Programme Specification for BSc (Hons) Environmental Science C15

1.	**Awarding institution/body**	University of Worcester
2.	**Teaching institution**	University of Worcester
3.	**Programme accredited by**	N/A
4.	**Final award**	BSc Hons
5.	**Programme title**	Environmental Science
6.	**Pathways available**	Single, major, joint, minor
7.	**Mode and/or site of delivery**	Standard taught programme at the University of Worcester site
8.	**Mode of attendance**	Full time or part time
9.	**UCAS Code**	F750 Single Honours VV47 Joint with Archaeology and Heritage Studies DN49 Joint with Ecology NF98 Joint with Geography 5DL4 Joint with Human Geography F891 Joint with Physical Geography
10.	**Subject Benchmark statement and/or professional body statement**	QAA Benchmark : Earth sciences, environmental sciences and environmental studies, October 2014. http://www.qaa.ac.uk/en/Publications/Documents/SBS-earth-sciences-14.pdf
11.	**Date of Programme Specification preparation/ revision**	April 2015, July 2015 (PAT), July 2105 update of coding for Independent Study,

12. Educational aims of the programme

In the Environmental Science programme students are provided with the opportunity to follow an intellectually challenging and contemporary programme of study at Honours degree level. In addition to the teaching of the theoretical and factual aspects of the subject, and as a particular feature of the course, there are numerous opportunities for laboratory and fieldwork, both local and regional, and additionally a European residential field trip, which enable the learning and practise of key skills and enhancement of employability. The course prepares students for entry into a wide range of potential occupations, for example, environmental consultancy evaluating water, soil or air quality and water companies.

The course aims to:

- Provide a broad, rigorous and intellectually challenging curriculum of organized, current knowledge and practice relating to the discipline of 'Environmental Science' so that students develop a sound understanding of its principles, theories and applications.
- Offer students the opportunities to develop a range of subject–specific and transferable skills to support their undergraduate studies and to prepare them for employment and/or post-graduate study.
- Provide a supportive learning environment which acknowledges and responds to the diversity of student backgrounds and experiences, and which allows students the opportunity to realize their academic potential.
- Enable students to develop a capacity for sustained independent work and ability to work with others as part of a team.
- Develop students' skills of reflection, critical analysis, information literacy and communication in a range of formats.
- Develop graduates who are ethically and environmentally responsible, whilst appreciating uncertainties and limits of knowledge in the discipline.

13. Intended learning outcomes and learning, teaching and assessment methods

At the end of the course students who have successfully completed their studies will be able to demonstrate:

Knowledge and understanding of:

a) Earth systems, including selected surface and near-surface physical, chemical, biological and anthropogenic processes, and interrelationships between the various systems.

b) Processes being influenced on different temporal and spatial scales and their influence on and by human activities.

c) Methods of acquiring, interpreting and analysing information with a critical understanding of the applications to environmental science.

d) Issues concerning the availability and sustainability of resources, their management and associated risks.

e) A range of approaches and methods appropriate to embarking on a career in environmental science.

Knowledge and understanding: examples of learning, teaching and assessment methods employed.

All modules deliver a range of subject-specific material incorporating concepts and issues in those areas of Environmental Science appropriate to the award programme.

The content of specific mandatory modules ensures that students are well versed in the essential knowledge and applications of the subject. Introductory Level 4 modules provide the preliminary subject knowledge and context. Development and applications of the subject is continued at Level 5 in the mandatory modules, and additionally, students are prepared for their Independent study which will be conducted at Level 6. Preparation for careers in the environmental sector is also incorporated within modules. A wide range of optional modules are also available for students who can use this flexibility to specialize in a particular area of Environmental Science if they wish. Students who

prefer a broader approach however can select modules across the range. At Level 6 advanced material and applications are studied; additionally there is a residential field trip offered to study the environment in a different climatic zone. Again, at this level, students can continue to specialize or maintain a broader approach. The Independent Study module is a major enterprise which allows the student to plan, design and carry out a project which will utilize and develop the knowledge and skills acquired on the course.

Learning and teaching methods are varied providing progression through the levels of study to ensure appropriate and effective delivery of material in a style which is readily accessible to the students. Students are encouraged to become increasingly independent learners as they progress through the levels. This is achieved through a structured programme of lectures, field trips, laboratory investigations, tutorials, group work and VLE methods. Students are encouraged to be interactive in sessions through various questioning methods, class exercises and quizzes. These also provide an element of formative assessment.

Modules throughout the course use a range of assessment methods to ensure that students have an opportunity to excel and none are disadvantaged through over-reliance on any one particular assessment mode. Details of assessments are given on the module specifications and a table in the Course Handbook. Examples include examinations, poster and oral presentations, species identification tests, practical reports and essays.

