical module on consultancy delivered in partnership with a range of contributors from environmental consultancies and other organisations. Optional modules will allow students to advance their understanding of environmental science and management, and to focus on their area of expertise. The optional residential fieldtrip module will provide the opportunity to learn more advanced field-techniques and to carry out a group research project. The final semester of the programme in Part III is spent on placement where the students will complete a practical independent research project in partnership with the placement organisation. Students will have the opportunity to continue working with the organisation (subject to satisfactory outcomes) upon completion of the course.

Special Features of the programme

The programme includes one compulsory and optional residential field-trip, along with numerous field and industry site visits. The Part III 'Sustainability Professional' module (ENVS3017) will be run in partnership with a range of contributors from environmental and sustainability consultancies and other organisations to deliver an innovative approach to learning, teaching and assessment. The final semester of the programme in Part III is spent on placement where the students will complete a practical independent research project in partnership with the placement organisation. Students will have the opportunity to continue working with the organisation (subject to satisfactory outcomes) upon completion of the course.

Programme details

The full list of core, compulsory and optional modules available to environmental science students is laid out in **Appendix 1**. Students are able to tailor their degree via optional modules in Parts II and III

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 <u>Progression, Determination and</u> <u>Classification of Results: Undergraduate and Integrated Masters Programmes</u> as set out in the University Calendar http://www.calendar.soton.ac.uk/sectionIV/progression-regs.html

Faculty regulations specific to this degree as set out in the University Calendar http://www.calendar.soton.ac.uk/sectionVIII/fee-uq.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 pointscredits	Minimum ECTS/CATS points Credits required at level of award
Bachelor of Science	At least 150/300	30/60
Diploma of Higher Education	at least 120/240	45/90
Certificate of HE	at least 60/120	45/90

Programme outcomes for different exit points

Level 4 (Part I)	You will have a sound knowledge of some of the basic concepts in, and principles associated with, the study of Environmental Science and business management. You will have learned how to take different approaches to solving problems. You will be able to communicate accurately, and will have the qualities needed for employment requiring the exercise of some personal responsibility.
Level 5 (Part II)	You will have developed a sound understanding of the principles involved in a range of core Environmental Science and business management subjects, and will have learned to apply those principles more widely. Through this, you will have learned to evaluate the appropriateness of different approaches to solving problems. You will be able to demonstrate knowledge and critical understanding of the well-established principles of the study of Environmental Science and business management, and of the way in which those principles have developed You will have the qualities necessary for employment in situations requiring the exercise of personal responsibility and decision-making.
Level 6 (Part III)	You will have developed an understanding of a complex body of knowledge relevant to Environmental Science and business management, some of it at the forefront of current developments. Through this, you will have developed analytical techniques and problem-solving skills that can be applied to a range of environmental and business problems, and learned to communicate these effectively. You will have a systematic understanding of key aspects of the study of Environmental Science and business management, including a coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of the discipline of Environmental Science. As an Honours graduate you will be able to evaluate evidence, arguments and assumptions, and to reach sound judgements. You should have the qualities needed for employment in situations requiring the exercise of personal responsibility, and decision-making in complex and unpredictable circumstances.

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 extracurricular 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.

Associated with your programme 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.
- Membership of the professional accreditation body
- Professional and learning resources provided by the accreditation body
- Membership of the Environmental Sciences Student Society (ESSS)

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
- External professional examiner who will assess the placement programme
- Professional body accreditation/inspection
- A national Research Assessment Exercise (our research activity contributes directly to the quality of your learning experience)
- Institutional Review by the Quality Assurance Agency

Criteria for admission

The University's Admissions Policy www.southampton.ac.uk/admissions_policy applies equally to all programmes of study. The following are the typical entry criteria to be used for selecting candidates for admission. The University's approved equivalencies for the requirements listed below will also be acceptable. The entry criteria for our programmes are reviewed annually by the Faculty. Those stated below were correct as of July 2017. Applicants should refer to their specific offer conditions on their offer letter.

