

## Programme Specification: Undergraduate

### For Academic Year 2026/27

#### 1. Course Summary

<b>Names of programme and award title(s)</b>	MSci Environmental Science MSci Environmental Science with International Year (see Annex for details) MSci Environmental Science with Work Placement Year (see Annex for details)
<b>Award type</b>	Single Honours (Masters)
<b>Mode of study</b>	Full-time
<b>Framework of Higher Education Qualification (FHEQ) level of final award</b>	Level 7
<b>Normal length of the programme</b>	4 years; 5 years with either the International Year or Placement Year between years 2 and 3
<b>Maximum period of registration</b>	The normal length as specified above plus 3 years
<b>Location of study</b>	Keele Campus
<b>Accreditation (if applicable)</b>	n/a
<b>Regulator</b>	Office for Students (OfS)
<b>Tuition Fees</b>	<p><b>UK students:</b> Fee for 2026/27 is £9,790*</p> <p><b>International students:</b> Fee for 2026/27 is £18,200**</p> <p>The fee for the international year abroad is calculated at 15% of the standard year fee</p> <p>The fee for the work placement year is calculated at 20% of the standard year fee</p>

**How this information might change:** Please read the important information at <http://www.keele.ac.uk/student-agreement/>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

\* These fees are regulated by Government. We reserve the right to increase fees in subsequent years of study in response to changes in government policy and/or changes to the law. If permitted by such change in policy or law, we may increase your fees by an inflationary amount or such other measure as required by government policy or the law. Please refer to the accompanying Student Terms & Conditions. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

\*\* These fees are for new students. We reserve the right to increase fees in subsequent years of study by an inflationary amount. Please refer to the accompanying Student Terms & Conditions for full details. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

#### 2. What is a Single Honours programme?

The Single Honours programme described in this document allows you to focus more or less exclusively on this subject. In keeping with Keele's commitment to breadth in the curriculum, the programme also gives you the opportunity to take some modules in other disciplines and in modern foreign languages as part of a 360-credit Honours degree. Thus, it enables you to gain, and be able to demonstrate, a distinctive range of graduate attributes.

### **3. Overview of the Programme**

Environmental Science at Keele offers a comprehensive understanding of the natural environment and the impact of human activities on it. In this programme you will integrate interdisciplinary approaches from biology, chemistry, geology and ecology to analyse environmental systems and address ecological challenges. Core modules cover topics such as global environmental change, human environmental impacts, Geographical Information Systems, environmental impact assessment, and sustainability.

You will gain hands-on practical experience through laboratory work, field studies on our 620-acre campus (which we use as our 'living laboratory') and overseas, research projects, developing skills in data collection, analysis, and interpretation. The program emphasizes critical thinking and problem-solving, preparing you to tackle issues like environmental toxicology, renewable energy, and environmental change.

Collaboration with industrial partners provides opportunities for work-placements and real-world experience. You will also have the opportunity to obtain professional standard qualifications, such as the Field Identification Skills Certificate. This programme will equip you for careers in environmental consulting, government agencies, non-profit organizations, and industry, as well as for further academic study. The program fosters a deep understanding of environmental ethics and the importance of sustainable practices, encouraging you to become proactive stewards of the environment.

Overall, our Environmental Science degree will prepare you to address contemporary environmental challenges and contribute to the development of sustainable solutions for a healthier planet.

The MSci Environmental Science is a four-year undergraduate Integrated Masters course primarily designed for those considering a career in Environmental Science and supports both vocational and academic interests. The course aims to provide an in-depth experience of Environmental Science.

The topics covered are at the forefront of the discipline along with training in research techniques, laboratory methods, computing techniques and other fundamental transferable skills. In particular, the fourth year will develop your independent research and project management skills and allow you to work and specialise in an area of Environmental Science of your choice.

### **4. Aims of the programme**

The broad aims of the programme are to enable you to:

- Develop a sound scientific understanding of the core natural science disciplines (Biology, Ecology, Chemistry, Earth Sciences) that underpin the field of environmental science, irrespective of students' scientific background prior to studying at Keele University, and to be able to apply these to environmental problems.
- Be able to integrate scientific knowledge, and an awareness of social, economic and ethical issues, to address the management of the environment and tackle environmental problems such as climate change, water pollution, water resource scarcity, atmospheric pollution.
- Gain a wide range of field and laboratory skills, including the ability to carry out independent research, relevant to the investigation of environmental issues.
- Develop to a high professional standard, employability skills in report writing, information technology, numeracy, oral presentation, teamwork and independent work, problem solving and searching and evaluating literature and related resources.
- enable students to specialise in programme to obtain an in-depth experience of the subject, as well as gaining additional experience in independent research project work and key skills. n Environmental Science via a four-year Integrated Masters

### **5. What you will learn**

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding
- Subject specific skills
- Key or transferable skills (including employability skills)

#### **Subject knowledge and understanding**

Successful students will be able to demonstrate knowledge and understanding of:

#### **Level 4:**

- the application of the earth-, biological and chemical sciences to environmental science
- fundamental principles of chemistry relevant to the Environmental Sciences; the application of fundamental chemical principles to a range of applications in environmental chemistry
- the internal structure and composition of the Earth and its development since the formation of the Solar System and the evolution of Life on Earth the theory of plate tectonics, its manifestation on the Earth's current surface, and the consequences of its operation in the Earth's history; the three major subdivisions of rocks in terms of how they are formed and how their properties relate to environmental science issues; how rocks and geological events may be dated, both relatively and in terms of the absolute time scale
- the impact of human activity, e.g. resource exploitation on the Earth's surface and near surface environments (using well-established principles and examples from the forefront of the discipline)
- integrate and apply knowledge of the biological, earth scientific, chemical and social aspects of the fields of environmental science and sustainability; demonstrate understanding of the ideological and philosophical underpinning of different approaches to environmental and sustainability research
- the environmental and social responsibilities of organisations including the benefits to businesses to 'green' their operation and ways this can be achieved

#### **Level 5:**

- the application of the earth-, biological and chemical sciences to environmental science
- fundamental principles of chemistry relevant to the Environmental Sciences; the application of fundamental chemical principles to a range of applications in environmental chemistry
- the impact of human activity, e.g. resource exploitation on the Earth's surface and near surface environments (using well-established principles and examples from the forefront of the discipline)
- integrate and apply knowledge of the biological, earth scientific, chemical and social aspects of the fields of environmental science and sustainability; demonstrate understanding of the ideological and philosophical underpinning of different approaches to environmental and sustainability research
- pressures and threats on terrestrial and aquatic ecosystems as well as the Earth's climate that are related to human activity
- possible options for alternative solutions to environmental problems and their implications for nature and society
- environmental management issues in a range of different environments; the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media (including soil, water, vegetation)
- the essential contributions of environmental science to the economic, environmental and cultural needs of Society

#### **Level 6:**

- the application of the earth-, biological and chemical sciences to environmental science
- fundamental principles of chemistry relevant to the Environmental Sciences; the application of fundamental chemical principles to a range of applications in environmental chemistry
- the internal structure and composition of the Earth and its development since the formation of the Solar System and the evolution of Life on Earth the theory of plate tectonics, its manifestation on the Earth's current surface, and the consequences of its operation in the geological past; the three major subdivisions of rocks in terms of how they are formed and how their properties relate to environmental science issues; how rocks and geological events may be dated, both relatively and in terms of the absolute time scale
- the impact of human activity, particularly resource exploitation on the Earth's surface and near surface environments (using well-established principles and examples from the forefront of the discipline)
- integrate and apply knowledge of the biological, earth scientific, chemical and social aspects of the fields of environmental science and sustainability; demonstrate understanding of the ideological and philosophical underpinning of different approaches to environmental and sustainability research
- pressures and threats on terrestrial and aquatic ecosystems as well as the Earth's climate that are related to human activity
- possible options for alternative solutions to environmental problems and their implications for nature and society
- environmental management issues in a range of different environments; the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media (including soil, water, vegetation)
- the essential contributions of environmental science to the economic, environmental and cultural needs of society the environmental and social responsibilities of organisations including the benefits to businesses to 'green' their operation and ways this can be achieved
- a key multidisciplinary issue/problem reflecting the student's interests at the forefront of Environmental Science

In addition to those outcomes listed above, which are developed through to level 7, as appropriate, to an

advanced level, MSci Environmental Science students will also be able to demonstrate advanced knowledge and understanding of:

- the principles and applications of cutting-edge research methodologies and techniques in the study of Environmental Sciences to an advanced level;
- the context of their extended research project in relation to on-going research activity in their field of study and the wider subject area.