At the end of their course, students who have successfully completed their studies will be able to demonstrate:

Cognitive and intellectual skills:

a) Recognize and use subject-specific theories, paradigms, concepts and principles.
b) Search for, analyse, synthesize and summarize information critically, including past research.
c) Collect and integrate several lines of evidence to formulate and test hypotheses, to inform decision-making processes.
d) Apply knowledge and understanding to complex and multidimensional environmental problems in familiar and unfamiliar contexts.

Cognitive and intellectual skills: examples of learning, teaching and assessment methods employed:

All modules involve the practice and development of cognitive and intellectual skills. A table indicating which skills are specifically addressed in each module can be found in the Course Handbook.

Learning and teaching methods encourage the students to reflect and engage in discussion concerning the key aspects of the subjects studied. For example, at Level 4 students are required to evaluate their practical work and projects and appraisal of environmental issues and discussions. Level 5 includes the evaluation of practical methods in the laboratory, field and simulated situations, understanding and use of Geographical Information Systems (GIS) and the designing of a research proposal and choice of statistical methods. These aspects are developed further at Level 6 particularly

in the Independent Study and other mandatory and optional modules. Throughout the course topical issues such as pollution, waste management and recycling, the 'greening' of industries and environmental impact assessments are studied to ensure a good depth and breadth of subjects within the discipline.

Assessment of these skills occurs throughout the modules. Details of assessments are given in the module specifications and in a table given in the Course Handbook. These include a large element of course work. Examples for these assessments include site location analyses, evaluation of a pollution event in a specific environment, evaluation of experimental precision and accuracy.

At the end of their course, students who have successfully completed their studies will be able to demonstrate:

Practical skills relevant to employment:

a) Undertake field and laboratory investigations in a safe and responsible manner, completing and responding to risk assessment, rights of access, relevant health and safety regulations and sensitivity to the impact of investigations on the environment and stakeholders

b) Plan, collect, record and analyse data using appropriate techniques in the field and the laboratory including GIS and atmospheric modelling.

c) Apply methods of prioritisation and manage limited resources effectively and optimally; recognise moral/ethical dilemmas and issues.

d) Communicate effectively with individuals and organizations.

Practical skills relevant to employment: examples of learning, teaching and assessment methods employed:

It is a particular feature of the course that great emphasis is placed on the development and practice of practical skills which are relevant to employment and hence enhance the students' employability. A table indicating which skills are specifically addressed in each module can be found in the Course Handbook.

Most modules incorporate elements of field and/or laboratory work. Skills are taught and practised so that students become competent and confident in the appropriate selection and use of the skills. At each level modules incorporate a range of environmental chemical analyses (in soil and water). At Levels 5 and 6 there are modules dedicated to the learning and practice of GIS. Also at these levels there are modules dedicated to the study of atmospheric processes, including modelling of pollutant dispersion, progressing from introductory material at Level 4. Assessment of these skills is principally through the production of laboratory reports and files, field-based data collection, data analysis and production of environmental models. The Independent Study is a major piece of assessed work in which the students use the many subject-specific and generic skills that they have developed and report on results according to scientific practice.

At the end of their course, students who have successfully completed their studies will be able to demonstrate:

Transferable/key skills:

a) Communicate appropriately and effectively with a variety of audiences in written, oral, numerical and graphical forms.

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

c) Prepare process, interpret and present data using appropriate quantitative and qualitative techniques and packages.

d) Use the internet as critically a source of information, recognise and respect various views and opinions, judge the authority and credibility of sources and have well-developed information literacy;

e) Identify individual and collective goals and responsibilities and perform efficiently and adaptably in ways appropriate to the task.

f) Ethical practice: recognise, appreciate and conform to codes of professional conduct as laid-down by sector professional organisations

Transferable/key skills: examples of learning, teaching and assessment methods employed:

Students are prepared to embark on a range of careers. All modules involve the development of transferable/key skills. A table indicating which skills are specifically addressed in each module can be found in the Course Handbook.

These skills are introduced at Level 4 and are developed and reinforced throughout the course. Development of skills is also reinforced by the effective use of PDP (Personal Development Planning) supported in Personal Academic Tutoring. At Induction and in mandatory modules at Level 4 the range of subject specific and generic skills are introduced together with the opportunity to practise these. Formative assessment is ongoing and is evidenced by the use of frequent short in-class tests, structured worksheets and activities, questioning, discussions, etc. All Level 4 modules have a skills-based element.

