

Programme Specification

Environmental Geoscience (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	3
Accreditation details	None
Final award	Bachelor of Science with Honours (BSc (Hons))
Name of Award	Environmental Geoscience Geoscience Marine
Interim Exit awards	Bachelor of Science (Ordinary) Certificate of Higher Education (CertHE) Diploma of Higher Education (DipHE)
FHEQ level of final award	Level 6
UCAS code	F650
Programme Code	8458
QAA Subject Benchmark or other external reference	Earth sciences, environmental sciences and environmental studies (2019)
Programme Lead	Stephen Roberts
Pathway Lead	Stephen Roberts

Programme Overview

Brief outline of the programme

Our Environmental Geoscience programmes bring together the University of Southampton's teaching and internationally-leading research in Earth, Marine and Environmental Science to assess the processes, management and sustainability of the global Earth System.

Using the evolving Earth and its sustainable management as its focus, students on this multidisciplinary programme will explore a range of topics on the interaction between the Earth System and human activity, and develop practical field and laboratory skills for employment in environmental consultancy, resource management, and the wider geoscience, energy and marine sectors. Students will study diverse topics including environmental and engineering geology, remote sensing, environmental law and management, Earth resources and their management, terrestrial and marine pollution, natural hazards, ocean processes and carbon cycling.

Ocean and Earth Science is housed in the prestigious National Oceanography Centre Southampton (NOCS), which opened in 1995 housing the University of Southampton department and part of the Natural Environment Research Council (NERC)'s National Oceanography Centre. NOCS is one of the world's largest centres devoted to research, teaching and technology development in ocean and Earth science.

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

Learning and teaching

You will develop core knowledge and understanding of subject-specific and transferable key skills via compulsory modules and specialised option module lectures. You will study both the fundamental science underpinning our understanding of the global Earth system, and practical skills related to data collection, interpretation, and environmental management. Teaching and learning through the degree programme will be supported by tutor- and student-led tutorials, seminars and presentations, essays and report writing. You will be trained to make use of peer-reviewed internet sources to support guided independent study, group study and your own research.

Experimental, research, experimental design, data processing and interpretive/analytical skills are further developed through laboratory and practical classes and fieldwork (including boatwork).

Assessment

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

Special Features of the programme

This programme brings together an innovative combination of topics and practical learning and skills from geology, geography, oceanography and environmental science to assess human – environment interactions, and the processes, management and sustainability of the global Earth System, from crust to land to sea. Students may choose to specialise in more terrestrially / geoscience-focused modules (Geoscience Pathway) or in more marine science-focused modules (Marine Pathway) in the later parts of the programme.

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

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

Educational Aims of the Programme

The spectrum of programmes within ocean and Earth science offered by the School are all scientifically exciting and challenging, as well as highly relevant to the modern world. This three-year Bachelors programme explores the processes, management and sustainability of the global Earth System.

Ocean and Earth Science (OES) is strongly committed to providing the very best learning experience to all our students in a friendly and stimulating environment. We are known nationally and internationally for our excellence in teaching, and are continually improving the scope and delivery of our activities.

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

The specific aims of the programmes are to:

- Provide you with a coherent programme of study which will offer you an extensive and in-depth knowledge and understanding of aspects of Environmental Geoscience, and how it interrelates with the entire spectrum of Earth, Marine and Environmental Science. Through flexibility of choice, the programme will allow you to develop some degree of specialisation within your field of choice.
- Provide you with a high quality and intellectually stimulating experience of learning in a supportive environment.
- Equip you to undertake a successful career as a professional environmental geoscientist in the public or private arena, or in a wide range of other contexts.
- Provide you with a sound background and suitable qualification that would enable you to proceed to a more specialist higher degree at the MSc or PhD level.

- Develop your critical and analytical problem-solving powers, especially in relation to the environmental geosciences, but also those which have a broader application.
- Develop your intellectual, practical and fieldwork skills in the collection, analysis, interpretation and understanding of Earth, Marine and Environmental Science data.
- Develop your powers of observation, analysis and understanding in order that you can make decisions with appropriate acknowledgement of uncertainties.
- Enhance your interpersonal skills, particularly in the context of the work place.
- Provide you with opportunities for shared multi-disciplinary learning in the environmental geosciences.
- Enable you to engage with life-long learning, study and enquiry, and to appreciate the value of education and research to society.
- Give you the experience of undertaking an original project at the forefront of Environmental Geoscience in a professional research environment.