## **Subject specific skills**

Successful students will be able to:

### **Level 4:**

- carry out and record practical chemistry experiments relevant to the environmental sciences, including the analysis and interpretation of data generated
- recognise minerals in hand specimen and thin section using a hand lens, petrological microscope and related techniques use techniques for the acquisition, interpretation, analysis and visualisation of earth scientific data (e.g. geological maps) show knowledge and understanding of geological field skills, and be able to synthesise their observations and interpretations within a scientific report
- demonstrate competency in a range of skills necessary for a successful study of environmental science in higher education (e.g. numeracy, IT, visual, oral and written communication)
- demonstrate familiarity with a range of ecological and geochemical laboratory and field techniques
- work safely in a scientific laboratory, with awareness of standard methods and procedures and with due regard for risk assessment and relevant health and safety regulations apply relevant quantitative techniques to the analysis of environmental problems manipulate, analyze and interpret data sets relating to an area of environmental science
- integrate biological, earth scientific and chemical aspects of field (and laboratory) study by preparing a report/presentation on investigations of several habitats
- evaluate possible options for alternative solutions to environmental problems
- demonstrate familiarity with a range of field and laboratory techniques appropriate to Environmental Science investigation
- demonstrate technical appreciation of the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media
- undertake effective fieldwork with due regard for safety, risk assessment, rights of access, relevant health and safety regulations and sensitivity to the impact of investigations on the environment

### **Level 5:**

- carry out and record practical chemistry experiments relevant to the environmental sciences, including the analysis and interpretation of data generated
- demonstrate competency in a range of skills necessary for successful study of environmental science in higher education (e.g. numeracy, IT, visual, oral and written communication)
- demonstrate familiarity with a range of ecological and chemical laboratory and field techniques
- work safely in a scientific laboratory, with awareness of standard methods and procedures and with due regard for risk assessment and relevant health and safety regulations apply relevant quantitative techniques to the analysis of environmental problems manipulate, analyze and interpret data sets relating to an area of environmental science
- design an achievable piece of research applicable to the field of environmental science, showing an ability to synthesize and interrogate the research literature and evaluate and select appropriate techniques
- integrate biological, geological and chemical aspects of field (and laboratory) study by preparing a report/presentation on investigations of several habitats
- evaluate solutions to problems of managing a disturbed/degraded area
- evaluate possible options for alternative solutions to environmental problems
- demonstrate familiarity with a range of field and laboratory techniques appropriate to environmental scientific investigation
- assess solutions to problems of managing disturbed/degraded/ disadvantaged areas and demonstrate an understanding of environmental management issues in a range of environments and contexts
- apply theoretical knowledge and understanding of environmental science and sustainability issues to specific social, geographical and environmental contexts
- demonstrate technical appreciation of the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media
- apply their own knowledge, skills and experience to an aspect of current Environmental Science research (through the use of established, analytical scientific methods, literature review, data collection and interpretation etc.) and to have developed the skills necessary to exercise own independent analysis, initiative and self-learning

### **Level 6:**

- carry out and record practical chemistry experiments relevant to the environmental sciences, including the analysis and interpretation of data generated
- demonstrate competency in a range of skills necessary for successful study of environmental science in higher education (e.g. numeracy, IT, visual, oral and written communication)
- demonstrate familiarity with a range of ecological and chemical laboratory and field techniques
- collect, synthesize, evaluate and present environmental (chemical, ecological, biological) data
- work safely in a scientific laboratory, with awareness of standard methods and procedures and with due regard for risk assessment and relevant health and safety regulations apply relevant quantitative techniques to the analysis of environmental problems manipulate, analyze and interpret data sets relating to an area of environmental science
- design an achievable piece of research applicable to the field of environmental science, showing an ability to synthesize and interrogate the research literature and evaluate and select appropriate techniques
- integrate biological, geological and chemical aspects of field (and laboratory) study by preparing a report/presentation on investigations of several habitats
- evaluate solutions to problems of managing a disturbed/degraded area
- evaluate possible options for alternative solutions to environmental problems
- demonstrate familiarity with a range of field and laboratory techniques appropriate to Environmental Science investigation
- apply theoretical knowledge and understanding of environmental science and sustainability issues to specific social, geographical and environmental contexts
- demonstrate technical appreciation of the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media
- undertake effective fieldwork with due regard for safety, risk assessment, rights of access, relevant health and safety regulations and sensitivity to the impact of investigations on the environment
- apply their own knowledge, skills and experience to an aspect of current Environmental Science research (through the use of established, analytical scientific methods, literature review, data collection and interpretation etc.) and to have developed the skills necessary to exercise own independent analysis, initiative and self-learning

In addition to those outcomes listed above, which are developed through to level 7, as appropriate, to an advanced level, MSci Environmental Science students will also:

- identify, engage with, and evaluate environmental information, issues and topics at the forefront of the discipline; critically evaluate current literature and complex methodologies to an advanced level in relevant areas of contemporary Environmental Science.

### **Key or transferable skills (including employability skills)**

Successful students will be able to:

#### **Level 4:**

- develop effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity
- communication skills enabling them to communicate effectively to a variety of audiences in written, verbal and graphical forms
- work with numerical data using appropriate qualitative and quantitative techniques, as well as computer software packages work effectively with a variety of types of information technology to analyse and present information and data, as well as solve numerical problems
- use the internet as a means of communication and a source of information
- demonstrate competence in spatial awareness and observation
- conduct field and laboratory studies
- reference work in an appropriate manner
- work effectively both as an individual and as part of a group or team, recognising and respecting the viewpoints of others sustain motivation to work towards a goal over an extended period of time recognise responsibilities as a local, national and international citizen

#### **Level 5:**

- develop effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity
- communication skills enabling them to communicate effectively to a variety of audiences in written, verbal and graphical forms
- work with numerical data using appropriate qualitative and quantitative techniques, as well as computer software packages work effectively with a variety of types of information technology to analyse and present information and data, as well as solve numerical problems
- use the internet as a means of communication and a source of information
- demonstrate competence in spatial awareness and observation

- conduct field and laboratory studies
- reference work in an appropriate manner
- work with information handling and retrieval systems using data from a wide range of sources
- design a piece of research achievable as a third-year dissertation project and applicable to the field of Environment & Sustainability; showing an ability to synthesize the research literature, select appropriate techniques for data collection and analysis, and conduct research ethically and safely
- work effectively both as an individual and as part of a group or team, recognising and respecting the viewpoints of others sustain motivation to work towards a goal over an extended period of time recognise responsibilities as a local, national and international citizen

#### Level 6:

- develop effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity
- communication skills enabling them to communicate effectively to a variety of audiences in written, verbal and graphical forms
- work with numerical data using appropriate qualitative and quantitative techniques, as well as computer software packages work effectively with a variety of types of information technology to analyse and present information and data, as well as solve numerical problems
- use the internet as a means of communication and a source of information
- demonstrate competence in spatial awareness and observation
- conduct field and laboratory studies
- reference work in an appropriate manner
- work with information handling and retrieval systems using data from a wide range of sources
- design a piece of research achievable as a third-year dissertation project and applicable to the field of Environment and Sustainability; showing an ability to synthesize the research literature, select appropriate techniques for data collection and analysis, and conduct research ethically and safely
- work effectively both as an individual and as part of a group or team, recognising and respecting the viewpoints of others sustain motivation to work towards a goal over an extended period of time recognise responsibilities as a local, national and international citizen

In addition to those outcomes listed above, which are developed through to level 7, as appropriate, to an advanced level, MSci Environmental Science students will also:

- develop greater autonomy in the planning and implementation of tasks associated with their research project and taking responsibility for their workload.

In addition, students taking the four-year 'with work placement' will develop additional employability skills and will be able to:

- evaluate their own employability skills (via a SWOT Analysis) and develop their own intended learning outcomes (ILOs)
- develop, through practice in the workplace, the work-related skills identified through their SWOT analysis and ILOs
- apply academic theory learnt as part of the taught degree to real situations in the workplace
- critically evaluate their learning from the work placement
- explain how the professional environmental sector operates and what skills are needed to develop their career

The additional intended learning outcomes associated with the International Year are included in the Annex.

### [Keele Graduate Attributes](#)

The Keele Graduate Attributes are the qualities (skills, values and mindsets) which you will have the opportunity to develop during your time at Keele through both the formal curriculum and also through co- and extra-curricular activities (e.g., work experience, and engagement with the wider University community such as acting as ambassadors, volunteering, peer mentoring, student representation, membership and leadership of clubs and societies). Our Graduate Attributes consist of four themes: **academic expertise, professional skills, personal effectiveness, and social, environmental and ethical responsibility**. You will have opportunities to engage actively with the range of attributes throughout your time at Keele: through your academic studies, through self-assessing your own strengths, weaknesses, and development needs, and by setting personal development goals. You will have opportunities to discuss your progress in developing graduate attributes with, for example, Academic Mentors, to prepare for your future career and lives beyond Keele.

## 6. How is the programme taught?

Learning and teaching methods used on the programme vary according to the subject matter and level of the module. They include the following:

- **Lectures** - in which the lecturer typically narrates an overview of intended learning outcomes, core

concepts, literature and case studies to provide a framework for follow on reading, independent study and completion of assignments.

- **Tutorials, seminars and workshops** - in which typically intended learning outcomes, core concepts, literature, and case studies can be discussed in depth, with you expected to play a full part in, and occasionally to lead these discussions.
- **Problem-solving classes** - in which you typically work collaboratively to apply knowledge and understanding to real-world scenarios and learn new concepts, with discussion and feedback from tutors scaffolding learning.
- **Practical and laboratory classes** - in which you typically learn and apply a range of practical techniques, usually to generate data that is then analysed and reported in an appropriate format that engages with subject knowledge and concepts.
- **Field courses** - in which you typically spend one or more days, often as a residential visit of 1-2 weeks, in an appropriate fieldwork location with staff to learn fieldwork and practical skills through application and to develop your knowledge and understanding of core concepts as applied to real-world scenarios.
- **Group presentations and linked discussion** - in which you will work collaboratively in small groups to analyse an issue, project, or assignment and communicate your findings to the wider class and staff through discussion and questioning.
- **Online learning** - in which the Keele Learning Environment (KLE) and other platforms typically provide you with access to a wide range of resources and tools, and a platform for online discussions, assignment submission, feedback, and announcements.

MSci study at level 7 (fourth year): This will further develop your research skills in the critical evaluation of scientific literature, and an extended research project will give you the opportunity to design and conduct an in-depth research project in an area of Environmental Science, including formulating a complete research strategy and producing a grant proposal. Research skills in these areas will also be developed in a series of research seminars and journal club-style presentations/discussion in an Advanced Research Topics module.

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Academic Mentors or module lecturers on a one-to-one basis.

## 7. Teaching Staff

As Environmental Science is such an interdisciplinary subject, staff that deliver the Environmental Science Programme come from the Schools of Chemical and Physical Sciences, and Life Sciences, with option modules from other Schools.