At a more advanced level, students acquire a range of skills from various specialist modules including the use of VLE (virtual learning environment) Blackboard, Geographical Information Systems GIS, mapping, modelling, laboratory skills, research design and management skills, identification skills etc. Additionally, numerical, data processing and statistical skills are taught and practised.

Incorporation of group and team work into practical, project management and field sessions promotes a range of interpersonal skills and those of self-management.

All students are required to communicate effectively through a variety of media. Assessments include the use of oral presentations, use of PowerPoint and posters, VLE exercises and written work in a range of formats. Full details are given in the individual module specifications.

14. Assessment Strategy

External Examiners have commended the Environmental Sciences team on the excellent and innovative range of assessment types which are fully appropriate to the learning outcomes. Furthermore there is recognition that the assessment items have strong links to future employment. Assessments are designed to test knowledge and

understanding and the ability to apply these to a range of circumstances, and to demonstrate ability to evaluate, criticise and problem solve. As students progress through the levels more advanced knowledge and skills are required to complete more complex assignments such as management plans, site evaluations and modelling reports.

Assessment points occur throughout the semester after an introductory period for each module. All modules include both formative and summative assessments. Formative assessments may take a number of different formats and be conducted informally in class practical and field situations or more formally in classrooms or via Blackboard VLE. These provide ready feedback to the students. Modules throughout the course use a range of summative assessment methods to ensure that students have an opportunity to excel and none are disadvantaged through over-reliance on one type. Most modules have two summative assessment items. Students are notified at the start of the semester about the contents of their assessments which allows them to organise their study effectively. Details of assessment briefs are included in the module handbooks distributed at the beginning of the semester and are also available on Blackboard VLE. Additional supporting resources are also made available on Blackboard in many instances.

Throughout all modules, assessments are made in line with assessment criteria (given as subject-specific criteria and descriptors) in accordance with the University's Assessment Policy http://www.worc.ac.uk/aqu/documments/AssessmentPolicy.pdf and make full use of the UW grade descriptors when awarding grades. A table demonstrating how assessment methods at each level are mapped to modules is included in the course handbook.

The external examiner noted that 'detailed and useful written feedback is provided to the students on their performance'.

15. Programme structures and requirements

Course Title: BSc Environmental Science	**Year of entry: September 2015**

Level 4

Module Code	**Module Title**	**Credits** (Number)	**Status** (Mandatory (M) Designated (D), or Optional (O))		**Co-requisites/ exclusions and other notes***
			Single Hons	**Joint Hons**	
ENVS1011	Introduction to Environmental Sciences	30	M	M	Exclusions: ENVS1010 Introduction to Environmental Science
ENVS1012	Environmental Change – Past and Present	30	D	O	Exclusions: ENVS1101
ENVS1100	Introduction to Ecology	15	M	M	-
ENVS1102	Basis of Biological Surveying	15	O	O	
ENVS1201	Introduction to Climate Change	15	O	O	
GEOG1110	Earth Systems, Processes and Landscapes	30	O	O	Exclusions: GEOG1011 Earth Systems and Processes, GEOG1012 Landforms and Landscapes
GEOG1111	Introduction to Geology	15	O	O	Exclusions: GEOG1013 Introduction to Geology
GEOG1112	An Introduction to River Science	15	O	O	-

Single Honours Requirements at Level 4

Single Honours students must take 120 credits in total, 90 of which must be drawn from the table above to include ENVS1011 (30 credits) **AND** ENVS1012 (30 credits) **AND** ENVS1100 (15 credits) plus 1 of the 15 credit optional modules from the above list: ENVS1102, GEOG1111 **OR** GEOG1112

Single Honours students may also choose to take elective modules to the value of 30 credits from the listing of elective modules provided for undergraduate degree programmes, or take additional modules from the table above to the value of 30 credits (including GEOG1110 (30 credits)).

Joint Honours Requirements at Level 4

Joint Honours students must take 60 credits from the table above to include ENVS1011 (30 credits) AND ENVS1100 (15 credits)

Students taking **Joint Honours Ecology and Environmental Science** must take ENVS1011, ENVS1100 AND ENVS1012. The remaining modules are available as options.

