Programme Specification

Geology with Study Abroad (2020-21)

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

Awarding Institution	University of Southampton
Teaching Institution	University of Southampton
Mode of Study	Full-time
Duration in years	4
Accreditation details	Geological Society
Final award	Integrated Masters degree in Science
Name of award	Geology with Study Abroad
Interim Exit awards	Bachelor of Science with Honours (BSc (Hons))
	Bachelor of Science (Ordinary)
	Certificate of Higher Education (CertHE)
	Diploma of Higher Education (DipHE)
FHEQ level of final award	Level 7
UCAS code	F603
Programme code	4956
QAA Subject Benchmark or other external reference	Earth Sciences, Environmental Sciences And Environmental Studies 2019, Master's Degree Characteristics 2016
Programme Lead	John Marshall

Programme Overview

Brief outline of the programme

If you are looking for a professional career in the Earth sciences, this integrated masters programme will provide you with a great breadth and depth of geological knowledge and a complete understanding of current research areas in the geological sciences. Particular emphasis is placed on research skills developed through extensive group and independent project work. Interaction with scientists from the NOCS research community is embedded in the programme, ensuring a research-led experience.

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

Learning and teaching

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

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, and fieldwork exercises and/or reports.

Special Features of the programme

Fieldwork is an essential and exciting component of your degree programme and is incorporated into various modules. Further information is available in the Student Handbooks and on the School web pages: http://www.southampton.ac.uk/oes/.

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. Within this particular programme of study, we aim to develop and enhance your knowledge of and enthusiasm for geology. There is a natural and important synergy between geology and the scientific disciplines of marine biology, oceanography and physical geography, in particular as they apply to the natural environment. We offer the opportunity to study geology with one of these disciplines.

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

The MSci Geology with Study Abroad programme, in addition, allows students to benefit from study abroad during their third year at one of a number of leading international research universities. Compared with the conventional MSci programmes, this programme aims to provide students with an opportunity to study in a different cultural environment and to receive instruction from research leaders of an additional top international university.

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.

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.

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

The specific aims of these programmes are to:

- Provide you with a coherent programme of study which will offer you an in-depth knowledge and understanding of all aspects of Earth Science, and to allow you to further 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 geologist, or in a relevant area of oceanographic/marine/geographical science, or a career in a wide range of other contexts.
- Provide you with a sound background and suitable qualification that would enable you to proceed to a more specialist higher degree at the MSc, MRes or PhD level.
- Develop your critical and analytical problem-solving powers in relation to the Earth sciences, but also in relation to broader applications.
- Develop your intellectual, practical and fieldwork skills in the collection, analysis, interpretation and understanding of geological (and/or oceanographic, biological and geographical) data.
- Develop your powers of observation, analysis and understanding to make decisions with appropriate acknowledgement of uncertainties.
- Enhance the development of your interpersonal skills.
- Provide you with opportunities for shared multi-disciplinary learning in the Earth sciences.
- Enable you to engage with life-long learning, study and enquiry, and to appreciate the value of education and research to society.
- Enable you to fulfil the requirements of the Geological Society of London for admission to Fellowship and progress to the professional qualification of Chartership (C.Geol) of the Society.
- Give you the experience of undertaking an original project at the forefront of Earth Science 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 geosciences (and marine sciences/physical geography where relevant);

A4. The significance of a wide range of geological techniques in addressing research topics across a broad range of Earth science problems;

A5. Methods of acquiring, interpreting and analysing all relevant forms of scientific information with a critical understanding of the appropriate contexts for their use;

A6. Issues concerning the availability and sustainability of resources and their geological context;

A7. The contribution of Earth and Marine scientific expertise to debates on environmental issues and how knowledge of these subjects forms the basis for informed concern about the Earth and its people;

A8. The contribution of your subject to the development of knowledge about the world we live in;

A9. The relevance of knowledge and skills acquired on your programme of study to professional activity, environmental impact and the world of work.

Subject Specific Intellectual and Research Skills

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

B1. The cycling of matter and the flows of energy into, between and within the solid Earth, hydrosphere, atmosphere and biosphere.

B2. The chemistry, physics, biology and mathematics that underpin our understanding of Earth structure, materials and processes.

B3. Major geoscience paradigms: the extent of geological time; evolution: the history of life on Earth; plate tectonics.