There is a strong emphasis throughout the Environmental Science programme on enhancing the student learning experience, as evidenced by the number of environmental staff who hold teaching qualifications, such as the MA in Learning and Teaching in Higher Education, who are Fellows, Senior Fellows and Principals Fellows of the Higher Education Academy (HEA) and who have won awards for their excellence in teaching (e.g., Keele Teaching Excellence Awards, National Teaching Fellowships). Recent curriculum developments within our environmental programmes have been supported by external funds from the Higher Education Academy (HEA) Geography, Earth and Environmental Sciences (GEES) subject centre, the HEA Education for Sustainable Development project and the Higher Education Funding Council for England. Several staff are actively involved with pedagogic research that seeks to identify ways in which the student learning experience within the environmental sciences can be enhanced.

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

## 8. What is the structure of the Programme?

The academic year runs from September to June and is divided into two semesters. The number of weeks of teaching will vary from programme to programme, but you can generally expect to attend scheduled teaching sessions between the end of September and mid-December, and from mid-January to the end of April. Our degree courses are organised into modules. Each module is usually a self-contained unit of study and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort. An outline of the structure of the programme is provided in the tables below.

There are two types of module delivered as part of your programme. They are:

- Compulsory modules - a module that you are required to study on this course;
- Optional modules - these allow you some limited choice of what to study from a list of modules.

## Global Challenge Pathways

This programme includes the option for you to take a Global Challenge Pathway. These modules offer you an exciting opportunity to work with students and staff from different disciplines to explore topical global issues such as power and conflict, health inequalities, climate change, generative AI, social justice, global citizenship, and enterprise from different perspectives.

Global Challenge Pathways can either be taken as one 15-credit module at Levels 4, 5 and 6, or one 15-credit module at Levels 5 and 6. For more information about our Global Challenge Pathways please visit:

<https://www.keele.ac.uk/study/undergraduate/globalchallengepathways/>

## Modern Languages or Certificate in TESOL

Alternatively, you could choose to study modules with the University Language Centre. The Language Centre offers three pathways; The Language Specialist, The Language Taster, and The Trinity Certificate in Teaching English to Speakers of Other Language (TESOL). Language Centre modules are available separately for students at Levels 4 and 5. At Level 6 they are included within the Global Challenge Pathways.

If you choose the Language Specialist pathway, you will automatically be enrolled on a Semester 2 Modern Language module as a continuation of your language of choice (at Level 4 this is a faculty funded 'additional' module). Undertaking a Modern Languages module in Semester 2 is compulsory if you wish to continue to the Language Specialist Global Challenge Pathway the following academic year.

For more information about Language Centre option modules available to you please visit the following webpages.

For Level 4 and 5 students please visit: <https://www.keele.ac.uk/study/languagecentre/languagecentreoptions/>

For Level 6 students please visit: <https://www.keele.ac.uk/students/academiclife/global-challenge-pathways/>

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For further information on the content of modules currently offered, please visit:

<https://www.keele.ac.uk/recordsandexams/modulecatalogue/>

A summary of the credit requirements per year is as follows.

Year	Compulsory	Optional	
		Min	Max
Level 4	90	30	30
Level 5	90	30	30
Level 6	30	90	90
Level 7	120	0	0

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## Module Lists

### Level 4

Compulsory modules	Module Code	Credits	Period
Planet Earth - Our Environment	ESC-10104	30	Semester 1
Academic, Professional and Field Skills	ESC-10101	30	Semester 1-2
Environment and Sustainability	ESC-10102	30	Semester 1-2

<b>Optional modules</b>	<b>Module Code</b>	<b>Credits</b>	<b>Period</b>
Conservation Policy and Practice	GEG-10021	15	Semester 2
Roots and Future: exploring sustainable places	GEG-10023	15	Semester 2
Ecology	LSC-10111	30	Semester 2

## **Level 5**

<b>Compulsory modules</b>	<b>Module Code</b>	<b>Credits</b>	<b>Period</b>
Geographic Information Science and Remote Sensing	ESC-20132	15	Semester 1
Human Impact on the Environment	ESC-20150	15	Semester 1
Environmental and Sustainability Impact Assessment: Methods and Research Design	ESC-20146	30	Semester 1-2
Environmental Analytical Methods	ESC-20032	15	Semester 2
Lake District Field Course	ESC-20144	15	Semester 2

<b>Optional modules</b>	<b>Module Code</b>	<b>Credits</b>	<b>Period</b>
Palaeoclimatology and Quaternary Studies	ESC-20036	15	Semester 1
Earth's Changing Landscapes	ESC-20110	15	Semester 1
Flexible Work Placement (Level 5)	NAT-20011	15	Semester 1-2
Water in the Environment	ESC-20100	15	Semester 2
Geoethics and Environmental Justice	ESC-20142	15	Semester 2

## **Level 5 Module Rules**

Please note: You cannot take both Flexible Work Placement (Level 5) and Flexible Work Placement (Level 6);  
ESC-20146 is a pre-requisite for ESC-30142

## **Level 6**

<b>Compulsory modules</b>	<b>Module Code</b>	<b>Credits</b>	<b>Period</b>
Independent Research Dissertation	ESC-30144	30	Semester 1-2

<b>Optional modules</b>	<b>Module Code</b>	<b>Credits</b>	<b>Period</b>
Ecotoxicology and Risk Assessment	ESC-30056	15	Semester 1
Extinction!	ESC-30106	15	Semester 1
Quaternary Climate Change: from Ice Ages to a Warming World	ESC-30166	15	Semester 1
Tropical Biology Field Course	LSC-30066	15	Semester 1
Professional Environmental Field Skills	ESC-30142	30	Semester 1-2
Sustainable Futures Consultancy	ESC-30148	30	Semester 1-2
Applied GIS	ESC-30152	30	Semester 1-2
Flexible Work Placement (Level 6)	NAT-30008	15	Semester 1-2
Professional Experience in Education	NAT-30012	15	Semester 1-2
Natural Hazards	ESC-30009	15	Semester 2
Clean Technology	ESC-30040	15	Semester 2
Blue Economy: sustainable futures with an ocean focus	ESC-30108	15	Semester 2
Environmental and Wildlife Forensics	FSC-30029	15	Semester 2
Advanced Geographical Fieldwork	GEG-30051	15	Semester 2

## **Level 6 Module Rules**

Please note: You cannot take both Flexible Work Placement (Level 5) and Flexible Work Placement (Level 6).

Sustainable Futures Consultancy, Flexible Work Placement (level 6) and Professional Experience in Education are barred combinations.

You cannot take LSC-30066 and GEG-30051

## **Level 7**

<b>Compulsory modules</b>	<b>Module Code</b>	<b>Credits</b>	<b>Period</b>
Literature Review and Grant Proposal	LSC-40065	30	Semester 1
Advanced Research Topics in Environmental Science and Sustainability	LSC-40167	30	Semester 1
MSci Extended Research Project	LSC-40063	60	Semester 1-2

## **Learning Outcomes**

The table below sets out what students learn in the programme and the modules in which that learning takes place. Details of how learning outcomes are assessed through these modules can be found in module specifications.

## **Level 4**

In Year 1 (Level 4) and Year 2 (Level 5) these learning outcomes are achieved in the compulsory modules which all students are required to take. Some of these outcomes may also be achieved or reinforced in elective

modules together with other outcomes not stated here. In Year 3 (Level 6) the stated outcomes are achieved by taking any of the modules offered in each semester.

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
the application of the earth-, biological and chemical sciences to environmental science	Academic, Professional and Field Skills - ESC-10101 Planet Earth - Our Environment - ESC-10104
fundamental principles of chemistry relevant to the Environmental Sciences; the application of fundamental chemical principles to a range of applications in environmental chemistry	Planet Earth - Our Environment - ESC-10104
the internal structure and composition of the Earth and its development since the formation of the Solar System and the evolution of Life on Earth the theory of plate tectonics, its manifestation on the Earth's current surface, and the consequences of its operation in the Earth's history; the three major subdivisions of rocks in terms of how they are formed and how their properties relate to environmental science issues; how rocks and geological events may be dated, both relatively and in terms of the absolute time scale	Planet Earth - Our Environment - ESC-10104
the impact of human activity, e.g. resource exploitation on the Earth's surface and near surface environments (using well-established principles and examples from the forefront of the discipline)	Academic, Professional and Field Skills - ESC-10101 Environment and Sustainability - ESC-10102 Roots and Future: exploring sustainable places - GEG-10023
integrate and apply knowledge of the biological, earth scientific, chemical and social aspects of the fields of environmental science and sustainability; demonstrate understanding of the ideological and philosophical underpinning of different approaches to environmental and sustainability research	All L4 modules
environmental management issues in a range of different environments; the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media (including soil, water, vegetation)	Academic, Professional and Field Skills - ESC-10101 Environment and Sustainability - ESC-10102 Planet Earth - Our Environment - ESC-10104
the environmental and social responsibilities of organisations including the benefits to businesses to 'green' their operation and ways this can be achieved	All L4 modules