Level 5 BSc Environmental Science								
Module Code	**Module Title**	**Credits** (Number)	**Status (Mandatory (M) or Optional (O)**				**PRE-REQUISITE**	**Co-requisites/exclusions and other notes***
			SINGLE	**MAJOR**	**JOINT**	**MINOR**		
ENVS2010	Research Practice and Professional Development	30	M	M	O	NOT AVAIL-ABLE		ENVS2004-
ENVS2012	Theory and Practice of Environmental Analysis	30	M	M	M	M	ENVS1011	ENVS2006
ENVS2005	Work Experience	15	O	O	NOT AVAIL-ABLE	NOT AVAIL-ABLE		BIOS2003 or BIOS3003 or GEOG3007
ENVS2011	Ecology - Individuals to Ecosystems	30	O	O	NOT AVAIL-ABLE	NOT AVAIL-ABLE	ENVS1100	ENVS2100 excluded
ENVS2100	Population and Community Ecology	15	O	O	O	O	ENVS1100	ENVS2011
ENVS2104	Ecology of Freshwaters	15	O	O	O	O	ENVS1100	-
ENVS2303	Field Skills and Identification Techniques	15	O	O	O	O	ENVS1100	-

GEOG2113	Geographical Information Systems	15	O	O	O	O		Exclusions: GEOG3113 GIS, GEOG2005 GIS, GEOG3005 GIS
GEOG2121	Meteorology and Climate	15	M	O	O	O		Exclusions: GEOG2015 Meteorology and Climate
GEOG2122	River Monitoring and Assessment	15	O	O	O	O		-
GEOG2123	Natural Hazards	15	O	O	NOT AVAIL-ABLE	NOT AVAI L-ABLE		Exclusions: GEOG2009 Natural Hazards

Single Honours Requirements at Level 5

Single Honours students must take 120 credits in total, 90 of which must be drawn from the table above to include ENVS2010 (30 credits) **AND** ENVS2012 (30 credits) **AND** GEOG2121 (15 credits) **AND** an optional module from the list: ENVS2005, ENVS2100, ENVS2100, ENVS2104, ENVS2303, GEOG2113, GEOG2121, GEOG2122, GEOG2123.

Single Honours students may also choose to take elective modules to the value of 30 credits from the listing of elective modules provided for undergraduate degree programmes, or take additional modules from the table above to the value of 30 credits including ENVS2011 (30 credits).

Joint, Major and Minor Honours Requirements at Level 5

Students following Joint Honours pathways can adjust their studies at level 5 to take more modules in one subject or can maintain an equally balanced programme of modules in each subject. The precise award title (Joint Hons or Major/Minor Hons) depends on the total number of credit achieved in each subject at levels 5 and 6 – for further information see the table at the end of this document.

Major Pathway Requirements at Level 5

Major Pathway students must take at least 60 and no more than 90 credits from the table above to include ENVS2010 (30 Credits) **AND** ENVS2012 (30 credits)

Joint Pathway Requirements at Level 5

Joint Pathway students must take at least 45 credits and no more than 75 credits from the table above.

A: if intending to take an Independent study in ENVS students must take **ENVS2010 (30 credits)**, and **ENVS2012 (30 credits)**

B: if not intending to take an Independent study in ENVS: students must take **ENVS2012 (30 credits)** plus 15 credits from the optional modules listed above.

Minor Pathway Requirements at Level 5

Minor Pathway students must take at least 30 credits and no more than 60 credits from the table above to include **ENVS2012 (30 credits).**

Course Title: BSc Environmental Science	Year of entry: September 2015

Level 6								
Module Code	**Module Title**	**Credits**	**Status (Mandatory (M) or Optional (O))**				**Pre-requisites**	**Co-requisites/ exclusions and other notes***
			SINGLE	**MAJOR**	**JOINT**	**MINOR**		
ENSC3001/2	Independent Study in Environmental Science	30	M	M	O	NOT AVAIL-ABLE	ENVS2010	Exclusions: ENVS3001/2 Not for direct entry students who will take ENVS3315
ENVS3100	Residential Environmental Field Trip (Provence)	15	M	M	M	O	ENVS1011 or ENVS1012	
ENVS3004	Environmental Pollution and its Management	15	M	M	M	M	ENVS2012 or ENVS2006	
ENVS3113	Atmospheric processes, air pollution and its modelling	15	O	O	O	NOT AVAIL-ABLE		
ENVS3102	Environmental Impact Assessment	15	O	O	O	O	ENVS1011	
ENVS3103	Restoration Ecology	15	O	O	O	NOT AVAIL-ABLE	ENVS2011 or ENVS2100	
ENVS3105	Project Management	15	M	M	O	NOT AVAIL-ABLE		
GEOG3113	GIS	15	O	O	O	NOT AVAIL-		Exclusions: GEOG2113 GIS, GEOG2005 &