B4. Geological time, including the principles of stratigraphy, radiometric dating, the stratigraphic column, rates of Earth processes, major events in Earth history, and the evolution of life as revealed by the fossil record.

B5. The study of structures, materials and processes ranging in scale from atoms to planets.

B6. The structure and composition of the solid Earth (core, mantle, crust, asthenosphere, lithosphere, etc.), the hydrosphere, the atmosphere, the cryosphere and the biosphere, and the processes operating within and between them.

B7. The identification of rocks, minerals, fossils, and geological structures.

B8. Collection and documentation of geological information in the field, including the production and interpretation of geological maps.

B9. Surveying and measurement both in the field and laboratory, and using qualitative, quantitative and instrumental techniques.

B10. The exploration for, and the development and exploitation of, Earth resources.

B11. Geohazards and their impacts on human societies.

B12. The concepts of Earth observation and remote data acquisition skills.

B13. Earth science perspectives on sustainability and social awareness (e.g. renewable versus non-renewable resources, climate change, the history of life and biodiversity).

Transferable and Generic Skills

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

C1. Recognise and use geological (and oceanographic/geographical/marine biological where relevant) theories, paradigms, concepts and principles.

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

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

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

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

C6. Plan, design, conduct and report (both verbally and in writing) on investigations, including the integration of external datasets and published results.

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

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

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

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

C11. Plan and execute an extended research project at the forefront of Earth science [MSci students only].

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

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

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

C15. Write an independent research proposal. [MSci programme only]

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

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

C18. Develop computing and data analysis skills in a wide range of relevant geological techniques.

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

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

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

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

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

C24. Evaluate performance as an individual and as a team member to maximise results and benefits.

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

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

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

Programme Structure

The programme structure table is below:

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

Part I

The programme is offered as a full-time course. The MSci programme normally lasts for four years.

At Southampton, the programme is delivered in a semester pattern, each semester having 12 weeks for teaching and learning and 2-3 weeks for examinations.

At the Partner Institutions [MSci Geology with Study Abroad] the academic year is divided into Semesters or Quarters. In general the academic year will commence either late August, or mid-September. The Semester/Quarter dates vary from

Institution to Institution, and you will be provided with more detailed information nearer the time. Teaching and learning in each Semester (or Quarter) is between 12 – 15 weeks, with 1-2 weeks for examinations.

The programme is divided into individual study modules at each part. Each study module is worth a certain number of credit points to you on successful completion. Modules are normally worth 7.5 ECTS (15 CATS) which is equivalent to 150 hours of study. Normally up to 60 hours comprises contact teaching (lectures, practical sessions, tutorials, etc.), and the remainder of the time is for your own independent study. Modules are generally assessed at the end of each semester, but some are assessed entirely by coursework throughout the duration of the module.

In part 1, there are a number of compulsory modules, which lay a solid foundation in the basic discipline of this programme. A compulsory Mathematics module is also taken, depending on your mathematical background. More specialised training and options that enable diversification commence in part 2.

If you are following the Study Abroad programme, in part 3 you will enrol at your chosen institution to take a variety of exciting modules that build on core areas of marine sciences as well as options that will enable you to follow your specific interests. This programme follows the University credit award scheme for study abroad and details can be found in the University Calendar.

In parts 3 and 4, students are exposed to the forefronts of geological (and oceanographic/ geographical/biological where applicable) knowledge, with the opportunity to conduct supervised original research. A significant field mapping project and report is undertaken, with fieldwork in the summer between parts 2 and 3 and the project completed during part 3. If studying for a MSci, in your final (part 4) year you will undertake a major research project which may involve external stakeholders and in which you will play a significant role in the design stage.

Those students studying abroad during part 3 are required to undertake 15 ECTS (30 CATS) points of independent study. This takes the form of completion of the field mapping project discussed above. The remaining 45 ECTS (90 CATS) points are taken from appropriate modules in the Partner Institution.

The MSci courses are intended to develop research skills, and computational and quantitative skills in a more multi-disciplinary context than is possible in a three-year degree structure. You will also be exposed to cutting edge research, participating in seminar presentations in wide-ranging and specialist topics. There will be an opportunity to choose modules from a wide range of master's level options.