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
carry out and record practical chemistry experiments relevant to the environmental sciences, including the analysis and interpretation of data generated	Planet Earth - Our Environment - ESC-10104
recognise minerals in hand specimen and thin section using a hand lens, petrological microscope and related techniques use techniques for the acquisition, interpretation, analysis and visualisation of earth scientific data (e.g. geological maps) show knowledge and understanding of geological field skills, and be able to synthesise their observations and interpretations within a scientific report	Planet Earth - Our Environment - ESC-10104
demonstrate competency in a range of skills necessary for a successful study of environmental science in higher education (e.g. numeracy, IT, visual, oral and written communication)	All L4 modules
demonstrate familiarity with a range of ecological and geochemical laboratory and field techniques	Academic, Professional and Field Skills - ESC-10101 Planet Earth - Our Environment - ESC-10104
work safely in a scientific laboratory, with awareness of standard methods and procedures and with due regard for risk assessment and relevant health and safety regulations apply relevant quantitative techniques to the analysis of environmental problems manipulate, analyze and interpret data sets relating to an area of environmental science	Academic, Professional and Field Skills - ESC-10101 Planet Earth - Our Environment - ESC-10104
integrate biological, earth scientific and chemical aspects of field (and laboratory) study by preparing a report/presentation on investigations of several habitats	Academic, Professional and Field Skills - ESC-10101 Planet Earth - Our Environment - ESC-10104
evaluate possible options for alternative solutions to environmental problems	All L4 modules
demonstrate familiarity with a range of field and laboratory techniques appropriate to Environmental Science investigation	Academic, Professional and Field Skills - ESC-10101 Planet Earth - Our Environment - ESC-10104
demonstrate technical appreciation of the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media	Planet Earth - Our Environment - ESC-10104
undertake effective fieldwork with due regard for safety, risk assessment, rights of access, relevant health and safety regulations and sensitivity to the impact of investigations on the environment	Academic, Professional and Field Skills - ESC-10101

<b>Key or Transferable Skills (graduate attributes)</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
develop effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity	All L4 modules
communication skills enabling them to communicate effectively to a variety of audiences in written, verbal and graphical forms	All L4 modules
work with numerical data using appropriate qualitative and quantitative techniques, as well as computer software packages work effectively with a variety of types of information technology to analyse and present information and data, as well as solve numerical problems	All L4 modules
use the internet as a means of communication and a source of information	All L4 modules
demonstrate competence in spatial awareness and observation	Academic, Professional and Field Skills - ESC-10101 Planet Earth - Our Environment - ESC-10104
conduct field and laboratory studies	Academic, Professional and Field Skills - ESC-10101 Planet Earth - Our Environment - ESC-10104
reference work in an appropriate manner	All L4 modules
work effectively both as an individual and as part of a group or team, recognising and respecting the viewpoints of others sustain motivation to work towards a goal over an extended period of time recognise responsibilities as a local, national and international citizen	All L4 modules

## **Level 5**

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
the application of the earth-, biological and chemical sciences to environmental science	Environmental Analytical Methods - ESC-20032 Water in the Environment - ESC-20100 Lake District Field Course - ESC-20144 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
fundamental principles of chemistry relevant to the Environmental Sciences; the application of fundamental chemical principles to a range of applications in environmental chemistry	Environmental Analytical Methods - ESC-20032 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
the impact of human activity, e.g. resource exploitation on the Earth's surface and near surface environments (using well-established principles and examples from the forefront of the discipline)	All L5 modules
integrate and apply knowledge of the biological, earth scientific, chemical and social aspects of the fields of environmental science and sustainability; demonstrate understanding of the ideological and philosophical underpinning of different approaches to environmental and sustainability research	All L5 modules
pressures and threats on terrestrial and aquatic ecosystems as well as the Earth's climate that are related to human activity	Environmental Analytical Methods - ESC-20032 Palaeoclimatology and Quaternary Studies - ESC-20036 Water in the Environment - ESC-20100 Earth's Changing Landscapes - ESC-20110 Lake District Field Course - ESC-20144 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146 Human Impact on the Environment - ESC-20150
possible options for alternative solutions to environmental problems and their implications for nature and society	All L5 modules
environmental management issues in a range of different environments; the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media (including soil, water, vegetation)	Environmental Analytical Methods - ESC-20032 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
the essential contributions of environmental science to the economic, environmental and cultural needs of Society	All L5 modules

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
carry out and record practical chemistry experiments relevant to the environmental sciences, including the analysis and interpretation of data generated	Environmental Analytical Methods - ESC-20032
demonstrate competency in a range of skills necessary for successful study of environmental science in higher education (e.g. numeracy, IT, visual, oral and written communication)	All L5 modules

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
demonstrate familiarity with a range of ecological and chemical laboratory and field techniques	Environmental Analytical Methods - ESC-20032 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
work safely in a scientific laboratory, with awareness of standard methods and procedures and with due regard for risk assessment and relevant health and safety regulations apply relevant quantitative techniques to the analysis of environmental problems manipulate, analyze and interpret data sets relating to an area of environmental science	Environmental Analytical Methods - ESC-20032 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
design an achievable piece of research applicable to the field of environmental science, showing an ability to synthesize and interrogate the research literature and evaluate and select appropriate techniques	Environmental Analytical Methods - ESC-20032 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
integrate biological, geological and chemical aspects of field (and laboratory) study by preparing a report/presentation on investigations of several habitats	Environmental Analytical Methods - ESC-20032 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
evaluate solutions to problems of managing a disturbed/degraded area	Geographic Information Science and Remote Sensing - ESC-20132 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146 Human Impact on the Environment - ESC-20150
evaluate possible options for alternative solutions to environmental problems	All L5 modules
demonstrate familiarity with a range of field and laboratory techniques appropriate to environmental scientific investigation	Environmental Analytical Methods - ESC-20032 Geographic Information Science and Remote Sensing - ESC-20132 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
assess solutions to problems of managing disturbed/degraded/ disadvantaged areas and demonstrate an understanding of environmental management issues in a range of environments and contexts	Geographic Information Science and Remote Sensing - ESC-20132 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146 Human Impact on the Environment - ESC-20150
apply theoretical knowledge and understanding of environmental science and sustainability issues to specific social, geographical and environmental contexts	Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146 Human Impact on the Environment - ESC-20150
demonstrate technical appreciation of the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media	Environmental Analytical Methods - ESC-20032
apply their own knowledge, skills and experience to an aspect of current Environmental Science research (through the use of established, analytical scientific methods, literature review, data collection and interpretation etc.) and to have developed the skills necessary to exercise own independent analysis, initiative and self-learning	All L5 modules

<b>Key or Transferable Skills (graduate attributes)</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
develop effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity	All L5 modules
communication skills enabling them to communicate effectively to a variety of audiences in written, verbal and graphical forms	All L5 modules
work with numerical data using appropriate qualitative and quantitative techniques, as well as computer software packages work effectively with a variety of types of information technology to analyse and present information and data, as well as solve numerical problems	Environmental Analytical Methods - ESC-20032 Geographic Information Science and Remote Sensing - ESC-20132 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
use the internet as a means of communication and a source of information	All L5 modules
demonstrate competence in spatial awareness and observation	All L5 modules
conduct field and laboratory studies	Environmental Analytical Methods - ESC-20032 Geographic Information Science and Remote Sensing - ESC-20132 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
reference work in an appropriate manner	All L5 modules
work with information handling and retrieval systems using data from a wide range of sources	Environmental Analytical Methods - ESC-20032 Geographic Information Science and Remote Sensing - ESC-20132 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146
design a piece of research achievable as a third year dissertation project and applicable to the field of Environment & Sustainability; showing an ability to synthesize the research literature, select appropriate techniques for data collection and analysis, and conduct research ethically and safely	Geographic Information Science and Remote Sensing - ESC-20132 Environmental and Sustainability Impact Assessment: Methods and Research Design - ESC-20146 Human Impact on the Environment - ESC-20150
work effectively both as an individual and as part of a group or team, recognising and respecting the viewpoints of others sustain motivation to work towards a goal over an extended period of time recognise responsibilities as a local, national and international citizen	All L5 modules

## **Level 6**

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
the application of the earth-, biological and chemical sciences to environmental science;	All L6 modules

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
fundamental principles of chemistry relevant to the Environmental Sciences; the application of fundamental chemical principles to a range of applications in environmental chemistry	Natural Hazards - ESC-30009 Ecotoxicology and Risk Assessment - ESC-30056 Independent Research Dissertation - ESC-30144 Quaternary Climate Change: from Ice Ages to a Warming World - ESC-30166
the internal structure and composition of the Earth and its development since the formation of the Solar System and the evolution of Life on Earth the theory of plate tectonics, its manifestation on the Earth's current surface, and the consequences of its operation in the geological past; the three major subdivisions of rocks in terms of how they are formed and how their properties relate to environmental science issues; how rocks and geological events may be dated, both relatively and in terms of the absolute time scale;	Natural Hazards - ESC-30009 Extinction! - ESC-30106 Independent Research Dissertation - ESC-30144 Quaternary Climate Change: from Ice Ages to a Warming World - ESC-30166
the impact of human activity, particularly resource exploitation on the Earth's surface and near surface environments (using well-established principles and examples from the forefront of the discipline);	Natural Hazards - ESC-30009 Clean Technology - ESC-30040 Extinction! - ESC-30106 Professional Environmental Field Skills - ESC-30142 Independent Research Dissertation - ESC-30144 Sustainable Futures Consultancy - ESC-30148 Applied GIS - ESC-30152 Quaternary Climate Change: from Ice Ages to a Warming World - ESC-30166
integrate and apply knowledge of the biological, geological, chemical and social aspects of the fields of environmental science and sustainability; demonstrate understanding of the ideological and philosophical underpinning of different approaches to environmental and sustainability research;	All L6 modules
pressures and threats on terrestrial and aquatic ecosystems as well as the Earth's climate that are related to human activity;	Natural Hazards - ESC-30009 Clean Technology - ESC-30040 Extinction! - ESC-30106 Professional Environmental Field Skills - ESC-30142 Independent Research Dissertation - ESC-30144 Sustainable Futures Consultancy - ESC-30148 Applied GIS - ESC-30152 Quaternary Climate Change: from Ice Ages to a Warming World - ESC-30166
possible options for alternative solutions to environmental problems and their implications for nature and society;	Natural Hazards - ESC-30009 Clean Technology - ESC-30040 Extinction! - ESC-30106 Professional Environmental Field Skills - ESC-30142 Independent Research Dissertation - ESC-30144 Sustainable Futures Consultancy - ESC-30148 Applied GIS - ESC-30152 Quaternary Climate Change: from Ice Ages to a Warming World - ESC-30166
environmental management issues in a range of different environments; the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media (including soil, water, vegetation);	Clean Technology - ESC-30040 Professional Environmental Field Skills - ESC-30142 Independent Research Dissertation - ESC-30144 Sustainable Futures Consultancy - ESC-30148 Applied GIS - ESC-30152 Quaternary Climate Change: from Ice Ages to a Warming World - ESC-30166
the essential contributions of geoscience to the economic, environmental and cultural needs of Society;	All L6 modules