						ABLE		GEOG3005 GIS
GEOG3114	Applied GIS and Remote Sensing	15	O	O	NOT AVAIL-ABLE	NOT AVAIL-ABLE	GEOG 2113 or GEOG3113	Exclusions: GEOG3019 Applied GIS & Remote Sensing
GEOG3120	River Conservation and Management	15	O	O	O	O	GEOG1112 OR GEOG2122	Exclusions: GEOG3013 River Conservation and Management
GEOG3121	River science research project	15	O	O	O	O	GEOG1112 GEOG2122 GEOG3120	Exclusions: GEOG3013 River Conservation and Management
GEOG3122	Environmental Geology	15	O	O	O	NOT AVAIL-ABLE		Exclusions: GEOG3014 Environmental Geology
ENVS3315	Research Methods & Independent Study in Environmental Science (for direct entry at Level 6 only)	30	M	M	O	NOT AVAIL-ABLE		

Single Honours Requirements at Level 6

Single Honours students must take 120 credits from the table above to include ENSC3001 **OR** ENSC3002 (30 CREDITS), **AND** ENVS3100 (15 credits) **AND** ENVS3004 (15 credits) **AND** ENVS3105 **(15 credits)** plus **3** modules from the options in the list.

Direct entry students into Level 6

Students must take ENVS3315 (30 credits) in place of ENSC3001/2 **AND** ENVS3100 (15 credits) **AND** ENVS3004 (15 credits) **AND** ENVS3105 **(15 credits)** plus **3** modules from the options in the list.

Joint, Major and Minor Honours Requirements at Level 6

Students following pathways in two subjects can adjust their studies at level 6 to take more modules in one subject or can maintain an equally balanced programme of modules in each subject. The precise award title (Joint Hons or Major/Minor Hons) depends on the total number of credit achieved in each subject at levels 5 and 6 – for further information see the table at the end of this document.

Major Pathway Requirements at Level 6

Major Pathway students must take 75 or 90 credits from the table above to include ENSC3001 **OR** ENSC3002 (30 CREDITS), **AND** ENVS3100 (15 credits) **AND** ENVS3004 (15 credits) **AND** ENVS3105 **(15 credits)**

Joint Pathway Requirements at Level 6

Joint Pathway students must take either 45, 60 or 75 credits (to make at least 105 credits over levels 5 and 6 in the subject, and no more than 135 credits over levels 5 and 6 in the subject) from the table above to include ENVS3100 (15 credits) **and** ENVS3004 (15 credits)

Joint pathway students who choose to take their independent study (or equivalent) in this subject must take ENSC3001 (30 credits) **OR** ENSC3002 (30 credits)

Joint pathway students who choose to place their Independent Study in their other joint subject must take ENVS3100 (15 credits), ENVS3004 (15 credits) plus 30 credits from the options above.

Joint pathway students must take one Independent Study (or equivalent), either in this subject , in their other joint subject, or take JOIN 3001/2 or Join 3013 where an Independent Study covers both joint subjects.

Minor Pathway Requirements at Level 6

Minor pathway students must take either 30 or 45 credits to include ENVS3004 (15 credits) plus optional modules drawn from the table above.

Credit requirements for awards involving two subjects

In determining whether an award derived from two subjects is Joint Honours (subject 1 **and** subject 2) or Major/Minor Honours (subject 1 **with** subject 2) credits taken in each subject at levels 5 and 6 will count as follows:

Subject 1	Subject 2	Award
120	120	Joint Hons
135	105	Joint Hons
150	90	Major/minor Hons

165	75	Major/minor Hons
180	60	Major/minor Hons

16. QAA and Professional Academic Standards and Quality

This course design has been informed by the benchmark statement: Earth Science, Environmental Sciences, Environmental Studies (ES3) (2014) QAA 10/14. http://www.qaa.ac.uk/en/Publications/Documents/SBS-earth-sciences-14.pdf

Hence the course incorporates the aims, objectives, learning outcomes, skills and practices advocated within this benchmark statement. The course operates at levels 4, 5 and 6 of the Framework for HE Qualifications. This award is located at level 6 of the FHEQ.

17. Support for students

Students following this course will encounter a wide range of learning experiences, including lectures, seminars, group work, laboratory and field practical sessions, workshops, and tutorials.

All new students attend a week-long induction at the start of the course to familiarise them with the course structures and expectations. Presentations from current and past students (where possible) are included to help welcome the newcomers and additionally the 'Environmental and Conservation Society' is invited to sessions to explain their activities and encourage new membership.

All students have an academic personal tutor who offers specific support and guidance enabling them to become effective learners understanding the requirements of their course in terms of knowledge and understanding, skills development and assessment requirements. Students are required to attend tutorials with their tutors twice per semester at Level 4 and 5 and at Level 6 they have frequent meetings with their Independent Study tutor (who may be the same person). Grades and feedback from assessments are discussed together with strategies to improve learning outcome attainments. Students are encouraged to actively reflect on their achievements and to document their evidence in a Personal Development Plan and maintain a current CV. In addition, career planning is formally addressed at Level 5 and in Worcester Weeks and through the University's Careers Advisory Service. Frequent visits and talks from practitioners in the environmental sector help to reinforce aspects of career planning.