Programme Learning Outcomes

Knowledge and Understanding

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

- A1. The need for both a multidisciplinary and an interdisciplinary approach in advancing knowledge and understanding of Earth and marine systems, drawing, as appropriate, from the natural sciences.
- A2. The processes which shape the natural world at different temporal and spatial scales, and their influence on and conversely their modification by, human activities.
- A3. The terminology, nomenclature and classification systems used and developed within the disciplines of environmental geoscience.
- A4. Methods of acquiring, interpreting and analysing all relevant forms of scientific information with a critical understanding of the appropriate contexts for their use.
- A5. Issues concerning the availability and sustainability of resources, for example, the different value sets relating to the Earth's resources as commodities and/or heritage.
- A6. The contribution of Earth and marine scientific expertise to debates on environmental issues and how knowledge of these forms the basis for informed concern about the Earth and its people.
- A7. The contribution of your subject to the development of knowledge about the world we live in.
- A8. The relevance of knowledge and skills acquired on your programme of study to professional activity, environmental impact and the world of work.
- A9. The relationship between physical and human processes in shaping terrestrial and marine environments.
- A10. Past, present and future variability in terrestrial and marine environments.
- A11. The use of concepts of space and spatial variation in scientific analysis of the environment.

Subject Specific Intellectual and Research Skills

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

- B1. Take a holistic view of the present and past interactions between components of the Earth system.
- B2. Appreciate the cycling of matter and the flows of energy into, between and within the solid Earth, the Earth's surface, the hydrosphere, the atmosphere and the biosphere.
- B3. Investigate the biological, chemical and physical processes that underpin our understanding of the structure, materials and processes relevant to the Earth.
- B4. Appreciate the central paradigms in the Earth sciences: uniformitarianism (the present is the key to the past); the extent of geological time; evolution (the history of life on Earth); and plate tectonics.
- B5. Appreciate geological time, including the principles of stratigraphy, the stratigraphic column, the methods of geochronology, the rates of Earth processes, major events in Earth history, the evolution of life as revealed by the fossil record, the quaternary and anthropocene.
- B6. Collect and analyse Earth science data in the field, and subsurface, the appropriate presentation, manipulation and extrapolation of these sometimes incomplete data in both two and three-dimensions, including the generation of geological maps and cross sections.
- B7. Appreciate the study of structures, materials and processes that includes an appreciation of temporal and spatial variations at appropriate scales.
- B8. Appreciate the study of the structure, the composition and the materials of the solid Earth (core, mantle, crust, asthenosphere, lithosphere and so on), the hydrosphere, the atmosphere, the cryosphere and the biosphere, and the processes operating within and between them.

- B9. Understand Earth science terminology, nomenclature and classification of rocks, minerals, fossils, and geological structures.
- B10. Appreciate the identification of rocks, minerals, fossils, and geological structures.
- B11. Understand surveying and measurement both in the field and laboratory, using quantitative and instrumental techniques.
- B12. Show an awareness that the understanding and knowledge gained from the subject and its application has to be considered within a wider socio-economic and environmental context.
- B13. Appreciate the scientific study of physical, chemical, biological and anthropogenic processes operating on the ecosystems.
- B14. Understand major environmental processes on scales from global to organismal, and where appropriate, to the molecular and atomic levels of organisation.
- B15. Understand the importance of timescale, from geological to the short term, on the impacts of natural and human-induced activities on the ecosystem.
- B16. Understand the spatial scale, from global to local, of human impacts on the environment and responses to environmental change.
- B17. Appreciate the nature, organisation, complexity, sustainability and interconnections of humans and the ecosystems.
- B18. Appreciate a scientific and interdisciplinary approach to identifying, understanding and managing the Earth's processes and the ecosystem.
- B19. Understand the principles of energy consumption, resource extraction and waste disposal arising from the fulfilment of human needs.
- B20. Appreciate the monitoring, modelling and management of natural and human-induced environmental changes and behaviour.
- B21. Appreciate the principles of sustainability and the use of sustainable approaches to manage the natural cycles.
- B22. Understand key concepts of environmental instruments, for example, environmental impact assessment, management and policy; risk-based management; environmental engineering approach; sustainability and sustainable development; and precautionary principles.
- B23. Appreciate the role of institutions, organisations and other stakeholders in managing and regulating the human impact on the environment.
- B24. Appreciate the role of environmental and sustainability professions in contributing to policy and practice, influencing behaviour and delivering positive change to environmental performance.
- B25. Understand the risks presented by a changing environment.
- B26. Demonstrate the use of scientific and technological information and tools to inform decision-making processes and environmental management.
- B27. Take a holistic approach to resolve a broad spectrum of environmental issues and enhance environmental performance.
- B28. Appreciate the options for remediation of environmental impacts available to human society.