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
the environmental and social responsibilities of organisations including the benefits to businesses to 'green' their operation and ways this can be achieved;	Clean Technology - ESC-30040 Independent Research Dissertation - ESC-30144 Sustainable Futures Consultancy - ESC-30148 Quaternary Climate Change: from Ice Ages to a Warming World - ESC-30166
a key multidisciplinary issue/problem reflecting the student's interests at the forefront of Environmental Science.	Independent Research Dissertation - ESC-30144

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
carry out and record practical chemistry experiments relevant to the environmental sciences, including the analysis and interpretation of data generated	Ecotoxicology and Risk Assessment - ESC-30056 Independent Research Dissertation - ESC-30144
demonstrate competency in a range of skills necessary for successful study of environmental science in higher education (e.g. numeracy, IT, visual, oral and written communication)	All L6 modules
demonstrate familiarity with a range of ecological and chemical laboratory and field techniques	Professional Environmental Field Skills - ESC-30142 Independent Research Dissertation - ESC-30144 Sustainable Futures Consultancy - ESC-30148 Applied GIS - ESC-30152
collect, synthesize, evaluate and present environmental (chemical, ecological, biological) data	All L6 modules
work safely in a scientific laboratory, with awareness of standard methods and procedures and with due regard for risk assessment and relevant health and safety regulations apply relevant quantitative techniques to the analysis of environmental problems manipulate, analyze and interpret data sets relating to an area of environmental science	Ecotoxicology and Risk Assessment - ESC-30056 Independent Research Dissertation - ESC-30144
design an achievable piece of research applicable to the field of environmental science, showing an ability to synthesize and interrogate the research literature and evaluate and select appropriate techniques	Independent Research Dissertation - ESC-30144
integrate biological, geological and chemical aspects of field (and laboratory) study by preparing a report/presentation on investigations of several habitats	Independent Research Dissertation - ESC-30144
evaluate solutions to problems of managing a disturbed/degraded area	Independent Research Dissertation - ESC-30144
evaluate possible options for alternative solutions to environmental problems	All L6 modules
demonstrate familiarity with a range of field and laboratory techniques appropriate to Environmental Science investigation	Ecotoxicology and Risk Assessment - ESC-30056 Independent Research Dissertation - ESC-30144
apply theoretical knowledge and understanding of environmental science and sustainability issues to specific social, geographical and environmental contexts	All L6 modules

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
demonstrate technical appreciation of the process and application of a range of analytical techniques relevant to the analysis of the composition of different environmental media	All L6 modules
undertake effective fieldwork with due regard for safety, risk assessment, rights of access, relevant health and safety regulations and sensitivity to the impact of investigations on the environment	Professional Environmental Field Skills - ESC-30142 Independent Research Dissertation - ESC-30144
apply their own knowledge, skills and experience to an aspect of current Environmental Science research (through the use of established, analytical scientific methods, literature review, data collection and interpretation etc.) and to have developed the skills necessary to exercise own independent analysis, initiative and self-learning	Independent Research Dissertation - ESC-30144

<b>Key or Transferable Skills (graduate attributes)</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
develop effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity	All L6 modules
communication skills enabling them to communicate effectively to a variety of audiences in written, verbal and graphical forms	All L6 modules
work with numerical data using appropriate qualitative and quantitative techniques, as well as computer software packages work effectively with a variety of types of information technology to analyse and present information and data, as well as solve numerical problems	All L6 modules
use the internet as a means of communication and a source of information	All L6 modules
demonstrate competence in spatial awareness and observation	All L6 modules
conduct field and laboratory studies	Professional Environmental Field Skills - ESC-30142 Independent Research Dissertation - ESC-30144 Sustainable Futures Consultancy - ESC-30148 Applied GIS - ESC-30152
reference work in an appropriate manner	All L6 modules
work with information handling and retrieval systems using data from a wide range of sources	All L6 modules
design a piece of research achievable as a third year dissertation project and applicable to the field of Environment & Sustainability; showing an ability to synthesize the research literature, select appropriate techniques for data collection and analysis, and conduct research ethically and safely	Independent Research Dissertation - ESC-30144
work effectively both as an individual and as part of a group or team, recognising and respecting the viewpoints of others sustain motivation to work towards a goal over an extended period of time recognise responsibilities as a local, national and international citizen	All L6 modules

## **Level 7**

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
the principles and applications of cutting-edge research methodologies and techniques in the study of Environmental Sciences to an advanced level;	All L7 Modules
the context of their extended research project in relation to on-going research activity in their field of study and the wider subject area.	All L7 Modules

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
identify, engage with, and evaluate environmental information, issues and topics at the forefront of the discipline; critically evaluate current literature and complex methodologies to an advanced level in relevant areas of contemporary Environmental Science.	All L7 Modules

<b>Key or Transferable Skills (graduate attributes)</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
develop greater autonomy in the planning and implementation of tasks associated with their research project and taking responsibility for their workload.	All L7 Modules

## 9. Final and intermediate awards

Credits required for each level of academic award are as follows:

<b>MSci Environmental Sciences</b>	480 credits	You will require at least 120 credits at levels 4, 5, 6 and 7 You must accumulate at least 360 credits in your main subject (out of 480 credits overall) to graduate with a named single honours degree in this subject.
<b>BSc (Hons) Environmental Sciences</b>	360 credits	You will require at least 120 credits at levels 4, 5 and 6 You must accumulate at least 270 credits in your main subject (out of 360 credits overall), with at least 90 credits in each of the three years of study*, to graduate with a named single honours degree in this subject.  *An exemption applies for students transferring from a Combined Honours programme - see point 3.4 here: <a href="https://www.keele.ac.uk/regulations/regulationc3/">https://www.keele.ac.uk/regulations/regulationc3/</a>
<b>Diploma in Higher Education</b>	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher
<b>Certificate in Higher Education</b>	120 credits	You will require at least 120 credits at level 4 or higher

**International Year option:** in addition to the above students must pass a module covering the international year in order to graduate with a named degree including the 'international year' wording. Students who do not complete, or fail the international year, will be transferred to the three-year version of the programme.

**Work Placement Year option:** in addition to the above students must pass a non-credit bearing module covering the work placement year in order to graduate with a named degree including the 'with Work Placement Year' wording. Students who do not complete, or fail the work placement year, will be transferred to the three-year version of the programme.

## 10. How is the Programme Assessed?

The wide variety of assessment methods used on this programme at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive

feedback that helps to clarify things you did not understand and helps you to improve your performance. The following list is representative of the variety of assessment methods used on your programme:

- **Reports** require you to describe the process and progress of a scientific investigation, including engagement with and analysis of scientific data, and present this in a clear and concise format. Some technical reports may require you to make recommendations.
- **Poster presentations:** enable you to develop your communication skills and summarize the findings of your research in a clear, concise, visual and professional format. Posters may be presented in the form of a 'conference-style' presentation session whereby you give an oral summary of your work. Posters may be completed in small groups or as individuals.
- **Presentations** assess your subject knowledge and understanding. They also test your ability to work effectively as members of a team, to communicate what you know orally and visually, and to reflect on these processes as part of your own personal development.
- **Workbooks** document a range of tasks, activities and exercises undertaken in the laboratory, field, either individually or in small groups.
- **Essays** allow you to demonstrate your ability to articulate ideas clearly using argument and reasoning skills and with close reference to the contexts and critical concepts covered in the modules. Essays also develop and demonstrate research and presentation skills (including appropriate scholarly referencing).
- **Laboratory reports** - structured proformas and full lab reports are formal summaries of work carried out in the laboratory and test your understanding of the practical aspects of the programme and develop the skills necessary to enable you to present and analyse your results.
- **Class tests** taken either conventionally or online via the Keele Learning Environment (KLE) assess your subject knowledge and your ability to apply it in a more structured and focused way.
- **Dissertations** enable you to explore in depth an area of particular interest through a substantial piece of focused research and writing and test your ability to formulate and answer research questions.
- **Research proposals and portfolio** test your knowledge of different research methodologies and the limits and provisional nature of knowledge. They also enable you to demonstrate your ability to formulate research questions and to answer them using appropriate methods.
- **Group assessment:** you will work together in groups/ as a team on a specific task or problem-solving activity.
- **Literature Reviews** of other scholars' work test your ability to identify and summarise the key points of a text and to evaluate the quality of arguments and the evidence used to support them. In the case of work based on empirical research, reviews also assess your knowledge of research methodologies and your ability to make critical judgements about the appropriateness of different strategies for collecting and analysing data.
- **Projects** document a range of tasks, activities and exercises undertaken in the laboratory, field, either individually or in small groups.
- **Video blogs** are used to train your reflective, descriptive and interpretive and presentation skills.

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

## 11. Contact Time and Expected Workload

This contact time measure is intended to provide you with an indication of the type of activity you are likely to undertake during this programme. The data is compiled based on module choices and learning patterns of students on similar programmes in previous years. Every effort is made to ensure this data is a realistic representation of what you are likely to experience, but changes to programmes, teaching methods and assessment methods mean this data is representative and not specific.

Undergraduate courses at Keele contain an element of module choice; therefore, individual students will experience a different mix of contact time and assessment types dependent upon their own individual choice of modules. The figures below are an example of activities that a student may expect on your chosen course by year stage of study. Contact time includes scheduled activities such as: lecture, seminar, tutorial, project supervision, demonstration, practical classes and labs, supervised time in labs/workshop, fieldwork and external visits. The figures are based on 1,200 hours of student effort each year for full-time students.