All tutors have an 'open door policy', that is, there are no restrictions on the number of times a tutor will meet and discuss issues with their tutees. Additionally, subject tutors offer additional tutorials if required.

Further support is available during Worcester Weeks when students are encouraged to arrange their academic tutorials and additional study sessions and trips are organised.

Students have access to a range of specialist resources including the GIS, Mapping and Visualization Suite, GPS equipment, and hydrological and meteorological monitoring equipment, field and analytical equipment.

A comprehensive course handbook is provided online which details essential information about the course, availability of modules, etc.

All modules provide module handbooks for the students as paper copies and also on the Blackboard VLE. These include planned teaching activity, attendance requirements, assessment brief(s), assessment criteria and reading lists.

The VLE 'Blackboard' has a section dedicated to the Environmental subject areas (Environmental Science and Ecology). This acts as a notice board for events, employment and volunteering activities. Details of Course Management Committees, Annual Evaluation and External Examiners' reports are posted here for the students to read. Past Independent Studies in the subject area are available as is information on staff details and StAR contacts. Additionally there are discussions fora posted on the site.

All students following this course are provided with a study guide on Blackboard, and have access to study skills assistance provided by the University.

Library and ILS inductions and support are provided at Induction or as the students request by the ILS staff.

Library, IT, media and print support is provided by Information and Learning Services (ILS) staff through desk services and the support of professionally-qualified librarians including a dedicated Academic Liaison Librarian for the Institute of Science and the Environment (ISE). The Academic Liaison Team offers a portfolio of professional information services, including information literacy programmes for cohorts and one-to-one support, both in-person and online.

Firstpoint is a University service acting as the first point of contact for all students' enquiries. They provide information, advice and guidance on many aspects of student life at Worcester, for example, accommodation, fees, finance, registration, ID cards, disability support, module choice and international student issues.

Students have the opportunity to study abroad for one semester under the ERASMUS scheme in the second year.

The Careers Service provides information, advice and training opportunities for career planning in addition to such opportunities offered within the course.

Equal opportunities via the Disability & Dyslexia Service provide advice and support for students who have mental health difficulties, dyslexia, sensory or physical impairments or other difficulties. There is a dedicated Assistant Disability Coordinator for students with sensory impairments. Advice is also available on access to technology such as voice recognition and text-to-speech software. Much of the support provided is funded through the Disabled Students' Allowance (DSA). *http://www.worcester.ac.uk/student-services/disability-and-dyslexia.htm*

There are a range of student support services, including financial and accommodation advice. *http://www.worcester.ac.uk/student-services/index.htm*

18. Admissions

Admissions Policy

The University aims to be accessible; it is committed to widening participation and encourages diversity in the student population. The Institute of Science and the Environment works closely with central student support services, including the Admissions Office, the Disability and Dyslexia Service and the International Office, to support students from a variety of backgrounds. We actively encourage and welcome people from the widest range of economic and cultural backgrounds, and value the contribution of mature learners.

Entry requirements

The University's standard minimum entry requirements apply: 4 GCSEs (Grade C or above) plus 120 Tariff points from a minimum of 2 and maximum of 3½ A Levels or equivalent Level 3 qualifications. See UW Admissions Policy for other acceptable qualifications.

At GCSE students need to pass at least Science (double award) or the separate science subjects, Maths and English at grade C or above.
At A level, science subjects (includes Environmental Science/Studies) and/or Geography and/or Geology must have been passed.
For students studying joint honours, the same qualifications are required.

The current UCAS Tariff requirements for entry to this course are published in the prospectus.

The University will consider each application on its individual merits and will recognise a range of qualifications not currently included in the Tariff, including Access courses, European Baccalaureate and pre-2002 qualifications such as GNVQ.

Recognition of Prior Learning

Details of acceptable level 3 qualifications, policy in relation to mature students or applicants with few or no formal qualifications can be found in the prospectus or on the University webpages. Information on eligibility for recognition of prior learning for the purposes of entry or advanced standing is also available from the University webpages or from the Registry Admissions Office (01905 855111).

