



UNIVERSITY OF
PORTSMOUTH

COURSE SPECIFICATION

MEnv Sci (Hons) Environmental Science

**Academic Standards, Quality and Partnerships
Department of Student and Academic Administration**

March 2018

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COURSE SPECIFICATION

Please refer to the [Course Specification Guidance Notes](#) for guidance on completing this document.

Course Title	<i>MEnvSci Environmental Science</i>
Final Award	<i>MEnvSci</i>
Exit Awards	<i>CertHE, DipHE, BSc, BSc (Hons)</i>
Course Code / UCAS code (if applicable)	<i>C2598F (F900)</i>
Mode of study	<i>Full time</i>
Mode of delivery	<i>Campus</i>
Normal length of course	<i>4 years, 5 years with placement</i>
Cohort(s) to which this course specification applies	<i>From September 2019 intake onwards</i>
Awarding Body	<i>University of Portsmouth</i>
Teaching Institution	<i>University of Portsmouth</i>
Faculty	<i>Science Faculty & Health</i>
School/Department/Subject Group	<i>School of Environment, Geography & Geosciences</i>
School/Department/Subject Group webpage	<i>http://www.port.ac.uk/school-of-earth-and-environmental-sciences/</i>
Course webpage including entry criteria	<i>None - as no longer recruiting</i>
Professional and/or Statutory Regulatory Body accreditations	<i>Institution of Environmental Sciences</i>
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	<i>4 - 7</i>

This course specification provides a summary of the main features of the course, identifies the aims and learning outcomes of the course, the teaching, learning and assessment methods used by teaching staff, and the reference points used to inform the curriculum.

This information is therefore useful to potential students to help them choose the right course of study, to current students on the course and to staff teaching and administering the course.

Further detailed information on the individual modules within the course may be found in the relevant module descriptors and the Course Handbook provided to students on enrolment.

Please refer to the [Module Web Search](#) for further information on the course structure and modules.

Educational aims of the course

The MEnvSci Environmental Science course is designed to offer an integrated approach to the scientific study and analysis of the environment, backed-up with a good awareness of current environmental issues and concerns. The course aims to provide a stimulating learning environment to enable students develop a range of academic and generic skills to help them find good quality employment on graduation, and provide the basis for a lifetime of learning. The course embraces the integrated nature of environmental science, drawing on biology, chemistry, physics and geology to allow students to interpret the pressures on our environment and point to ways in which we can act to manage these more successfully. Elements of the course can be chosen including environmental forensics, freshwater systems, flood hazard management, environmental conservation. There is the opportunity to specialise and numerous opportunities for fieldwork. In the final-year dissertation, students are able to choose their own area in which to conduct a substantial environmental investigation to produce a report to a professional standard. The course aims to equip students to work as environmental scientists or within alternative employment. In general, the course aims to: Develop knowledge of the variety of strategies needed to work in the field of environmental science. Train environmental scientists with a specialist knowledge of a specific aspect of environmental science, such as ecology or environmental chemistry. In addition, and more specifically, the course aims to: Provide a stimulating, wide ranging, yet integrated programme in the environmental sciences. Develop a range of key skills through opportunities provided in the study modules, including critical, analytical, practical, professional, research and communication skills, to prepare students for postgraduate study and/or professional qualifications. Provide a challenging, stimulating and self-rewarding study environment. Provide a framework whereby individual study paths may be forged based on choice from a range of options. Accommodate student needs in relation to maximising their career potential by enabling them to develop knowledge, understanding and skills in their chosen subject area. Train students in a professional manner such that it will enhance their employability prospects and help them towards a satisfying career in environmental science. Develop the skills necessary for life-long independent learning and acquisition of knowledge.

Course Learning Outcomes and Learning, Teaching and Assessment Strategies

The [Quality Assurance Agency for Higher Education \(QAA\)](#) sets out a national framework of qualification levels, and the associated standards of achievement are found in their [Framework for Higher Education Qualifications](#) document.

The Course Learning Outcomes for this course are outlined in the tables below.

A. Knowledge and understanding of:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
A1	The need for a multidisciplinary and interdisciplinary approach to acquire and advance knowledge and understanding of the Earth's environmental systems.	Through the Environmental Systems and Introduction to Marine Ecology and Oceanography at level 4 and many other modules at levels 5 and 6, including Hydrology and Freshwater Ecosystems. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.