### Activity

	<b>Scheduled learning and teaching activities</b>	<b>Guided independent Study</b>	<b>Placements</b>
<b>Year 1 (Level 4)</b>	26.8%	73.2%	0%
<b>Year 2 (Level 5)</b>	28.3%	70.4%	1.2%
<b>Year 3 (Level 6)</b>	27.3%	71.8%	1%

## 12. Accreditation

This programme is not currently accredited

## 13. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at:

<http://www.keele.ac.uk/student-agreement/>

If this programme has any exemptions, variations or additions to the University Regulations these will be detailed in an Annex at the end of this document titled 'Programme-specific regulations'.

Students should note that it is not possible to take both the Work Placement Year and International Year options.

A student who has completed a semester abroad will not normally be eligible to transfer onto the International Year option.

## 14. What are the typical admission requirements for the Programme?

See the relevant course page on the website for the admission requirements relevant to this programme:

<https://www.keele.ac.uk/study/>

### English for Academic Purposes

Please note: All new international students entering the university will provide a sample of Academic English during their registration. Using this sample, the Language Centre may allocate you to an English language module which will become compulsory. This will replace any GCP modules. *NB:* students can take an EAP module only with the approval of the English Language Programme Director and are not able to take any other Language modules in the same academic year.

English Language Modules at Level 4:

- Business - ENL-90003 Academic English for Business Students (Part 1); ENL-90004 Academic English for Business Students (2)
- Science - ENL-90013 Academic English for Science Students
- General - ENL-90006 English for Academic Purposes 2; ENL-90001 English for Academic Purposes 3; ENL-90002 English for Academic Purposes 4

English Language Modules at Level 5:

- Business - ENL-90003 Academic English for Business Students (Part 1); ENL-90004 Academic English for Business Students (2)
- Science - ENL-90013 Academic English for Science Students
- General - ENL-90006 English for Academic Purposes 2; ENL-90001 English for Academic Purposes 3; ENL-90002 English for Academic Purposes 4

English Language Modules at Level 6:

- Business - ENL-90003 Academic English for Business Students (Part 1); ENL-90004 Academic English for Business Students (2); ENL-90005 Advanced Business English Communication

- Science - ENL-90013 Academic English for Science Students
- General - ENL-90006 English for Academic Purposes 2; ENL-90001 English for Academic Purposes 3; ENL-90002 English for Academic Purposes 4

**Recognition of Prior Learning (RPL)** is considered on a case-by-case basis and those interested should contact the Programme Director. The University's guidelines on this can be found here:

<https://www.keele.ac.uk/qa/programmesandmodules/recognitionofpriorlearning/>

## 15. How are students supported on the programme?

Support for student learning on the Programme is provided in the following ways:

**Academic Mentors:** All students are allocated an Academic Mentor for the duration of their studies as part of the University's Academic Mentor system. The role of the Academic Mentor is to meet formally with their mentees at least once per semester to discuss progress and performance, to discuss profiling/ PDP, and to offer support and advice. In addition to an Academic Mentor allocated to the student, students are encouraged to seek support from any of the Environmental Science teaching and administrative staff. Students can make arrangements to see their Academic Mentor or other staff at any time and an **open-door policy** is operated by all current Environmental Science teaching staff so students can easily get in contact with staff either personally or via email or phone. There is very strong communication links between students and staff and a friendly and supportive environment throughout the Environmental Science programme.

**Use of e-learning/the Keele Learning Environment (KLE):** All modules are supported by learning materials that are accessible to students via the KLE. The School supports the University's policy on module support on the KLE.

**Health and Safety:** All students admitted to the programme are expected to read the Geography, Geology and Environment Safety Handbook. Students are required to sign an agreement that they have read this Handbook, and that they will abide by the rules and regulations governing the efficient working, safety and welfare of all members both within the University and in the field. The handbook can be accessed from:

<http://www.keele.ac.uk/eesg/handbooks/>

**Students with disabilities:** Students with disabilities or medical problems, who are admitted onto the Environmental Science degree programme, will meet with a member of the University's Disability Services department, the Environmental Science Programme Director and the School Disability Officer where appropriate, at the very start of the course in order to discuss any special requirements. Procedures will then be implemented according to the nature of the student's disability or medical problem. These procedures can range, for example, from allowing extra examination time for students diagnosed as dyslexic, to allocating additional staff or demonstrators to field classes to help students with mobility problems.

**Careers:** In addition, to the University's central Careers service there is a specific careers tutor for Environmental programmes. Students are encouraged to seek the careers tutor for any help with deciding on postgraduate programmes and funding opportunities, discussing career options, discussing option choices in relation to specific career routes, and for help and assistance in applying for jobs and placements. Within the Keele Learning Environment there is a dedicated page to careers including several subject specific careers sites.

## 16. Learning Resources

Environmental Science has its own building (the William Smith Building) that contains well-equipped laboratories and lecture theatres, and uses the state-of-the-art teaching facilities in the Central Science Laboratory building. The Office in the William Smith Building is currently open during the week from 8.45am to 5.00pm to answer student queries. Teaching on specific modules takes place elsewhere in the University (including the over 600 acres estate which we use as a 'living laboratory') when there is a need for more specialised teaching facilities allowing the Environmental Science programme to benefit from a wide range of cutting-edge teaching facilities and analytical instrumentation based elsewhere within the University. Students also have access to computing facilities within Environmental Science for individual work.

## 17. Other Learning Opportunities

### Study abroad (semester)

Students on the programme have the potential opportunity to spend a semester abroad in their second year studying at one of Keele's international partner universities.

Exactly which countries are available depends on the student's choice of degree subjects. An indicative list of countries is on the website (<http://www.keele.ac.uk/studyabroad/partneruniversities/>); however this does not guarantee the availability of study in a specific country as this is subject to the University's application process for studying abroad.

No additional tuition fees are payable for a single semester studying abroad but students do have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad to be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination.

Whilst students are studying abroad any Student Finance eligibility will continue, where applicable students may be eligible for specific travel or disability grants. Students studying in Erasmus+ destinations may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible for income dependent bursaries at Keele. Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.

### **Study Abroad (International Year)**

A summary of the International Year, which is a potential option for students after completion of year 2 (Level 5), is provided in the Annex for the International Year.

### **Work Placement Year**

Students have the opportunity to apply directly for the 4-year 'with Work Placement Year' degree programme or to transfer onto the 4-year degree programme at the end of Year-1 and in Year-2 at the end of Semester 1. Students who are initially registered for the 4-year degree programme may transfer onto the 3-year degree programme at any point in time, prior to undertaking their year-long placement. Eligibility rules are included in the Annex.

Students wishing to take the work placement year should meet with the Programme Director to obtain their signature to confirm agreement before they will be allowed to commence their placement.

International students who require a Tier 4 visa must check with the Immigration Compliance Team prior to commencing any form of placement.

A summary of the Work Placement Year, which is a potential option for students after completion of year 2 (Level 5), is provided in the Annex for the Work Placement Year.

### **Fieldwork**

Fieldwork is an essential part of an environmental scientist's training, providing both the opportunity to acquire and practice field-based skills, to develop skills of observation and recording and to work as effective members of a team. Keele is ideally located to be able to integrate a large component of field work into its environmental science programmes with a wide range of habitats in easy reach, including the Keele campus itself with its lake system and extensive woodlands, in addition to the mining and industrial heritage of the local area providing ideal opportunities for the study of the impact of these activities on the environment. The field courses in the second year provide the opportunity to investigate environmental science and management issues and environmental change within an unfamiliar environment. Students are also encouraged to make the most of other opportunities for field work with external organisations such as Operation Wallacea, which can form part of students third year independent project work.

## **18. Additional Costs**

### **Mandatory costs**

You can expect some additional costs as a student on this course, which may support learning activities, specialist equipment, fieldwork, placements, or other course-related requirements. Details of these mandatory costs are outlined below to help you plan accordingly.

### **Field Course Costs**

#### **COMPULSORY FIELD TRIPS**

All students undertake compulsory field courses as part of their studies - these are provided at no cost. The University provides significant financial support for the compulsory fieldwork elements of the degree programme and the costs of travel and accommodation for compulsory field courses are fully paid for by the University up to and including Year 2.

#### **INDEPENDENT RESEARCH PROJECT**

All students undertake an independent research project in their final year, which MAY include fieldwork. Students are responsible for organising their own transport and accommodation as well as paying any costs incurred whilst carrying out fieldwork. These costs are extremely variable as they are dependent on where the student

carries out their project. Costs are minimal if the project work is undertaken in the students' local area.

**IMPORTANT:** Students are expected to have adequate clothing for field trips. We reserve the right to change the venues of field courses due to both cost and academic considerations. Some field courses are fully or partly catered for. Others are self-catered and students are expected to purchase meals (e.g., lunch and/or evening meal).

### Optional costs

In addition to the mandatory costs listed below, there may be optional costs that students can choose to incur to enhance their learning experience. These are not required to complete the course. Details of these optional costs are outlined below to help you plan accordingly.

Optional international field course: £700 plus subsistence costs for lunches and dinners (estimated at £35 per day).

Activity	Estimated Cost
<b>Mandatory costs</b>	
Compulsory field courses (levels 4 and 5)	£0
Compulsory field courses (levels 4 and 5) - approx. £35 a day to cover subsistence costs for lunches and dinners.	£35 per day
Equipment: Waterproof and appropriate clothing and footwear for field courses	£200
Field Notebook(s):	£30
<b>Optional costs</b>	
Optional international field course:	£700
Optional international field course - £700 plus subsistence costs for lunches and dinners (estimated at £35 per day):	£35 per day
<b>Total estimated additional costs:</b>	<b>£475 - £1,420</b>

These costs have been forecast by the University as accurately as possible but may be subject to change as a result of factors outside of our control (for example, increase in costs for external services). Forecast costs are reviewed on an annual basis to ensure they remain representative. Where additional costs are in direct control of the University we will ensure increases do not exceed 5%.

