

Plymouth University

Faculty of Science and Engineering

Programme Specification

**BSc (Hons) Environmental Science with Foundation
Year - 5475**

September 2021

1.0 BSc (Hons) Environmental Science with Foundation Year

Final award title; the final award title is that of the programme to which the student progresses for Levels 4 to 6.

For students entering the BSc (Hons) Environmental Science with Foundation Year, normally this will be

BSc (Hons) Environmental Science
BSc (Hons) Environmental Management and Sustainability

UCAS code F850

JACS code F753

2.0 Awarding Institution Plymouth University

Teaching Institutions Plymouth University

3.0 Accrediting body

None

4.0 Distinctive features of the Programme and the Student Experience

This is a four-year BSc (Hons) degree programme starting at Year Zero. It is one of a suite of such programmes, designed for students who are not appropriately qualified, in subject knowledge, attainment or recent experience, for entry to Level 4 of undergraduate programmes in Science. On successful completion of Year Zero, students progress to Level 4 of an undergraduate degree in Science. Students completing the BSc (Hons) Environmental Science with Foundation Year programme will normally progress to BSc (Hons) Environmental Science, in the School of Geography, Earth and Environmental Sciences.

Distinctive features of this programme are that it:

- is suitable for non-standard entrants, including mature returners to study, those without Science qualifications or with Science qualifications below the standard required for entry to Level 4
- assumes no prior knowledge of science and welcomes applications from those who have studied other disciplines.
- is recognised nationally as excellent, allowing more than 2500 students to enter Higher Education in its 25 years of operation
- provides a choice of specialisms, in chemistry, biology and mathematics, as preparation for progression to undergraduate programmes in Environmental Science

- provides a high proportion of experiential work in field or lab, and intensive and early assessment, with rapid feedback designed to support learning
- provides personal support for learning through regular meetings with your personal tutor and input from specialist staff in Environmental Science
- provides English language support for overseas students in core modules
- is underpinned by research activity of staff, in Environmental Sciences and particularly in the pedagogy of science disciplines

5.0 Relevant QAA Benchmark Groups

The programme is devised with reference to the subject benchmarks of the discipline to which students will progress to complete their degree. For the BSc (Hons) Environmental Science with Foundation Year the relevant benchmark is:

[Earth Science, Environmental Science and Environmental Studies](#)

6.0 Programme structure

The programme structure is described diagrammatically below.

In Semester 1, students take the compulsory module GEES001 *Study and mathematical skills for science*, and two science modules, one in Chemistry, and one in Biology.

In Semester 2, students take the core module ENVS001 *Environmental Science*. Students also select two disciplines from Biology, Chemistry and Mathematics. To continue studying Biology or Chemistry students must have taken the corresponding module in Semester 1.

Semester 1 (all modules are 20 credits)

Compulsory modules		
*GEES001 Study and mathematical skills for science	BIO012 Biology 1	CHM009 Chemistry 1

*GEES001 is not compensatable in this programme

Semester 2 (all modules are 20 credits)

Compulsory modules	Students select two modules from:		
GLY007 Fundamentals of Geoscience	BIO013 Biology 2 Prerequisite BIO012	CHM010 Chemistry Prerequisite CHM009	MATH019 Mathematics and statistics for science

7.0 Programme Aims

The aims shown below are those for the Level Zero element of this programme. They should be read in conjunction with the aims of the BSc (Hons) programmes available to you in [Environmental Science](#) to show the full scope of our ambitions for you.

The aims of the Level Zero programme are to:

- 7.1 produce students who have a broad yet comprehensive understanding of the fundamentals of science that are necessary for successful progression to and in an honours degree programme in Environmental Science
- 7.2 develop in students the ability to apply scientific knowledge and skills appropriately and successfully in undergraduate studies
- 7.3 equip students with the study skills necessary to successfully progress to and in an honours degree programme in Environmental Science
- 7.4 enable students to become confident, critically self-aware independent learners.
- 7.5 begin to develop in students a range of key and transferable skills of value in the world of employment, including skills in the areas of communication, problem-solving, team-working, information-handling and processing.

- 7.6 prepare students for and initiate students into the culture of University-level study, both in terms of the academic standards and the study patterns required.

8. Intended programme learning outcomes (ILOs)

The intended learning outcomes shown below are those for the Level Zero element of this programme. They should be read in conjunction with the Intended Learning Outcomes of the BSc (Hons) programmes available to you in [Environmental Science](#), to show the full scope of our ambitions for you.

8.1 Knowledge and understanding

On successful completion, graduates should be able to

- a Demonstrate a broad understanding of the fundamental knowledge base and the terminology of at least two major STEM disciplines,
- b Demonstrate an awareness of current areas of debate and discovery in Environmental Science and how scientific knowledge and methods can be applied to investigate them.

8.2 Cognitive and intellectual skills

On successful completion, graduates should be able to

- a Identify correctly the concepts and principles underlying theoretical frameworks in at least two STEM disciplines, and begin to identify strengths and limitations of such models
- b Judge the reliability of data, results and information using well defined techniques and/or criteria
- c Operate in a range of varied but predictable contexts relevant to Environmental Science, requiring the use and application of specified scientific techniques and information sources.

