

Programme Specification

BSc Environmental Science

For students entering Part 1 in September 2024

UCAS Code: F851

UFENVSC

UFENVSCWX

This document sets out key information about your Programme and forms part of your Terms and Conditions with the University of Reading.

Awarding Institution	University of Reading
Teaching Institution	University of Reading
Length of Programme	3 years
Length of Programme with placement/year abroad	BSc Environmental Science with Professional Experience - 4 years (UCAS Code: F852)
Accreditation	Accredited by the Institution of Environmental Sciences (IES)
QAA Subject Benchmarking Group	Earth Sciences, Environmental Sciences and Environmental Studies (ES3)

Programme information and content

The programme aims to provide you with a sound scientific understanding of the processes operating in the Earth system, and the skills to monitor, model, and manage these processes in the context of current and future environmental issues. A strong emphasis is placed on developing Laboratory, Fieldwork, Data Science, and Teamwork skills. The programme also aims to provide you with the transferable skills required for a career in the environmental sector.

Part 1:	Part 1 introduces you to the discipline of Environmental Science, with an emphasis on building Laboratory, Fieldwork, Data Science, and Teamwork skills. You will develop your skills and consolidate your understanding of core themes and techniques, in Geography and Environmental Science. You will apply this core knowledge and skills to the interdisciplinary study of Global Challenges. A diverse range of optional module are available from departments across the University, including the opportunity to learn a language.
Part 2:	Part 2 provides you with opportunities to further develop your Laboratory, Fieldwork, and Teamwork skills, with particular emphasis on applying your understanding of key environmental processes to undertake environmental consultancy style team projects and field-based activities. Optional modules are designed to give you more detailed subject-specific knowledge and technical skills in specific areas of environmental science. You will prepare to undertake an independent research project during the final year of your programme.

Placement/Study abroad year:	The programme includes a placement year between Part 2 and Part 3 of the programme. If you are on the 3-year programme, then you can transfer to the 4-year programme. You will acquire the transferable skills demanded by graduate employers and, on return to university, be better informed about future career paths. The placement year should not normally be shorter than nine months full-time.
Part 3:	Part 3 gives you the opportunity to specialise by selecting from a wide range of specialist subject modules. You will also apply the skills acquired throughout the programme by conducting an original and independent research project.

Programme Learning Outcomes - BSc Environmental Science

During the course of the Programme, you will have the opportunity to develop a range of skills, knowledge and attributes (known as learning outcomes) For this programme, these are:

	Learning outcomes
1	Demonstrate knowledge and understanding of key processes operating in the Earth System, including the lithosphere, hydrosphere, atmosphere and biosphere
2	Convey the importance of temporal and spatial scales for comprehending natural and anthropogenic impacts on the environment and ecosystems
3	Use academic literature to support critical discussions of pertinent environmental and sustainable development issues
4	Plan and conduct inclusive fieldwork and laboratory investigations competently, ethically, and safely
5	Critically interpret and evaluate environmental information within the context of academic literature and other sources of information
6	Use geospatial technologies to visualise, interrogate, and analyse spatial information
7	Plan, conduct, and report the outcome of an independent scientific investigation
8	Communicate effectively with a variety of audiences using a range of formats and media
9	Work effectively within a multidisciplinary and multicultural team, demonstrating behaviours that support equality, diversity, and inclusion
10	Apply scientific concepts, techniques and expertise to problem solving

You will be expected to engage in learning activities to achieve these Programme learning outcomes. Assessment of your modules will reflect these learning outcomes and test how far you have met the requirements for your degree.

To pass the Programme, you will be required to meet the progression or accreditation and award criteria set out below.

Module information

Each part comprises 120 credits, allocated across a range of compulsory and optional modules as shown below. Compulsory modules are listed.

Part 1 Modules:

Module	Name	Credits	Level
GV1DEN	Data Environment	20	4
GV1EL	Earth Lab	20	4
GV1FC	Geography and Environmental Science Field Class	20	4
GV1GC	Global Challenges: a Planet in Crisis	20	4
GV1SKL	Skills in Geography and Environmental Science	20	4

Remaining credits will be made up of optional modules available in the Department of Geography and Environmental Science or modules from an approved list.

Part 2 Modules:

Module	Name	Credits	Level
GV2ED	Environmental Diagnostics	20	5
GV2FLD	Field Class	20	5
GV2STP	Skills Training and Project Design	20	5

Remaining credits will be made up of optional modules available in the Department of Geography and Environmental Science or modules from an approved list.