Further information on Recognition of Prior Learning can be found at http://www.worcester.ac.uk/registryservices/941.htm

Admissions procedures

Full-time applicants apply through UCAS *(see course code below)*

F750 Single honours

VV47 Joint with Archaeology and Heritage Studies

DN49 Joint with Ecology

NF98 Joint with Geography

5DL4 Joint with Human Geography

F891 Joint with Physical Geography

Part-time applicants apply directly to University of Worcester (UW).
Students holding offers of places on the courses will be invited to an Applicant Day when the student can experience a 'taster' of what is offered on the courses.

Admissions/selection criteria

The Admissions Tutors will pay particular attention to personal statements, references and predicted or actual grades. In particular, they will be looking for evidence of an interest in the subject, some level of involvement with environmental organisations and a clear explanation as to why the student is keen to pursue Environmental Science at degree level.

19. Methods for evaluating and improving the quality and standards of teaching and learning

Mechanisms for review and evaluation of teaching, learning and assessment, the curriculum and outcome standards include:

- Student module evaluation and feedback for all modules
- An Annual Evaluation Report completed by the Course Leader
- Periodic Review and re-approval including external scrutiny
- Peer learning through observation policy
- Staff research and scholarly activity
- External Examiner's Reports
- Academic staff annual appraisal
- Staff Development Away Days and other events
- ISE Policy on Approval (Module Outlines and Assignment Briefs) and Moderation of Student Work

Committees with responsibility for monitoring and evaluating quality and standards:

- ISE Quality Assurance Committee
- Environmental Sciences Course Management Committee
- Board of Undergraduate Studies
- Academic Quality Standards and Quality Enhancement Committee
- Ethics Committee
- Learning, Teaching and Student Experience Committee

Mechanisms for gaining student feedback on the quality of teaching and their learning experience:

- Module feedback questionnaire
- Environmental Sciences Course Management Committee
- Meetings with module tutors and Personal Academic Tutor
- Student Academic Representatives (StARs)
- Informal discussion
- Induction, exit and other ad hoc surveys
- UW Student Survey

20. Regulation of assessment.

The course operates under the University's Undergraduate Regulatory Framework

Requirements to pass modules

- Modules are assessed using a variety of assessment activities which are detailed in the module specifications.
- The minimum pass mark is D- for each module.
- Students are required to submit all items of assessment in order to pass a module, and in some modules, a pass mark in each item of assessment may be required.

- Some modules have attendance requirements.
- Full details of the assessment requirements for a module, including the assessment criteria, are published in the module outline.

Submission of assessment items

- Students who submit course work late but within 5 days of the due date will have work marked, but the grade will be capped at D- unless an application for mitigating circumstances is accepted.
- Students who submit work later than 5 days but within 14 days of the due date will not have work marked unless they have submitted a valid claim of mitigating circumstances.
- For full details of submission regulations see Undergraduate Regulatory Framework.

Retrieval of failure

- Students are entitled to resit failed assessment items for any module that is awarded a fail grade, unless the failure was due to non-attendance.
- Reassessment items that are passed are graded at D-.
- If a student is unsuccessful in the reassessment, they have the right to retake the module (or, in some circumstances, take an alternative module).

Requirements for Progression

- Students at Level 4 may be permitted to progress to Level 5 when they have passed at least 90 credits at Level 4.
- Students at Level 5 may be permitted to progress to Level 6 when they have passed at least 90 credits at Level 5.
- A student who fails 90 credits or more due to non-submission will be required to withdraw from the University.
- Students who pass less than 90 credits but have submitted all items of assessment will be required to retake modules.

Requirements for Awards

Award	**Requirement**
CertHE	Passed 120 credits at Level 4 or higher
DipHE	Passed a minimum of 240 credits with at least 90 credits at Level 5 or higher
Degree (non-honours)	Passed a minimum of 300 credits with at least 90 credits at Level 5 or higher and a minimum of 60 credits at Level 6
Degree with honours	Passed a minimum of 360 credits with at least 90 credits at Level 5 or higher and a minimum of 120 credits at Level 6

Classification

The honours classification will be determined by whichever of the following two methods results in the higher classification.

Classification determined on the profile of the best grades from 60 credits attained at Level 5 and the best grades from 120 credits at Level 6. Level 5 and Level 6 grades count equally in the profile.

Classification determined on the profile of the best grades from 120 credits attained at Level 6 only.

For further information on honours degree classification, see the Undergraduate Regulatory Framework.

21. Indicators of quality and standards

This course is new, commencing in September 2015, but has developed out of existing provision in Environmental Science and Environmental Management. Environmental courses have been run at the University of Worcester (or University College Worcester and Worcester College of Higher Education) for many years. The earlier version of the course underwent a successful Periodic Review in November 2014. The Periodic Review Panel commended the facilities across St Johns Campus, particularly the laboratory spaces, their design and layout, the support available to students and the philosophy of emphasising practical work. They identified a number of areas of good practice. The review Panel reported that 'confidence can be placed in the soundness of the management of the academic standards' and that 'confidence can be placed in the quality of the learning opportunities available to students' and these aspects are being carried through to the new course.