8.3 Key, transferable and employment-related skills

On successful completion, graduates should be able to demonstrate

- a Written and oral communication skills and be able to use these in a variety of contexts
- b Problem-solving skills, relating to qualitative and quantitative information.
- c Numeracy and computational skills appropriate to the study of undergraduate science at university
- d Information-retrieval skills, in relation to primary and secondary information sources
- e Demonstrate an awareness of their own capabilities in key areas and engage in development activity through guided self-direction

8.4 Practical skills

On successful completion, graduates should be able to

- a Demonstrate skills in the safe handling of materials in experimental settings, taking into account their chemical properties, including any specific hazards associated with their use.
- b Demonstrate the skills required to conduct standard laboratory procedures in at least two STEM disciplines
- c Demonstrate skills in the monitoring, by observation and/or measurement, of a variety of chemical or biological properties, events or changes, of both a quantitative and qualitative nature, together with their systematic and reliable recording and documentation, in the laboratory or the field.

9.0 Admissions Criteria, including APCL, APEL and DAS requirements

	Qualifications Required	Level Required
For all applicants	GCSE Mathematics	C
	GCSE English	C
International students	IELTS	IELTS 6.0 overall with at least 5.5 in each element
Applicants with formal qualifications in Science	At least 140 UCAS points from Level 3 qualifications such as those shown below, typically with passes in science subjects	
	A Levels	normally including at least one pass in a science subject.
	AS Level	At least two passes in science subjects
	Baccalaureate	Passes, to include science
	Scottish and Irish Highers	Passes, to include science
	Post GCSE quals such as NVQ	Level 3 usually required
	GNVQ and AGNVQ	Passes in the science subjects
Applicants without formal qualifications in Science	Applications from students with non-standard qualifications, including those without Science qualifications at Level 3, are welcomed and are assessed on an individual basis. This programme is also suitable for those returning to study who can offer work or other related experience in place of formal qualifications and who have the equivalent of basic mathematical, English and science skills (ie the equivalent of a Grade C at GCSE level).	

In accordance with the University's Academic Regulations, Accreditation for Prior Learning (APEL) may be applied where a student can demonstrate appropriate recent learning or experience which fully satisfies the learning outcomes of the module(s) concerned.

In accordance with the University's policies, Level Zero programmes welcome applications from disabled students who are appropriately qualified, academically, for the programme. Information interviews are conducted with applicants to determine the nature of adjustments required.

10.0 Progression routes for final and intermediate awards

The University guarantees progression to BSc (Hons) Environmental Science, providing a student has achieved:

- 120 credits in the programme described in this specification and
- an overall mean of at least 50% in the programme described in this specification, averaged across all 120 credits

The University does not guarantee progression to programmes outside those shown in Section 1. Students intending to progress to other programmes at Plymouth University should contact the admissions teams of the programme to which they wish to progress. You should be aware that some programmes may ask you to apply through UCAS so please make these enquiries in good time.

11.0 Exceptions to Regulations

None

12.0 Transitional arrangements

Module taken in 2018-19 or earlier	Corresponding module to be taken in 2019-20 onwards
PHY009	Either BIO12 or CHM009
PHY010	Either BIO12, CHM010 or MATH019

The transitional arrangements described above are indicative; the availability of new modules at Level Zero and new pathways for progression means that students affected by the transitional arrangements will be counselled individually, so that their programme best supports both completion of the Level Zero programme and successful progression to Level 4.

13. Mapping

13.1 Indicative Learning Outcomes (ILOs) against modules

	Knowledge and understanding On successful completion, students should be able to:	
a	Demonstrate a broad understanding of the fundamental knowledge base and the terminology of at least two major STEM disciplines	optional modules
b	Demonstrate an awareness of current areas of debate and discovery in Environmental Science and how scientific knowledge and methods can be applied to investigate them.	ENVS001 optional modules

	Cognitive and intellectual skills	
--	--	--

	On successful completion, students should be able to:	
a	Identify correctly the concepts and principles underlying theoretical frameworks in at least two STEM disciplines, and begin to identify strengths and limitations of such models	optional modules
b	Judge the reliability of data, results and information using well defined techniques and/or criteria	optional modules
c	Operate in a range of varied but predictable contexts relevant to Environmental Science, requiring the use and application of specified scientific techniques and information sources	ENVS001 optional modules

	Practical Skills On successful completion, graduates should be able to:	
a	Demonstrate skills in the safe handling of materials in experimental settings, taking into account their physical and chemical properties, including any specific hazards associated with their use.	optional modules except MATH019
b	Demonstrate the skills required to conduct standard laboratory procedures in at least two STEM disciplines	optional modules except MATH019
c	Demonstrate skills in the monitoring, by observation and/or measurement, of a variety of physical, chemical or biological properties, events or changes, of both a quantitative and qualitative nature, together with their systematic and reliable recording and documentation, in the laboratory or the field.	optional modules

	Key, transferable and employment-related skills On successful completion, graduates should be able to demonstrate	
a	Written and oral communication skills and be able to use these in a variety of contexts	GEES001 ENVS001 Optional modules
b	problem-solving skills, relating to qualitative and quantitative information.	ENVS001 GEES001 Optional modules
c	numeracy and computational skills appropriate to the study of undergraduate science at university	GEES001, ENVS001 MATH019 if selected

d	Information-retrieval skills, in relation to primary and secondary information sources, to include information retrieval through on-line computer searches.	GEES001 ENVS001
---	---	--------------------

13.2 Assessment in modules

Module	% Coursework	% Test	% Examination	% Practical
Core modules				
GEES001	50	50		
ENVS001	50	50		

Optional modules

CHM009	50	50		
CHM010	70		30	
BIO012	60		40	
BIO013	60		40	
MATH019	50	50		