Modules during a placement year or study year (if applicable):

Module	Name	Credits	Level
GV2PPY	Professional Placement Year	120	5

If you take a year-long placement or study abroad, Part 3 as described below may be subject to variation.

Part 3 Modules:

Module	Name	Credits	Level
GV3GED	Geography & Environmental Science Dissertation	40	6

Remaining credits will be made up of optional modules available in the Department of Geography and Environmental Science or modules from an approved list.

Placement opportunities**Placements:**

You may be provided with the opportunity to undertake a credit-bearing placement as part of your Programme. This will form all or part of an optional module. You will be required to find and secure a placement opportunity, with the support of the University

Study Abroad:

You may be provided with the opportunity to undertake a Study Abroad placement during your Programme. This is subject to you meeting academic conditions detailed in the Programme Handbook, including obtaining the relevant permissions from your School, and the availability of a suitable Study Abroad placement. If you undertake a Study Abroad placement, further arrangements will be discussed and agreed with you.

Optional modules:

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your programme can be found online in the Course Catalogue. Details of optional modules for each part, including any additional costs associated with the optional modules, will be made available to you prior to the beginning of the Part in which they are to be taken and you will be given an opportunity to express interest in the optional modules that you would like to take. Entry to optional modules will be at the discretion of the University and subject to availability and may be subject to pre-requisites, such as completion of another module. Although the University tries to ensure you are able to take the optional modules in which you have expressed interest this cannot be guaranteed.

Teaching and learning delivery:

Inclusive experiential learning is at the heart of the teaching and learning in Environmental Science. A strong emphasis is placed on developing Laboratory, Fieldwork, Data Science, and Teamwork skills. As an Environmental Science student, you will develop these skills during scheduled teaching and learning activities such as interactive lectures, laboratory practical classes, computer practical classes, residential field classes, external visits, and field trips. The skills will be further strengthened through self-scheduled teaching and learning activities and guided independent study to support group projects and independent research.

You will typically acquire knowledge of key environmental processes through pre-class reading and viewing pre-recorded screencasts so that you can apply this knowledge within interactive lectures or practical sessions. You will then consolidate this knowledge and strengthen your understanding of contemporary environmental issues through further guided independent study, including engagement with academic literature.

You will learn transferable skills for study and continuing professional development through practical exercises and peer support. Employability skills are built and embedded throughout the programme through engagement with employers, activities that reflect the tasks undertaken by professionals, authentic assessment, and the support and encouragement to undertake a professional placement in industry. You also have the opportunity to study abroad at one of our overseas partner universities during Part 3.

You will develop your fieldwork, laboratory, and data science skills through residential field classes and dedicated practical sessions in the laboratory or computer room. You will collect, process, analyse, and interpret environmental data within the context of pertinent environmental and sustainable development issues. You will learn how to conduct scientific investigations competently, ethically, and safely by first following and then later creating laboratory protocols, research ethics submissions, and risk assessments.

You will undertake projects to address key environmental challenges first as a member of a group, supported by staff, but with increasing degrees of independence as you progress through the programme. You will receive training on how to support equality, diversity, and inclusion while working in multidisciplinary and multicultural teams alongside subject specific disciplinary skills. The research and enquiry skills you acquire by participating in team projects during Part 1 and Part 2 will prepare you to undertake an independent research project, supervised by a member of staff, in the final year. Both group work and independent research projects are supported by meetings with staff to support planning and provide verbal feedback.

Elements of your programme will be delivered via digital technology.

The scheduled teaching and learning activity hours and amount of technology enhanced learning activity for your programme will depend upon your module combination. In addition, you will undertake some self-scheduled teaching and learning activities, designed by and/or involving staff, which give some flexibility for you to choose when to complete them. You will also be expected to undertake guided independent study. Information about module study hours including contact hours and the amount of independent study which a student is normally expected to undertake for a module is indicated in the relevant module description.

Accreditation details

The BSc Environmental Science programme is Accredited by the Institution of Environmental Sciences (IES)

Assessment

A diverse range of assignment types are adopted to assess the progress and attainment of BSc Environmental Science students. These assignment types include the assessment of knowledge by answering both closed and open-ended questions, the authoring of laboratory and field reports, undertaking practical exercises and keeping field and laboratory notebooks, and communicating the findings of scientific investigations to a range of specialist and lay audiences using a range of multimedia. Further information is contained in the individual module descriptions.