Undergraduate programmes

Qualification	Grades	Subjects required	Subjects not accepted	EPQ Alternative offer (if applicable)	Contextual Alternative offer (if applicable)
GCE A level	ABB (including 1 science subjects)	Geography, Biology, Chemistry, Physics, Mathematics, Psychology, Geology and Environmental Studies	General Studies Critical Thinking Use of Maths Thinking Skills	One A level grade (or equivalent) lower combined with EPQ at grade B or higher.	BBB
BTEC	DDD including relevant science modules	Science Modules and Mathematics	Na	Na	DDM including relevant science modules
International Baccalaureate	32 Points overall, 16 at Higher Level including 5 in a Higher Level Science subject	Higher Level Science Subjects	Na	Na	30 Points overall, 16 at Higher Level including 5 in a Higher Level Science subject
GCSE	С	English			
	С	Mathematics			

Mature applicants

Mature applicants are considered on an individual basis. Depending upon the date of academic qualification achieved applicants may be offered the Science Foundation Year.

Recognition of Prior Learning (RPL)

The University has a <u>Recognition of Prior Learning Policy</u>. Entry to Part II only is acceptable upon completion of a comparative Part I and / or Part II at another institution. Each case is assessed on an individual assessment based on copies of transcripts and Learning outcomes.

English Language Proficiency

As per the University's Admissions policy on English Language requirements, found here, www.southampton.ac.uk/admissions-language the requirements for this programme are: International English Language Testing System (IELTS) – Band C

Overall	Reading	Writing	Speaking	Listening
6.5	5.5	5.5	5.5	5.5

University Commitment

The University will at all times seek to operate admissions regulations that are fair and are in accordance with the law of the United Kingdom, and the University's Charter, Statutes, Ordinances and Regulations.

This includes specific compliance with legislation relating to discrimination (e.g. Equality Act 2010) and the University's Equal Opportunities Policy Statement. This includes a commitment that the University will:

- actively assist groups that experience disadvantage in education and employment to benefit from belonging to the University
- actively seek to widen participation to enable students that do not traditionally participate in Higher Education to do so;
- ensure that admission procedures select students fairly and appropriately according to their academic ability and that the procedure is monitored and regularly reviewed.

Entry Requirements

A typical offer for entry to our BSc and MEnvSci degrees may be found on the University website at

https://www.southampton.ac.uk/engineering/undergraduate/courses/environmental_sciences_list.page?

Equivalent Qualifications

We are happy to receive other UK and international applications from candidates with alternative qualifications, which are assessed on individual merit.

Applications from mature candidates and candidates resident in other European countries and overseas are welcome and will be considered on an individual basis. If you are unsure about our entry criteria, please contact our admissions staff who would be happy to provide advice in advance of your application.

International Applications

If your first language is not English, we need to ensure that your listening, written and spoken English skills would enable you to enjoy the full benefit of your studies. For entry onto our programmes, you will need an International English Language Testing System (IELTS) score of 6.5 or an equivalent qualification.

Equality and diversity:

In accordance with the University's Equality and Diversity Policy, all reasonable effort will be made to ensure that no prospective or existing student is treated less favourably on the grounds of age, race, colour, nationality, ethnic origin, creed, disability, HIV status, sexual orientation, gender, marital or parental/carer status, political belief or social or economic class, or any other type of discrimination.

Disabled applicants will be treated according to the same procedures as any other applicant with the added involvement of Enabling Services to assess their needs. The programme may require adaptation for students with disabilities (e.g. hearing impairment, visual impairment, mobility difficulties, dyslexia), particularly the practical laboratory sessions, and we will attempt to accommodate students wherever possible.

Career Opportunities

This exciting new programme will focus on combining the critical skills of an environmental scientist, with the business skills of a management specialist, to create highly employable graduates able to pursue rewarding careers in the growing field of environmental management and consultancy.

Students will gain a detailed understanding of the core areas of environmental science throughout the three years of study. This expertise will be combined with the development of business management skills through the study of appropriate management modules that will enable the graduates to have the full suite of theoretical and practical skills necessary to become an environmental professional.

Potential career routes include specialising in environmental management, sustainability, carbon management, water management, biodiversity, waste management. These career routes might be fulfilled 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 Karen Anderson Institution. 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 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 (or other appropriate guide) or online at (http://www.southampton.ac.uk/studentservices/academic-life/faculty-handbooks.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. Proofing of new template, R Stanton, June 2014
- 7. Update to Programme Overview (CMA Changes) September 2015
- 8. CQA textual updates August 2016, August 2017

BSc Environmental Management with Business 2017/18

Appendix 1:

Programme Structure

The information within this Appendix is liable to change in minor ways from year to year. It is accurate at the time of writing.

Core = must be taken and must be passed at 40% or higher. Compulsory (Comp) = must be taken and must be passed at the University pass mark or higher.