Part I Compulsory

Code	Module Title	ECTS	Type
SOES1002	Dynamic Earth 2020-21	7.5	Compulsory
SOES1008	Earth and Ocean System 2020-21	7.5	Compulsory
SOES1001	Earth Materials 2020-21	7.5	Compulsory
SOES1005	Introduction to Ocean Biogeochemistry 2020-21	7.5	Compulsory
SOES1014	Key Skills for Geoscientists 2020-21	7.5	Compulsory
SOES1009	The Living Earth 2020-21	7.5	Compulsory

Part I Optional

Part I Optional I

Choose MATH1008 if you have A-level Mathematics (Grade A or B), or equivalent, or are entering from the Foundation Year having attained more than 75% in Maths. In all other cases, choose SOES1010.

Code	Module Title	ECTS	Type
MATH1008	Mathematical Methods for Scientists 1a 2020-21	7.5	Optional
SOES1010	Quantitative Earth and Ocean Sciences 2020-21	7.5	Optional

Part I Optional II

ONE module must be chosen from the list below. Please ensure you have the required pre-requisite.

Code	Module Title	ECTS	Type
GEOG1002	Dynamic Landscapes 2020-21	7.5	Optional
BIOL1003	Ecology & Evolution 2020-21	7.5	Optional
CHEM1045	Fundamentals of Inorganic Chemistry I for non-chemists 2020-21	3.75	Optional
CHEM1041	Fundamentals of Organic Chemistry I for non-chemists 2020-21	3.75	Optional
CHEM1043	Fundamentals of Physical Chemistry I for non-chemists 2020-21	3.75	Optional
SOES1006	Introduction to Marine Ecology and Evolution 2020-21	7.5	Optional
MATH1009	Math Methods for Scientist 1b 2020-21	7.5	Optional
BIOL1004	Patterns of life and their evolution 2020-21	7.5	Optional
SOES1004	Physics of the Ocean 2020-21	7.5	Optional
GEOG1001	The Earth System 2020-21	7.5	Optional

Part II

All modules in Part 2 are compulsory and must be taken.

Code	Module Title	ECTS	Type
SOES2038	Exploration Geophysics and Remote Sensing 2021-22	7.5	Compulsory

SOES2018	Geochemistry 2021-22	7.5	Compulsory
SOES2003	Geohazards and Earth Resources 2021-22	7.5	Compulsory
SOES2004	Igneous and Metamorphic Petrology 2021-22	7.5	Compulsory
SOES2034	Key Skills and Fieldwork for Geologists 2021-22	7.5	Compulsory
SOES2032	Palaeobiology 2021-22	7.5	Compulsory
SOES2013	Sedimentary Systems and Processes 2021-22	7.5	Compulsory
SOES2037	Structural Geology and GIS 2021-22	7.5	Compulsory

Part III

Code	Module Title	ECTS	Type
SOES3025	Independent Mapping Project 2022-23	15	Compulsory
SOES3039	OES Abroad 1 2022-23	30	Compulsory
SOES3038	OES Abroad 2 2022-23	15	Compulsory

Part IV

Part IV Compulsory

The following modules are compulsory and must be taken:

Code	Module Title	ECTS	Type
SOES6001	Contemporary Topics in Geology and Geophysics 2023-24	7.5	Compulsory
SOES6065	Field Research and Workplace Techniques for Professional Geoscientists 2023-24	7.5	Compulsory
SOES6078	MSci Advanced Independent Research Project (GY) 2023-24	30	Compulsory

Part IV Optional

TWO optional modules should be chosen from the recommended list below. However, other options are available and may be chosen provided the timetable allows and you have the required pre-requisite.

Code	Module Title	ECTS	Type
SOES6059	Basin Analysis 2023-24	7.5	Optional
SOES6007	Biogeochemical Cycles in the Earth System 2023-24	7.5	Optional
SOES6023	Environmental Radioactivity and Radiochemistry 2023-24	7.5	Optional
SOES6037	Geodynamics and Solid Earth Geophysics 2023-24	7.5	Optional
SOES6047	Global Climate Change: Past and Future 2023-24	7.5	Optional
SOES6061	Marine Geoarchaeology 2023-24	7.5	Optional
SOES6024	Seafloor Exploration and Surveying 2 2023-24	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 Geology, 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.

The Partner Institutions [Geology with Study Abroad] will provide:

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

[NB this list provides a general overview of what support you might expect. More specific information for each Institution will be made available during Part 2].