Generally in relation to the past courses the external examiner said, "The practical and field experience is a strength of these awards, as well as the supportive environment provided for the students." This practise is to be continued and built upon in the new course and supports one of the aims for the courses which is to enhance the employability of our students in the environmental sector.

The quality of the course team's work has been acknowledged over the years by external examiners. ''Students benefit from a supportive environment and an excellent level of guidance in the module handbooks and assignment briefs. There is consistently detailed and useful feedback given on the assignments that they undertake.'

Comments in relation to Environmental courses from the last UW Student Survey are relevant to the new course as the lecturing staff remain the same as do the foundations of many of the modules:
'Lecturers in general seemed passionate about the subjects they were teaching and made themselves available for out of hour's assistance whenever possible.'

'A good mix of practical, theory and fieldwork in many modules provided a detailed overview of the subject in question. This also made it easier to understand the more theoretical topics by seeing the processes in action. Assessments were often challenging and interesting with support offered via tutorials and emails with lecturers.'

Students on the related past course have been successful with 100% progression from year 1 to year 2 and from year 2 to year 3, 100% completion rate, 83% gaining 1st or 2:1 classifications in their degrees

The staff team are all involved in research, scholarly activity, or professional development of some kind. The team have developed links with a range of environmental organisations, consultancies and industries and engage in activities or research with these.

The environmental team now have departmental membership of the Committee of Heads of Environmental Science, CHES. http://ches.org.uk
This organisation promotes the advancement of environmental sciences teaching, learning, research, knowledge exchange and scholarship and helps tutors to remain abreast of developments in the discipline.

The University underwent a QAA Institutional Audit in March 2011. The audit confirmed that confidence can be placed in the soundness of the institution's current and likely future management of the academic standards of its awards and the quality of the learning opportunities available to students. The audit team highlighted several aspects of good practice, including the student academic representative (StARs) initiative, the proactive approach which supports the student experience for disabled students, the comprehensiveness of the student online environment (SOLE), the wide range of opportunities afforded to students to enhance their employability, the institution's commitment to enhancement, and the inclusive approach to working with its collaborative partners.

22. Graduate destinations, employability and links with employers

Student employability is considered to be one of the key elements of the course. The course seeks to increase student employability throughout all three years. The teaching and practice of skills are embedded within the modules. The acquisition of practical and transferable skills and experience in the environmental field are considered to be major contributors to students' success in gaining employment in the environmental sector. Students' progress is reviewed by Personal Academic Tutors during the tutorials and the requirement to attend tutorials is linked to modules. Students also have the opportunity to take a Work Experience module at Level 5. Careers advice is also available as a part of the University Worcester Weeks at all levels.

Students are strongly encouraged to engage in work experience or undertake voluntary work with local environmental organizations to demonstrate their commitment and further their skills. They are also encouraged to become student members of recognized Institutions, for example, the Institute of Ecology and Environmental Management (IEEM), Institute of Environmental Management and Assessment (IEMA) or the Institution of Environmental Science (IES) so that they can access resources and attend conferences. Additionally students are able to take a work placement module in which existing and new skills are practised and their work is assessed at the end of the placement period.

Graduate Destinations:

Students undertaking the outgoing environmental degrees have been employed in the following roles:

Manager - Waste water treatment works
Environmental scientist - Landfill site
Water quality technician - Consultancy
Flow analyst - Water Supply Company
Water and Wetlands Officer – Wildlife Trust
Grasslands office- Wildlife Trust
Footpaths officer – Local Council
Consultant – Natural England
Laboratory technician – Food Industry
Flood Risk Assessment – Hydrology Consultancy
Technical Manager - Farmyard Environmental Compliance
Environmental Assistant – HS2 project
Environmental & CSR Coordinator – Construction Industry
A variety of Masters courses at this and other Universities.
A range of studies leading to Ph.D. qualifications.

Links with employers

The environmental team have many links with local, national and international external organisations and employers. Links are maintained by visits to a variety of establishments and visits by 'guest speakers' giving presentations at the University (for example the Environment Agency, Eon at Ironbridge Power Station, Severn Trent, Cheltenham Sewage Treatment Works, Environmental Consultancy Businesses, Malvern Hills Conservators) and contacts with organizations such as the local Wildlife Trust, local District Councils and the Forestry Commission.

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the module study guides and course handbook. The accuracy of the information contained in this document is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.