Part I Core/Compulsory Modules

Module Code	Module Name	Credit Points	Choice	Semester	Level
		(ECTS/CATS)	Type		
BIOL1003	Ecology and Evolution	7.5/15	Comp	2	4
ENVS1004	Environment Science: Concepts and Communication	7.5/15	Core	1 & 2	4
ENVS1005	Quantitative Methods	7.5/15	Core	1	4
ENVS1006	Environmental Science: Research & Applications	7.5/15	Core	1 & 2	4
ENVS1007	Environmental Field Technology & Applications	7.5/15	Core	2	4
GEOG1002	Dynamic Landscapes	7.5/15	0	1	4
MANG1003	Introduction to Management	7.5/15	0	1	4
SOES1008	Earth and Ocean System	7.5/15	0	1	4

Part II Core/Compulsory Modules

Module	Module Name	Credit Points	Choice	Semester	Level
Code		(ECTS/CATS)	Type		
ENVS2006	Environmental Impact Assessment	7.5/15	Core	2	5
ENVS2007	Environmental Pollution	7.5/15	Core	1	5
ENVS3013	Environmental Law & Management	7.5/15	Core	2	6
MANG3034	Project Management	7.5/15	Comp	2	6

Part II Optional Modules

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL2004	Pure and Applied Population Ecology	7.5/15	0	1	5
ENVS2003	Freshwater Ecosystems	7.5/15	0	1	5
ENVS2008	GIS for Environmental Scientists	7.5/15	0	2	5
ENVS2014	Environment and Sustainability	7.5/15	0	1	5
ENVS3011	Environmental Field Studies	7.5/15	0	1	6
GEOG2007	Remote Sensing for Earth Observation	7.5/15	0	1	5
GEOG2032	Global Climate Change: Science, Impacts and Policy	7.5/15	0	2	5
PHYS2015	Introduction to Energy in the Environment	7.5/15	0	2	5
ENTR2001	Entrepreneurial Management	7.5/15	0	1	5
ENTR2004	Innovation, Technology and the Environment	7.5/15	0	2	5
MANG2001	Organization & Management	7.5/15	0	1	5
MANG2014	Accounting & Finance for Non- Specialists	7.5/15	0	2	5
MANG2041	Management Ethics	7.5/15	0	1	5
UOSM2008	Living and Working on the Web	7.5/15	0	2	5
UOSM2022	Social Enterprise	7.5/15	0	1	5

Part III Core/Compulsory Modules

Module	Module Name	Credit Points	Choice	Semester	Level
Code		(ECTS/CATS)	Type		
ENVS3017	Sustainability Professional	7.5/15	Core	1	6
ENVS3018	Environmental Management	30/60	Core	1 & 2	6
	Research project				

Part III Optional Modules

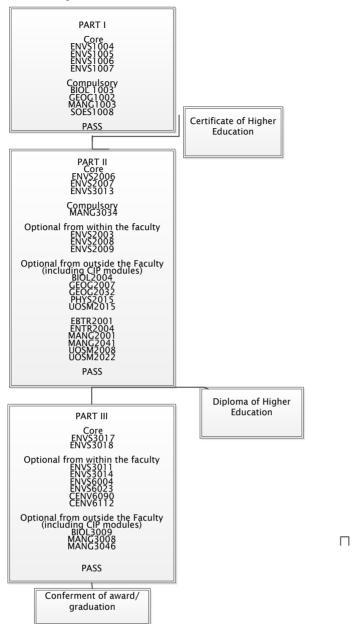
Note that a maximum of 15 ECTS/30 CATS of optional modules at level 7 are permitted

Module Code	Module Name	Credit Points (ECTS/CATS)	Choice Type	Semester	Level
BIOL3009	Applied Ecology	7.5/15	0	1	6
ENVS3011	Environmental Field Studies	7.5/15	0	1	6
ENVS3014	Sustainable Resource Management	7.5/15	0	1	6
		7.5/15			
MANG3008	Strategic Management	7.5/15	0	1	6
MANG3046	Managing Innovation	7.5/15	0	1	6
	Maximum of 15 ECTS/30 CATS from:	7.5/15			
CENV6088	Transportation Planning: Policies and Methods	7.5/15	0	1	7
CENV6090	Energy Resources and Engineering	7.5/15	0	1	7
CENV6112	Transport, Energy and the Environment	7.5/15	0	2	7
ENVS6023	Air Quality & Environmental Pollution	7.5/15	0	1	7