A2	<p>The processes that shape the natural world at different temporal and spatial scales and their influence on and by human activities. The human causes and consequences of environmental impacts, and solutions and controls of impacts.</p>	<p>Developed through a range of modules, starting with Environmental Systems in Level 4 and then through a range of conservation, pollution and other modules relating to human activity and its impact on the environment, including Energy Resources, Hydrology and Flood Hazard Assessment, and Environmental Pollution and Waste Management.</p> <p>Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11</p>	<p>Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and dissertation thesis.</p>
A3	<p>The methods of observing, acquiring, interpreting and analysing environmental information, with a critical understanding of the appropriate contexts for their values and use. The terminology, nomenclature and classification approaches drawn from the natural and social sciences, and developed within each individual discipline.</p>	<p>Embedded in all modules, including mathematics and computing units, including Quantitative Methods, Geographical Information Systems and Remote Sensing, Environmental Fieldwork and Professional Skills, Environmental Chemistry and Monitoring, Scientific and Technical Diving Techniques, Climate Change, and Environmental Auditing and Assessment, as well as through a variety of fieldtrips and the final year Dissertation module.</p> <p>Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11</p>	<p>Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.</p>
A4	<p>The issues concerning the finite re-use, availability and sustainability of resources.</p>	<p>Developed through the Environmental Systems module leading to other energy related units such as Energy Resources, the Hydrology units, and Environmental Pollution and Waste Management.</p> <p>Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11</p>	<p>Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.</p>

A5	Research methodologies in specified fields of environmental science.	During level 7 students are exposed to a range of research techniques and methods that will allow them to demonstrate A8-A10. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature review, presentations, report and final thesis.
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Add additional rows as required.

B. Cognitive (Intellectual or Thinking) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
B1	Plan, conduct and report on a programme of original research at undergraduate level including the formulation and testing of hypotheses.	Specifically developed during Environmental Fieldwork and Professional Skills, Research Design and Data Analysis, Study Tour modules, and the final year Dissertation. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.
B2	Critically consider, select and apply appropriate mathematical, scientific, laboratory and computer-based methods and principles in the analysis and solution of environmental problems.	Developed through a range of modules including Quantitative Methods, Environmental Chemistry and Monitoring, and Geographical Information Systems and Remote Sensing. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.
B3	Work with confidence from basic principles to apply essential environmental science techniques to unfamiliar situations, and estimate and scope the scale of environmental problems and their potential consequences.	Primarily developed through the Environmental Fieldwork and Professional Skills, Environmental Chemistry and Monitoring, Environmental Auditing and Assessment, and the Climate Change modules. Other modules, including the final year Dissertation also contribute to	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory

		achieving this learning outcome. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	reports and exams.
B4	Integrate and evaluate relevant information from a variety of sources and recognise legal, moral, ethical and other social issues. Contribute to topical debate on environmental issues and use specialist knowledge to propagate informed views.	Developed through most modules, including Environmental Systems, Energy Resources, Climate Change, and Environmental Auditing and Assessment, as well as the Dissertation module. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.
B5	Critically evaluate current research and advanced scholarship in an advanced field. Evaluate research methodologies and, where appropriate, to develop new hypotheses.	The level 7 project and literature review enable students to demonstrate critical evaluation of current research and methodologies at an advanced level (B8-B9). Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature review, presentations, report and final thesis.

C. Practical (Professional or Subject) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
C1	Plan, conduct and report on scientific investigations, including the use of secondary data, and collect, record and analyse data using appropriate techniques in the field and laboratory	C1-C2 are feature of many units within the Environmental Science Programme. C1-C2 are particularly stressed in Environmental Systems, Environmental Chemistry and Monitoring, Hydrology and Freshwater Ecosystems, Geographical Information Systems and Remote Sensing, Environmental Fieldwork and Professional Skills, Environmental Auditing and Assessment, and the Dissertation.	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.

		Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	
C2	Undertake field and laboratory investigations in a responsible and safe manner, paying due attention to risk assessment, rights of access, relevant health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders	Outlined above.	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and Dissertation thesis.
C3	Reference work in an appropriate manner	Developed in all modules, particularly where modules are assessed by fully referenced reports or presentations. Students are encouraged to critically read and cite primary literature and are taught and required to use the prescribed APA format. Specific examples of such units are Environmental Systems, Introduction to Marine Ecology and Oceanography, Energy Resources, as well as the final year Dissertation modules. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.
C4	Identify and work towards targets for personal, academic and career development. Develop an adaptable approach to study / work and develop the skills necessary for self-managed and lifelong learning.	Stressed explicitly within the tutorial system (particularly at levels 5 and 6), and in the Environmental Fieldwork and Professional Skills and Dissertation modules, as well as throughout a number of other modules where site visits and guest speakers provide students with experience and understanding of the work place, such as Environmental Pollution,	Careers portfolio, mock graduate recruitment assessment, mock job application, CV and job interview.

		and Waste Management and Environmental Pollution and Fieldwork in a number of modules, particularly Environmental Fieldwork and Professional Skills, Study Tour modules, and the final year Dissertation, further develop C6. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	
C5	Demonstrate relevant scientific applications to research, self-direction and the ability to operate complex analytical equipment independently following appropriate training, and to tackle and solve problems as they arise. Also, act autonomously in planning and implementing analytical tasks at an advanced research level.	The level 7 unit in Research Methodology & Technical Training specifically addresses these points. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Presentations, report and final thesis.

Add additional rows as required.