Transferable and Generic Skills

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

- C1. Intellectual Skills
Recognise and use Environmental Geoscience theories, paradigms, concepts and principles.
- C2. Intellectual Skills
Critically analyse, synthesise and summarise information, including published research.
- C3. Intellectual Skills
Collect and integrate several lines of evidence to formulate and test hypotheses.
- C4. Intellectual Skills
Apply knowledge and understanding to address familiar and unfamiliar problems, including collection and documentation of geological, oceanographic, geographical and environmental science information in the field, experimental design of field surveys and sampling programmes
- C5. Intellectual Skills
Recognise the moral and ethical issues of scientific investigations and appreciate the need for professional codes of conduct.
- C6. Practical Skills
Plan, design, conduct and report, both verbally and in writing, on investigations, including the use of secondary data.
- C7. Practical Skills
Collect, record and analyse primary data using appropriate techniques in the field and laboratory.

- C8. Practical Skills
Undertake field and laboratory investigations in a responsible and safe manner, paying due attention to risk assessment, rights of access, relevant health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders.
- C9. Practical Skills
Locate, retrieve, read, use and reference the work of others in an appropriate manner.
- C10. Practical Skills
Plan and execute an investigative Environmental Geoscience research project.
- C11. Communication Skills
Communicate effectively to a variety of audiences in written, verbal and graphical forms.
- C12. Communication Skills
Select and use the appropriate method and means of communication for a range of different situation.
- C13. Communication Skills
Absorb and respond to a variety of information sources (e.g., textual, numerical, verbal, graphical).
- C14. Communication Skills
Write a research proposal.
- C15. Numeracy and IT Skills
Appreciate issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and in the laboratory.
- C16. Numeracy and IT Skills
Prepare, process, interpret and present data, using appropriate qualitative and quantitative techniques, univariate and multivariate statistical analyses and computer software packages, including geographic information systems.
- C17. Numeracy and IT Skills
Develop computing and data analysis skills in a wide range of techniques.
- C18. Numeracy and IT Skills
Solve numerical problems.
- C19. Numeracy and IT Skills
Critically use the Internet as a means of communication and as a source of information.
- C20. Interpersonal/Teamwork Skills
Identify individual and collective goals and responsibilities and perform in an appropriate manner.
- C21. Interpersonal/Teamwork Skills
Appreciate the concepts of experimental learning in groups and team performance.
- C22. Interpersonal/Teamwork Skills
Recognise and respect the views and opinions of other team members.
- C23. Interpersonal/Teamwork Skills
Evaluate performance as an individual and as a team member.
- C24. Self-Management and Professional Development Skills
Develop the skills necessary for self-managed and life-long learning (e.g. working independently, time management and organisation skills).
- C25. Self-Management and Professional Development Skills
Identify and work toward targets for personal, academic and career development.
- C26. Self-Management and Professional Development Skills
Develop an adaptable and flexible approach to study and work.

Programme Structure

The programme structure table is below:

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

Geoscience Pathway

Part I

All modules are compulsory in part 1 and must be taken, in order to give a broad grounding in key geoscience, oceanographic and environmental science theories, concepts and techniques.

Code	Module Title	ECTS	Type
SOES1002	Dynamic Earth 2020-21	7.5	Compulsory
GEOG1002	Dynamic Landscapes 2020-21	7.5	Compulsory
SOES1001	Earth Materials 2020-21	7.5	Compulsory
ENVS1006	Environmental Science: Research and Applications 2020-21	7.5	Compulsory
SOES1014	Key Skills for Geoscientists 2020-21	7.5	Compulsory
SOES1004	Physics of the Ocean 2020-21	7.5	Compulsory
SOES1010	Quantitative Earth and Ocean Sciences 2020-21	7.5	Compulsory
GEOG1001	The Earth System2020-21	7.5	Compulsory

Part II

The following six modules in Part 2 are compulsory and must be taken.

Code	Module Title	ECTS	Type
ENVS2006	Environmental Impact Assessment 2021-22	7.5	Compulsory
SOES2018	Geochemistry 2021-22	7.5	Compulsory
SOES2003	Geohazards and Earth Resources 2021-22	7.5	Compulsory
GEOG2032	Global Climate Change: Science, Impacts and Policy 2021-22	7.5	Compulsory
GEOG2010	Introductory Geographic Information Systems 2021-22	7.5	Compulsory
SOES2034	Key Skills and Fieldwork for Geologists 2021-22	7.5	Compulsory

Part II Optional

Two optional modules from the following list.