Learning outcomes and Assessment Mapping document template

		Knov	wledg	e and	Under	stand	ing				Sub	ject-sp	ecific	Intell	ectual	Skills		Trar	nsfera	ble/G	eneric	Skills										ject-sp ctical S		
Module code	Module title	A1	A2	А3	A4	A5	A6	А7	A8	А9	B1	В2	В3	В4	В5	В6	В7	C1	C2	С3	C4	C5	C6	С7	С8	С9	C 10	C 11	C 12	C 13	D1	D2	D3	D4
ENVS 1004	ES concepts and communication	х	х	х	х	х	х	х	х		x	x		х				х	x				х	х	х	х	x	х	х					х
ENVS 1005	Quantitative Methods	х	х	х	х			х	х		х	х	х	х				х		х	х	х					х				х	х		
ENVS 1006	ES Research & Applications	х	х	х	х	х	х	х			х	х	х	х	х			х	х	х	х	х	х				x				х	х	х	х
ENVS 1007	Env Field Tech & Applics	х	х	х	х	х	х	х	х		х	х	х	x	х			x	х	x	x	х	x	x	х	x	х	х	х		x	х	х	х
ENVS 2006	Env Impact Assessment	х	х	х	х	х	х	х	х		х	х		x				x	х	x			х	x	х	x	х	х	х		х		х	х
ENVS 2007	Environmental Pollution	х	х	х	х		х	х			х	х	х	х	х			х	х	х	х	х	х	х	х	х	х	х	х		х			х
ENVS 3013	Env Law & Management	х		x		х	х	х	х		x	х		x	х			х	x				х	x	х	х	х	х	х		x			х
ENVS 3017	Sustainability Professional	х		х		х	х	х	х		х	х		х	х	х	х	х	х	х	х	x	х	х	х	х	х	х	х	х	х	х	х	х
ENVS 3018	Env Manage Res Project	х	х	x	х	х	х	х	х	х	х	х	х	х	х		х	х	х	х	х	х	х	х	х	х	x	х	х	х	х	х	х	х

Module Code	Module Title	Coursework 1	Coursework 2	Coursework 3	Coursework 4	Coursework 5	Exam
ENVS1004	Environmental Science Concepts and Communication	Essay 50%					Unseen 1 hour 50%
ENVS1005	Quantitative Methods	Practical test 2 hours 50%	Practical test 2 hours 50%				
ENVS1006	Environmental Science: Research and Applications	Practical report 35%	Fieldwork proposal 25%				Multiple choice exam 40%
ENVS1007	Environmental field techniques and applications	Practical report 80%	Group presentation 20%				
ENVS2006	Environmental impact assessment	Scoping report 40%	Press release 10%				Unseen 2 hours 50%
ENVS2007	Environmental Pollution	Data analysis report 30%					Two unseen exams, 1.5 hours 35% each
ENVS3013	Environmental Law and Management	Group presentation of environmental management statement (20% of module)	Individual submission of environmental policy statement (20% of module)				2 hour unseen written examination: Part A short answer questions; Part B essay (from a choice of titles)
ENVS3017	The Sustainability Professional	Sustainability Consultancy Report. Individual submission (50% of module)	Sustainability Portfolio. Individual submission (50% of module)				
ENVS3018	Environmental Management Research Project	Project Development Report (10% of module)	Project Presentation and Oral Examination (5% of module)	Final Project Report (60% of module)	Professional Development Portfolio (20% of module)	PDP Presentation and Oral Examination (5% of module)	



Appendix 2:

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.
Textbooks		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	Design equipment and materials:	Standard construction/modelling materials will be provided where appropriate, unless otherwise specified in a module profile.
Materials		For customisation of designs/models calling for material other than standard construction/ modelling materials, students will bear the costs of such alternatives.

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
Clothing	Lab Coats	
	Protective Clothing:	
	Hard hat; safety boots; hiviz 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.
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:	Accommodation:	
logistical costs	Insurance	
	Travel costs	
	Immunisation/vaccination costs	
	Other:	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?
		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?

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
		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 environmenal field techniques and applications.page?#overview
		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 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?
		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? 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? 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?

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
Optional		Some modules may include additional optional visits. You will normally be expected to cover the cost of travel and admission, unless otherwise specified
Visits (e.g.		in the module profile.
museums,		
galleries)		
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