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 MSci/BSc Geology 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
- An extra edge for any career with an international dimension

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 no longer need to carry the University logo.
Computer discs or USB drives	Students are expected to provide their own data storage device
Field course clothing	You will need to wear suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source.
Field Equipment and Materials	Fieldwork equipment Geology and Geophysics students · Geology and Geophysics students will need a minimum amount of field equipment and this is provided by the department. Most will be provided during Induction. · Geology students receive: compass-clinometer; geological hammer; hand lens; waterproof field notebooks (quantity depends on degree programme); steel tape measure; safety helmet; clip board; safety goggles; bottle for dilute hydrochloric acid; outdoor first aid kit; 3 mapping pens; grain size comparator cards. · Geophysics students receive: compass-clinometer; hand lens; waterproof field notebooks (quantity depends on degree programme); steel tape measure; safety helmet; clip board; safety goggles; bottle for dilute hydrochloric acid; outdoor first aid kit; 3 mapping pens; grain size comparator cards. · All Geology and Geophysics students are recommended to purchase the following items: a pair of compasses; set squares; protractor; pencils (including coloured); eraser; University-approved calculator. · Geology and Geophysics students will also need to provide their own walking boots, waterproof clothing, and a rucksack; some students purchase a 'Weather writer' which affords more protection for maps in wet weather. · Some of the items not included in the induction pack can be purchased from the department/University. Please visit Room 161/05, Level 1, NOCS.
Fieldwork: logistical costs	Fieldwork: introduction Experience of working in the field is an essential part of your learning process and is also widely regarded as valuable in personal development. Please note that circumstances may dictate that some field-courses are timetabled within part of the vacation period. For compulsory residential field courses, accommodation and travel are provided (for Independent Geology Mapping a fixed amount is provided to cover these costs for the least expensive area). You are usually expected to cover the costs of food and drink, although some courses may include meals. For optional field courses, students are asked to make a contribution to the travel and/or accommodation costs. Details are provided in the table below. Please note that if a field course is compulsory for your degree

	programme and you later move from that degree programme to one where that field course is optional, you will be charged for the cost of that field course. To provide an example: students on the MSci Marine Biology programme undertaking the field course to Bermuda will be charged the full cost of the field course if they later choose to transfer to the BSc Marine Biology degree programme. In addition to the field courses mentioned in this booklet, there are also one-day field courses associated with specific modules; students are expected to cover food and drink costs for these days, but transport is arranged and paid for by the department. As the department arranges transport, should students wish to make their own way to or from field courses, then they must meet these costs themselves. Additional Information SOES3020: Tenerife Field Course As this is an overseas field course which requires the department to make early flight bookings to minimise costs, students who pre-register for this module will be liable for the full flight costs if they subsequently opt not to take the module. SOES3025: Independent Geology Mapping Precise costs depend on specific arrangements made by students and on individual destinations. The department undertakes to cover the costs for accommodation and travel up to the cost of the least expensive destination, and currently provides £500 per student. SOES6052: Tropical Field Course This field trip is optional and open only to MSci Marine Biology and MSci Biology with Marine Biology students. Students are expected to fund their travel and to provide their own snorkelling equipment, including 3mm-thick wetsuit. The total cost is currently expected to be no more than £800-900. The department provides full board, IT and lab facilities and course-related travel whilst on Bermuda. Notes: Where a student contribution is made, invoices will be issued approximately 2 weeks prior to the start of a field course and payment will be due within 7 days. Dates and costs are correct at the time of going to press. Insurance (travel, medical, personal property and baggage) · Students are automatically insured whilst on University organised field courses undertaken as part of their official studies, including field courses in the UK involving an overnight stay.
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	Coursework such as essays, projects and dissertations may be submitted online. 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 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.

	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.
Software Licenses	Will be provided by the University where appropriate
Stationery	You will be expected to provide your own day-to-day stationery items, e.g. pens, pencils, notebooks, etc. Any specialist stationery items will be specified under the Additional Costs tab of the relevant module profile.
Textbooks	Where a module specifies core texts these should generally be available on the reserve list in the library. However, students may prefer to buy their own copies. These can be purchased from any source. Some modules suggest reading texts as optional background reading. The library may hold copies of such texts, or alternatively you may wish to purchase your own copies. Although not essential reading, you may benefit from the additional reading materials for the module.

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.