Code	Module Title	ECTS	Type
SOES2024	Coastal Ocean Processes 2021-22	7.5	Optional
ENVS2007	Environmental Pollution 2021-22	7.5	Optional
SOES2038	Exploration Geophysics and Remote Sensing 2021-22	7.5	Optional
GEOG2037	Global Water Resources 2021-22	7.5	Optional
SOES2004	Igneous and Metamorphic Petrology 2021-22	7.5	Optional
GEOG2007	Remote Sensing for Earth Observation 2021-22	7.5	Optional
SOES2013	Sedimentary Systems and Processes 2021-22	7.5	Optional

Part III

The following modules are compulsory and must be taken.

Code	Module Title	ECTS	Type
SOES3008	Environmental and Engineering Geology 2022-23	7.5	Compulsory
ENVS3013	Environmental Law and Management 2022-23	7.5	Compulsory
SOES3046	Independent Research Project (Oceanography, Marine Biology) 2022-23	15	Compulsory

Part III Fieldwork

The following compulsory fieldwork module.

Code	Module Title	ECTS	Type
SOES3021	Geophysical Field Methods 2022-23	7.5	Compulsory

Part III Optional

Three modules must be chosen from the following.

Code	Module Title	ECTS	Type
GEOG3057	Adapting to Climate Change and Weather Hazards 2022-23	7.5	Optional
ENVS3020	Air Quality and Environmental Pollution 2022-23	7.5	Optional
SOES3041	Communicating and Teaching in the Undergraduate Ambassadors Scheme 2022-23	7.5	Optional
SOES3015	Palaeoclimate Change 2022-23	7.5	Optional
SOES3002	Petroleum Geology and Mineral Resources 2022-23	7.5	Optional
ENVS3014	Sustainable Resource Management 2022-23	7.5	Optional
SOES3020	Volcanic and Mantle Processes 2022-23	7.5	Optional

Marine Pathway

Part I

All modules are compulsory in part 1 and must be taken, in order to give a broad grounding in key geoscience, oceanographic and environmental science theories, concepts and techniques.

Code	Module Title	ECTS	Type
SOES1002	Dynamic Earth 2020-21	7.5	Compulsory
GEOG1002	Dynamic Landscapes 2020-21	7.5	Compulsory
SOES1001	Earth Materials 2020-21	7.5	Compulsory
ENVS1006	Environmental Science: Research and Applications 2020-21	7.5	Compulsory
SOES1014	Key Skills for Geoscientists 2020-21	7.5	Compulsory
SOES1004	Physics of the Ocean 2020-21	7.5	Compulsory
SOES1010	Quantitative Earth and Ocean Sciences 2020-21	7.5	Compulsory
GEOG1001	The Earth System 2020-21	7.5	Compulsory

Part II

The following six modules in Part 2 are compulsory and must be taken.

Code	Module Title	ECTS	Type
ENVS2006	Environmental Impact Assessment 2021-22	7.5	Compulsory
SOES2018	Geochemistry 2021-22	7.5	Compulsory
SOES2003	Geohazards and Earth Resources 2021-22	7.5	Compulsory
GEOG2032	Global Climate Change: Science, Impacts and Policy 2021-22	7.5	Compulsory
GEOG2010	Introductory Geographic Information Systems 2021-22	7.5	Compulsory
SOES2034	Key Skills and Fieldwork for Geologists 2021-22	7.5	Compulsory

Part II Optional

Two optional modules from the following list.

Code	Module Title	ECTS	Type
SOES2024	Coastal Ocean Processes 2021-22	7.5	Optional
ENVS2014	Environment and Sustainability 2021-22	7.5	Optional
ENVS2007	Environmental Pollution 2021-22	7.5	Optional
GEOG2032	Global Climate Change: Science, Impacts and Policy 2021-22	7.5	Optional
GEOG2037	Global Water Resources 2021-22	7.5	Optional
SOES2025	Methods in Oceanography 2021-22	7.5	Optional
SOES2027	Monitoring Coastal and Estuarine Environments 2021-22	7.5	Optional

Part III

The following modules are compulsory and must be taken.