D. Transferrable (Graduate and Employability) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
D1	Communicate appropriately to a variety of audiences in written, verbal and graphical forms, using information from a variety of sources.	Developed in the tutorial programme and a number of modules where students are required to undertake group discussions, and give oral and poster presentations to staff and their peer group, including Environmental Systems, Environmental Chemistry and Monitoring, Hydrology and Freshwater Ecosystems, Environmental Fieldwork and Professional Skills and the final year Dissertation module. In some modules, external visitors may also be present at the presentations. Written communication skills are developed in all modules. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.

D2	Appreciate issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and laboratory. Also, solve numerical problems using both computer and non-computer based techniques.	<p>Addressed in a number of modules where laboratory or fieldwork is undertaken. The concept of sample, accuracy, precision and uncertainty during collection, recording and analysis of data is introduced in Environmental Systems, Introduction to Marine Ecology and Oceanography, Quantitative Methods, and Ecology, Plant and Human Impact and further developed at later stages in modules such as Environmental Chemistry and Monitoring, Environmental Fieldwork and Professional Skills, Geographical Information systems and Remote Sensing, Hydrology and Freshwater Ecosystems, Environmental Forensics and the final year Dissertation.</p> <p>Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11</p>	Reports, oral presentations, poster presentations, notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.
D3	Use the internet critically and professionally as a means of communication and a source of information.	<p>First addressed in modules such as Quantitative Methods, Introduction to Marine Ecology and Oceanography and Environmental Systems, and reinforced throughout the tutorial programme. Students are encouraged to critically assess the use of the internet as a source of information throughout the entire course, particularly when researching and preparing coursework. Group work plays an important role in many modules.</p> <p>Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11</p>	Literature reviews, portfolio, reports, oral presentations, poster presentations, notebooks, fieldwork reports, laboratory reports and exams.

D4	Identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles. Also, recognise and respect the views of others and evaluate performances as an individual and a team member.	Addressed in a number of modules, including Environmental Systems, Environmental Chemistry and Monitoring, Environmental Fieldwork and Professional Skills, Climate Change, and the Study Tour modules. In addition, the tutorial programme is used to examine Belbin's theory on group formation and dynamics and students take part in group analysis and role play exercises. Students also engage in analysis and evaluation of their team and individual roles throughout the course, through peer-review and self-assessment exercises in a number of modules. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Group fieldwork. Group work and individual oral presentations, posters and written assessments.
D5	Continue to advance their knowledge and understanding and to develop new skills at an advanced level.	During level 7, the project, the literature review and exposure to a range of research techniques and methods will allow the student to demonstrate D5. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature review, presentations, report and final thesis.

Add additional rows as required.

Academic Regulations

The current University of Portsmouth [Academic Regulations](#) will apply to this course.

Support for Student Learning

The University of Portsmouth provides a comprehensive range of support services for students throughout their course, details of which are available at the [MyPort](#) student portal.

In addition to these University support services, this course also provides support prior to, during and following work-based learning and/or placements (including study abroad). Support includes personal tutors, supervisors and mentors as appropriate. Students will have access to all their usual learning resources while off-campus including course details and handbooks, as well as a range of placement-specific resources and/or handbooks.

Evaluation and Enhancement of Standards and Quality in Learning and Teaching

The University of Portsmouth undertakes comprehensive monitoring, review and evaluation of courses within clearly assigned staff responsibilities. Student feedback is a key feature in these evaluations, as represented in our [Policy for Listening to and Responding to the Student Voice](#) where you can also find further information.

Reference Points

The course and outcomes have been developed taking account of:

Insert additional reference points or delete as required

- [University of Portsmouth Curriculum Framework Specification](#)
- [University of Portsmouth Education Strategy 2016 - 2020](#)
- [University of Portsmouth Code of Practice for Work-based and Placement Learning](#)
- [Quality Assurance Agency UK Quality Code for Higher Education](#)
- [Quality Assurance Agency Qualification Characteristic Statements](#)
- [Quality Assurance Agency Subject Benchmark Statement](#), Earth Sciences, Environmental Sciences and Environmental Studies, October 2014
- [Quality Assurance Agency Framework for Higher Education Qualifications](#)
- Requirements of Professional and/or Statutory Regulatory Bodies: Institution of Environmental Sciences (IES)
- Vocational and professional experience, scholarship and research expertise of the University of Portsmouth's academic members of staff
- National Occupational Standards

Disclaimer

The University of Portsmouth has checked the information provided in this Course Specification and will endeavour to deliver this course in keeping with this Course Specification. However, changes to the course may sometimes be required arising from annual monitoring, student feedback, and the review and update of modules and courses.

Where this activity leads to significant changes to modules and courses there will be prior consultation with students and others, wherever possible, and the University of Portsmouth will take all reasonable steps to minimise disruption to students.

It is also possible that the University of Portsmouth may not be able to offer a module or course for reasons outside of its control, for example, due to the absence of a member of staff or low student registration numbers. Where this is the case, the University of Portsmouth will endeavour to inform applicants and students as soon as possible, and where appropriate, will facilitate the transfer of affected students to another suitable course.

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