Progression

Part 1

To achieve a threshold performance at Part 1, a student will normally be required to:

- (i) Obtain an overall average of 40% over 120 credits taken in Part 1;
- (ii) Obtain a mark of at least 40% in individual modules amounting to not less than 80 credits taken in Part 1; and
- (iii) Obtain marks of at least 30% in modules amounting to 120 credits.

In order to progress from Part 1 to Part 2, a student must achieve a threshold performance.

The achievement of a threshold performance at Part 1 qualifies a student for a Certificate of Higher Education if they leave the University before completing the subsequent Part.

Transferring from a Joint Honours to a Single Honours programme

Students are able to transfer from a Joint Honours to a Single Honours programme in one of their joint subject areas at the end of Part 1, subject to fulfilling the Part 1 University Threshold Standard, achieving marks of at least 40% in at least 40 credits of modules in the subject to which they wish to transfer, and fulfilling any programme-specific progression rules for the Part 1 Single Honours Programme to which they wish to transfer.

Students who transfer from a Joint Honours to a Single Honours programme may not have taken all of the Part 1 modules listed in the Single Honours Programme Specification. The modules which they have taken will be shown on their Diploma Supplement.

Part 2

To achieve a threshold performance at Part 2, a student shall normally be required to:

- (i) Obtain a weighted average of 40% over 120 credits taken in Part 2; and
- (ii) Obtain marks of at least 40% in individual modules amounting to at least 80 credits taken in Part 2; and
- (iii) Obtain marks of at least 30% in individual modules amounting to at least 120 credits, except that a mark below 30% may be condoned in no more than 20 credits of modules owned by the Department of Mathematics and Statistics.

In order to progress from Part 2 to Part 3, a student must achieve a threshold performance.

The achievement of a threshold performance at Part 2 qualifies a student for a Diploma of Higher Education if they leave the University before completing the subsequent Part.

Professional/placement year

Students are required to pass the professional placement year/study abroad year in order to progress on the programme which incorporates the professional placement year/study abroad year. Students who fail the professional placement year/study abroad year transfer to the non-placement year version of the programme.

Classification

Bachelors' degrees

The University's honours classification scheme is based on the following:

Mark Interpretation

70% - 100% First class

60% - 69% Upper Second class

50% - 59% Lower Second class

40% - 49% Third class

35% - 39% Below Honours Standard

0% - 34% Fail

The weighting of the Parts/Years in the calculation of the degree classification is:

Three year programmes:

Part 2: one-third

Part 3: two-thirds

Four year programmes, including study abroad

Part 2: one-third

Study abroad: Year abroad not included in the classification

Part 3: two-thirds

The classification method is given in detail in: Bachelor's (for cohorts entering in 2022/23 and onwards) (see, in particular, section 17.5 and, for variants on the main method, Annex 1)

Additional costs of the programme

Our compulsory Part 1 and Part 2 field trips are free of charge, with all accommodation, travel and activity entry costs covered by the School (where relevant). The Part 2 residential field class is run on a Bed and Breakfast basis. You will therefore need to budget in advance to purchase your own lunch, dinner and to cover any evening activities you may choose to do during the week.

For all field classes you will be expected to be equipped with suitable outdoor clothing (waterproof jacket and trousers) and footwear. Information relating to the specific requirements for each trip location will be available in the module description.

Depending on your module choices, you may select a non-compulsory Part 3 field class, which will require a financial contribution of approximately £1100 to cover travel and accommodation costs. The final cost will be dependent on the destination and costs calculated at the time of booking, which will be linked to inflation rates.

All compulsory resources including textbooks and electronic resources are freely available via the library where there are extensive collections to support your curriculum. Reading lists and module-specific requirements for any other classroom and external activities are listed on the individual module descriptions. Our Digital Technology Services ensure that critical software is available via University computer rooms and where possible via our

Cloud paging platform AppsAnywhere. There may be bursaries and other financial support available to help students in financial difficulty, however eligibility will be dependent on individual circumstances.

Costs are indicative and may vary according to optional modules chosen and are subject to inflation and other price fluctuations. Estimates were calculated in 2023.

For further information about your Programme please refer to the Programme Handbook and the relevant module descriptions, which are available at <http://www.reading.ac.uk/module/>. The Programme Handbook and the relevant module descriptions do not form part of your Terms and Conditions with the University of Reading.

BSc Environmental Science for students entering Part 1 in session 2024/25

28 June 2023

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