Students may also incur general expenses related to university study, such as for printing, textbooks and other materials. Students who undertake a placement may be responsible for additional costs, such as travel, accommodation, and subsistence costs. For further information, please refer to the [additional costs](#) information.

## 19. Quality management and enhancement

The quality and standards of learning in this programme are subject to a continuous process of monitoring, review and enhancement.

- The School Education Committee is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of the academic year.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Revalidation process.

Student evaluation of, and feedback on, the quality of learning on every module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to module leaders and reviewed by the Programme Committee as part of annual programme review.
- Findings related to the programme from the annual National Student Survey (NSS), and from regular surveys of the student experience conducted by the University, are subjected to careful analysis and a planned response at programme and School level.

- Feedback received from representatives of students in all three years of the programme is considered and acted on at regular meetings of the Student Staff Voice Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all marks which contribute to a student's degree
- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here:

<http://www.keele.ac.uk/qa/externalexaminers/currentexternalexaminers/>

## 20. The principles of programme design

The programme described in this document has been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

**a.** UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education:

<http://www.qaa.ac.uk/quality-code>

**b.** QAA Subject Benchmark Statement: Earth Sciences, Environmental Sciences and Environmental Studies:

<https://www.qaa.ac.uk/the-quality-code/subject-benchmark-statements/earth-sciences-environmental-science-and-environmental-studies>

**c.** Keele University Regulations and Guidance for Students and Staff: <http://www.keele.ac.uk/regulations>

**d.** Accreditation guidelines of the Institution of Environmental Sciences: <https://www.the-ies.org/accreditation>

## 21. Annex - International Year

### BSc (Hons) Environmental Science with International Year

<p><b>International Year Programme</b></p> <p>Students registered for this Single Honours programme may either be admitted for or apply to transfer during their period of study at Level 5 to the International Year option. Students accepted onto this option will have an extra year of study (the International Year) at an international partner institution after they have completed Year 2 (Level 5) at Keele.</p> <p>Students who successfully complete both the second year (Level 5) and the International Year will be permitted to progress to Level 6. Students who fail to satisfy the examiners in respect of the International Year will normally revert to the standard programme and progress to Level 6 on that basis. The failure will be recorded on the student's final transcript.</p> <p>Study at Level 4, Level 5 and Level 6 will be as per the main body of this document. The additional detail contained in this annex will pertain solely to students registered for the International Year option.</p>
<p><b>International Year Programme Aims</b></p> <p>In addition to the programme aims specified in the main body of this document, the international year programme of study aims to provide students with:</p> <ol style="list-style-type: none"> <li>1. Personal development as a student and a researcher with an appreciation of the international dimension of their subject</li> <li>2. Experience of a different culture, academically, professionally and socially</li> </ol>
<p><b>Entry Requirements for the International Year</b></p>

Students may apply to the 4-year programme during Level 5. Admission to the International Year is subject to successful application, interview and references from appropriate staff.

The criteria to be applied are:

- Academic Performance (an average of 55% across all modules in Semester 1 at Level 5 is normally required. Places on the International Year are then conditional on achieving an average mark of 55% across all Level 5 modules. Students with up to 15 credits of re-assessment who meet the 55% requirement may progress to the International Year. Where no Semester 1 marks have been awarded performance in 1st year marks and ongoing 2nd year assessments are taken into account)
- General Aptitude (to be demonstrated by application for study abroad, interview during the 2nd semester of year 2 (Level 5), and by recommendation of the student's Academic Mentor, 1st and 2nd year tutors and programme director)

Students may not register for both an International Year and a Placement Year.

### **Student Support**

Students will be supported whilst on the International Year via the following methods:

- Phone or Skype conversations with Study Abroad tutor, in line with recommended Academic Mentoring meeting points.
- Support from the University's Global Education Team

### **Learning Outcomes**

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete a Keele undergraduate programme with International Year will be able to:

1. Describe, discuss and reflect upon the cultural and international differences and similarities of different learning environments
2. Discuss the benefits and challenges of global citizenship and internationalisation
3. Explain how their perspective on their academic discipline has been influenced by locating it within an international setting.
4. Apply their experiences abroad to the specific Graduate Attributes associated with their Environmental Science degree programme;
5. Integrate, apply and develop fundamental environmental science principles to describe and explain phenomena and solve problems in the context of selected topics within contemporary Environmental Science.

These learning outcomes will all be assessed by the submission of a satisfactory individual learning agreement, the successful completion of assessments at the partner institution and the submission of the reflective portfolio element of the international year module.

### **Regulations**

Students registered for the International Year are subject to the programme-specific regulations (if any) and the University regulations. In addition, during the International Year, the following regulations will apply:

Students undertaking the International Year must complete 120 credits, which must comprise *at least 40%* in the student's discipline area.

This may impact on your choice of modules to study, for example you will have to choose certain modules to ensure you have the discipline specific credits required.

Students are barred from studying any module with significant overlap to the Level 6 modules they will study on their return. Significant overlap with Level 5 modules previously studied should also be avoided.

### **Additional costs for the International Year**

Tuition fees for students on the International Year will be charged at 15% of the annual tuition fees for that year of study, as set out in Section 1. The International Year can be included in your Student Finance allocation, to find out more about your personal eligibility see: [www.gov.uk](http://www.gov.uk)

Students will have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination.

Students who meet external eligibility criteria may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible income dependent bursaries at Keele.

Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some Governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.

## 22. Annex - Work Placement Year

### BSc (Hons) Environmental Science with Work Placement Year

#### Work Placement Year summary

Students registered for this programme may either be admitted for or apply to transfer during their studies to the 'with Work Placement Year' option (NB: for Combined Honours students the rules relating to the work placement year in the subject where the placement is organised are to be followed). Students accepted onto this programme will have an extra year of study (the Work Placement Year) with a relevant placement provider after they have completed Year 2 (Level 5) at Keele.

Students who successfully complete both the second year (Level 5) and the Work Placement Year will be permitted to progress to Level 6. Students who fail to satisfactorily complete the Work Placement Year will normally revert to the 3-year programme and progress to Level 6 on that basis. The failure will be recorded on the student's final transcript.

Study at Level 4, Level 5 and Level 6 will be as per the main body of this document. The additional detail contained in this annex will pertain solely to students registered for the Work Placement Year option.

#### Work Placement Year Programme Aims

In addition to the programme aims specified in the main body of this document, the Work Placement Year aims to provide students with:

1. Substantial experience of work with a relevant placement provider, including familiarisation with the professional working environment.
2. The opportunity to apply academic theory to real situations in the work place and to expand your employability skills.

#### Entry Requirements for the Work Placement Year

Admission to the Work Placement Year is subject to successful application, interview and references from appropriate staff. Students have the opportunity to apply directly for the 4-year 'with work placement year' degree programme, or to transfer onto the 4-year programme at the end of Year-1 and in Year-2 at the end of Semester 1. Students who are initially registered for the 4-year degree programme may transfer onto the 3-year degree programme at any point in time, prior to undertaking the year-long work placement. Students who fail to pass the work placement year, and those who fail to meet the minimum requirements of the work placement year module, (\* or equivalent, work placement), will be automatically transferred onto the 3-year degree programme.

\* We recommend where possible students undertake a placement of between 9 - 12 months on a full-time basis to maximize academic and personal growth. However, the Work Placement Year mandates a minimum of 24 weeks in duration, ideally on a full-time basis, but no less than 21 hours per week. This enables those undertaking an unpaid placement to work on a part-time basis alongside.

The criteria to be applied are:

- A good University attendance record and be in 'good academic standing'.
- Academic Performance (an average of 50% across all modules in Semester 1 at Level 5 is normally required. Places on the Work Placement Year are then conditional on achieving an average mark of 50% across all Level 5 modules. Students with up to 15 credits of re-assessment who meet the 50% requirement may progress to the Work Placement Year. Where no Semester 1 marks have been awarded performance in 1st year marks and ongoing 2nd year assessments are taken into account).
- Students undertaking work placements will be expected to complete a Health and Safety checklist prior to commencing their work experience and will be required to satisfy the Health and Safety regulations of the company or organisation at which they are based.
- (*International students only*) Due to visa requirements, it is not possible for international students who require a Tier 4 Visa to apply for direct entry onto the 4-year with Work Placement Year degree programme. Students wishing to transfer onto this programme should discuss this with student support, the academic tutor for the work placement year, and the Programme Lead. Students should be aware that there are visa implications for this transfer, and it is the student's responsibility to complete any and all necessary processes to be eligible for this programme. There may be additional costs, including applying for a new Visa from outside of the UK for international students associated with a transfer to the work placement programme.

Students may not register for both an International Year and a Work Placement Year.

## **Student Support**

Students will be supported whilst on the Work Placement Year via the following methods:

- Regular contact between the student and a named member of staff who will be assigned to the student as their University supervisor. The University supervisor will be in regular contact with the student throughout the year, and be on hand to provide advice (pastoral or academic) and liaise with the Placement supervisor on the student's behalf if required.
- Two formal contacts with the student during the placement year: the University supervisor will visit the student in their placement organization at around 5 weeks after the placement has commenced, and then visit again (or conduct a telephone/video call tutorial) at around 15 weeks into the placement.
- Weekly supervision sessions will take place with the placement supervisor (or his/her nominee) throughout the duration of the placement.