Code	Module Title	ECTS	Type
SOES3008	Environmental and Engineering Geology 2022-23	7.5	Compulsory
ENVS3013	Environmental Law and Management 2022-23	7.5	Compulsory
SOES3046	Independent Research Project (Oceanography, Marine Biology) 2022-23	15	Compulsory

Part III Fieldwork

The following compulsory fieldwork module.

Code	Module Title	ECTS	Type
SOES3018	Applied Oceanography and Fieldwork 2022-23	7.5	Compulsory

Part III Optional

Three modules must be chosen from the following.

Code	Module Title	ECTS	Type
GEOG3057	Adapting to Climate Change and Weather Hazards 2022-23	7.5	Optional
SOES3014	Coastal Sediment Dynamics 2022-23	7.5	Optional

SOES3041	Communicating and Teaching in the Undergraduate Ambassadors Scheme 2022-23	7.5	Optional
SOES3015	Palaeoclimate Change 2022-23	7.5	Optional
SOES3029	Seafloor Exploration and Surveying 2022-23	7.5	Optional
ENVS3014	Sustainable Resource Management 2022-23	7.5	Optional

Progression Requirements

The programme follows the University's regulations for [*Progression, Determination and Classification of Results : Undergraduate and Integrated Masters Programmes*](#). Any exemptions or variations to the University regulations, approved by AQSC are located in [*section VI of the University Calendar*](#).

Support for student learning

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

The University provides:

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

The Students' Union provides

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

Associated with your programme you will be able to access:

- A personal tutor system - our tutorial system aims to provide personalised pastoral and academic care for all students. You will be allocated a member of the academic staff as your personal tutor on arrival at University, and he/she will be charged with your guidance throughout your undergraduate career. You will also have a shadow tutor for contact if your personal tutor is absent. You can also approach the Programme Leader for Environmental Geoscience, or the School's Senior Tutor if necessary.
- Programme and module guides/information. Hard copies are available, but are mainly published on the web: www.southampton.ac.uk/oes/ and www.blackboard.soton.ac.uk.
- Two large computer clusters at the National Oceanography Centre, Southampton for dedicated use by undergraduate students. Additional computer clusters are available for your use on the other University campuses, as well as at the Halls of Residence.
- Teaching staff via email and personal contact.
- Support from the administrative staff of the Student Office, which is readily available during the normal working day.
- A pool of geological equipment is available for laboratory and field-based learning, and the standard field equipment is issued to full fee paying students.
- A research-led environment at the NOCS which provides a high quality learning environment for students.
- A wide range of well-equipped laboratories which are available for student project work, and specific study rooms.
- Close collaboration between Ocean and Earth Science and staff from the Natural Environment Research Council's NOCS provides additional support for student learning, particularly with regard to independent research projects.
- Specialised teaching labs and lecture theatre at the NOCS, and Ocean and Earth Science's research vessels.

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

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

Career Opportunities

Graduates with BSc Environmental Geoscience degrees can expect to find work in the following areas:

- Petroleum and minerals resources industry
- Environmental surveying, research and consultancy
- Engineering geology, construction industry and geotechnical surveying
- Research
- Teaching

External Examiner(s) for the programme

Name: Professor Kevin G Taylor - University of Manchester

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 they take 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
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. These may be purchased from any source and do not need to carry the University logo.
Clothing	You will need to wear suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source.
Computer discs or USB drives	Students are expected to provide their own data storage device although a basic filestore space is provided on the network.
Hardware	It is advisable that students provide their own laptop or personal computer, although shared facilities are available across the University campus.
Laboratory Equipment and Materials	Laboratory equipment and consumables will be provided where appropriate.
Printing and Photocopying Costs	<p>Coursework such as essays, projects and dissertations may be submittable on line. However, some items will require submission as a printed copy including some items where it is not possible to submit online. A list of the University printing costs can be found here: http://www.southampton.ac.uk/isolutions/students/printing-for-students.page</p> <p>Please remember that we are unable to refund any credit that has not been used by the end of your course, so please consider this when topping up your printing/copy account.</p> <p>The University Print Centre also offer a printing and copying service as well as a dissertation/binding service. Current printing and copying costs can be found in http://www.southampton.ac.uk/printcentre/copyrooms/service.page. They also provide a large format printing service, e.g. Academic posters. Current costs can be found in http://www.southampton.ac.uk/printcentre/exhibition/academicposters.page.</p>
Software Licenses	Will be provided by the University where appropriate.
Textbooks	<p>Where a module specifies core texts these should generally be available on the reserve list in the library. However, students may prefer to buy their own copies. These can be purchased from any source.</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>

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.