## **Learning Outcomes**

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete the 'with Work Placement Year' option will be able to:

1. Evaluate their own employability skills.
2. Create Intended Learning Outcomes for their placement in order to develop the skills areas which they have identified as needing further enhancement.
3. Develop, through practice in the work place, the work-related skills identified in 1 and 2 above.
4. Apply academic theory learned as part of their taught degree to real situations in the workplace.
5. Reflect on their work placement activities and evaluate the impact on their own employability skills.
6. Explain how the sector of the placement operates and identify the skills required to pursue careers within the sector.

These learning outcomes will be assessed through the non-credit bearing Work Placement Year module (NAT-30010) which involves:

1. Submission of a mid-placement portfolio comprising evaluation of employability skills and ILOs, action plan and an evaluation of the student's performance based on the placement supervisor's initial report.
2. Submission of a final placement report comprising a reflective diary and an evaluation of the their performance based on the placement supervisor's final report.

## **Regulations**

Students registered for the 'with Work Placement Year' option are subject to programme-specific regulations (if any) and the University regulations. In addition, during the Work Placement Year, the following regulations will apply:

- Students undertaking the Work Placement Year must successfully complete the zero-credit rated 'Work Placement Year' module (NAT-30010)
- In order to ensure a high quality placement experience, each placement agency will sign up to a placement contract (analogous to a service level agreement).
- Once a student has been accepted by a placement organisation, the student will make a pre-placement visit and a member of staff identified within the placement contract will be assigned as the placement supervisor. The placement supervisor will be responsible for ensuring that the placement experience meets the agreed contract agreed with the University.
- The placement student will also sign up an agreement outlining his/her responsibilities in relation to the requirements of each organisation.

Students will be expected to behave professionally in terms of:

(i) conforming to the work practices of the organisation; and

(ii) remembering that they are representatives of the University and their actions will reflect on the School and have an impact on that organisation's willingness (or otherwise) to remain engaged with the placement.

## **Additional costs for the Work Placement Year**

Tuition fees for students on the Work Placement Year will be charged at 20% of the annual tuition fees for that year of study, as set out in Section 1. The Work Placement Year can be included in your Student Finance allocation; to find out more about your personal eligibility see: [www.gov.uk](http://www.gov.uk)

Students will have to bear the costs of travelling to and from their placement provider, accommodation, food and personal costs. Depending on the placement provider additional costs may include parking permits, travel and transport, suitable clothing, DBS checks, and compulsory health checks.

A small stipend may be available to students from the placement provider during the placement but this will need to be explored on a placement-by-placement basis as some organisations, such as charities, may not have any extra money available. Students should budget with the assumption that their placement will be unpaid.

Eligibility for student finance will depend on the type of placement and whether it is paid or not. If it is paid, this is likely to affect student finance eligibility, however if it is voluntary and therefore unpaid, should not affect student finance eligibility. Students are required to confirm eligibility with their student finance provider.

International students who require a Tier 4 visa should check with the Immigration Compliance team prior to commencing any type of paid placement to ensure that they are not contravening their visa requirements.

## 23. Annex - Programme-specific regulations

### Programme Regulations: Environmental Science

<b>Final Award and Award Titles</b>	BSc (Hons) Environmental Science BSc (Hons) Environmental Science with International Year BSc (Hons) Environmental Science with Work Placement Year
<b>Intermediate Award(s)</b>	Diploma in Higher Education Certificate in Higher Education
<b>Last modified</b>	January 2025
<b>Programme Specification</b>	<a href="https://www.keele.ac.uk/qa/programmespecifications">https://www.keele.ac.uk/qa/programmespecifications</a>

The University's Academic Regulations which can be found on the Keele University website (<https://www.keele.ac.uk/regulations/>)[1] apply to and regulate the programme, other than in instances where the specific programme regulations listed below over-ride them. These programme regulations list:

- *Exemptions* which are characterised by the omission of the relevant regulation.
- *Variations* which are characterised by the replacement of part of the regulation with alternative wording.
- *Additional Requirements* which set out what additional rules that apply to students in relation to this programme.

The following **exemptions, variations** and **additional requirements** to the University regulations have been checked by Academic Services and have been approved by the Faculty Education Committee.

#### A) EXEMPTIONS

The clause(s) listed below describe where an exemption from the University's Academic Regulations exists:

For the whole duration of their studies, students on this Programme are exempt from the following regulations:

- **No exemptions apply.**

#### B) VARIATIONS

The clause(s) listed below describe where a variation from the University's Academic Regulations exists:

##### **Variation 1: Re-assessment and alternative assessment of missed work**

This programme varies from Regulation C3.12.

Reassessment, or alternative work to replace a missed assessment supported by exceptional circumstances, may sometimes take a different form from the original assessment where it is not feasible to recreate the original circumstances of assessment, for example in the case of fieldwork, group work or peer-assessed activities. Appropriate alternative assessments may be substituted in these situations. Where fieldwork is missed and supported by exceptional circumstances where appropriate students may be given the option of taking the field course the following year or completing alternative assessment.

#### **Additional Requirements**

The programme requirements listed below are in addition to the University's Academic Regulations:

### **Additional requirement 1: Attendance requirements**

Students are required to attend all practical classes, tutorials, seminars, field courses and lectures. Attendance at all these sessions is monitored and checked by the academic support staff. Any absences due to exceptional circumstances should be notified as soon as possible to the School Office who will then pass on this information to tutors, as necessary. Any exceptional circumstances must be notified using the appropriate form following University regulations. Students who display a poor attendance record for no good reason are likely to be subject to disciplinary action. In addition, when taking modules from subjects other than those in the School of Life Sciences students must inform themselves of, and abide by, any additional attendance and notification requirements of that particular School. Self-certification of illness as a reason for absence from compulsory classes will be accepted for no more than three occasions per Semester. Any subsequent absence for reasons of illness must be accompanied by a doctor's note.

Individual modules within the Environmental Science programmes have specific attendance regulations:

#### ***Life Science (LSC) module attendance***

Attendance at practical classes, tutorials and seminars is compulsory in the School of Life Sciences. Registers will be taken at all compulsory sessions. It is the student's responsibility to ensure that they are recorded on the register as present. The office should be contacted by telephone on (01782) 733028 or (01782) 733677 or by e-mail at [lifesci-office@keele.ac.uk](mailto:lifesci-office@keele.ac.uk) as soon as possible to report an absence.

Failure to attend one compulsory session without good cause will result in an informal warning letter from the year tutor. Failure to attend any subsequent sessions without good cause will lead to the issuing of a formal warning from the Head of School. A maximum of two formal warnings will be issued and a fourth absence will result in a 3rd and final warning from the Director of Academic Services, which could result in the requirement to **withdraw** from the University.

The following School (Life Sciences) regulations will also apply:

- A student who is absent without good cause from 50% or more of the compulsory sessions in any module may be deemed to have failed the module.
- Self-certification of illness as a reason for absence from compulsory classes will be accepted for no more than two classes per module. Any subsequent absence for reasons of illness must be accompanied by a doctor's note.

### **Additional requirement 2: Regulations governing fieldwork**

Students are expected to read the online Safety Handbook at registration in Year 1. Students are required to sign an agreement that they have read the Safety Handbook, and that they will abide by the rules and regulations governing the efficient working, safety and welfare of all members both within the School and in the field

Students are required to follow all instructions provided by course staff within the Safety and Field Course Handbooks and in person in the field. This includes instructions given by postgraduate demonstrators. Students must make staff aware of any pre-existing medical conditions or other issues that may be relevant to field course safety prior to attending the field course.

Students, who by thoughtless actions or rowdy behaviour put the course, other students and the reputation of the University in jeopardy, will be immediately sent home to face disciplinary procedures by the University. Additionally, they will be required to attend the next scheduled field course as a re-assessment and at their own expense. Examples of serious misconduct include: wilful damage to property, injury to persons, ingestion of alcohol or illegal substances in the field so as to endanger themselves or other members of the course, improper use of safety equipment and/or failure to attend commitments.

### **Additional requirement 3: Form and submission of in-course assessments**

The form and submission of coursework are determined by module leaders and announced in module documentation. Unless otherwise stated, work should be word processed. Students must familiarise themselves with the module documentation for information about how specific coursework assessments should be submitted. When taking modules from subjects other than those from within Life Sciences, students must inform themselves of, and abide by, the assessment and submission requirements of that School.

In the absence of agreed exceptional circumstances, work submitted late but within one week of the deadline will be marked to a maximum of 40%. Work submitted more than one week late will be given a mark of zero. Requests for extensions to deadlines should be made to the relevant module tutor and the Programme Director in advance of the coursework deadline using the University's exceptional circumstances online system.

Marks indicated on returned work are provisional and subject to change until ratified by the appropriate examination board. Although marked assignments are returned to students to provide feedback, any work that counts towards the final degree result has to be made available for consultation by the External Examiner at the end of the programme. Students must be in a position to be able to resubmit work in good condition when

required by the School.

#### **Additional requirement 4: Field work expenses**

Fieldwork is a compulsory part of the Environmental Science degree programme and forms components of assessed modules. The University provides significant financial support for the compulsory fieldwork elements of the degree programme and the costs of travel and accommodation for compulsory field courses are fully paid for by the University up to and including Year 2.

ALL Environmental Science students undertake an independent research project in their final year, which MAY include fieldwork. Students are responsible for organising their own transport and accommodation as well as paying any costs incurred whilst carrying out fieldwork. These costs are extremely variable as they are dependent on where the student carries out their project. Costs are minimal if the project work is undertaken in the students' local area.

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[1] References to University Regulations in this document apply to the content of the University's Regulatory Framework as set out on the University website here <https://www.keele.ac.uk/regulations/>.

## **Version History**

### **This document**

**Date Approved:** 20 March 2026

### **Previous documents**

<b>Version No</b>	<b>Year</b>	<b>Owner</b>	<b>Date Approved</b>	<b>Summary of and rationale for changes</b>
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