

# **COURSE SPECIFICATION**

BSc (Hons) Environmental Science & Management (Dual Award with Edith Cowan University, Australia)

# **COURSE SPECIFICATION**

Please refer to the Course Specification Guidance Notes for guidance on completing this document.

Course Title	BSc (Hons) Environmental Science and Management	
Final Award	BSc (Hons)	
Exit Awards	CertHE, DipHE, BSc	
Course Code / UCAS code (if applicable)	U3250PYC	
Mode of study	Full time	
Mode of delivery	Campus	
Normal length of course	3.5 years with 1 year at Edith Cowan University, Australia.	
Cohort(s) to which this course specification applies	From September 2023 intake onwards	
Entry Requirements	120-128 points to include a minimum of 2 A levels, or equivalent, with 40 points from a Science subject (Biology, Chemistry, Environmental Science/Studies, Geography, Geology, Mathematics or Physics).  With GCSEs in English and Mathematics at grade 4 or above.  English language proficiency at a minimum of IELTS band 6.0 with no component score below 5.5.	
Awarding Body	University of Portsmouth.	
Teaching Institution	University of Portsmouth and Edith Cowan University, Australia.	
Faculty	Faculty of Science & Health	
School/Department/Subject Group	School of the Environment and Life Sciences	
School/Department/Subject Group	School of the Environment and Life Sciences   University	
webpage	of Portsmouth	
Course webpage including entry criteria	https://www.port.ac.uk/study/courses/bsc-hons- environmental-science-and-management-dual-degree	
Professional and/or Statutory Regulatory	Institution of Environmental Sciences (will be applied to	
Body accreditations	post approval).	
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	4 - 6	

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 <u>Course and Module Catalogue</u> for further information on the course structure and modules.

#### Educational aims of the course

The BSc (Hons) Environmental Science and Management dual degree 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, with addition of one year of study at Edith Cowan University, Australia. The course aims to provide a stimulating learning environment to enable students to 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 energy resources, hydrology, climate change and 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.

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

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

LO	Learning outcome	Learning and Teaching	Assessment
number		methods	methods
A1	Appreciate the need for a multidisciplinary and	Through the Global Environmental Challenges	*Literature reviews *Portfolio reports
	interdisciplinary approach to	and Introduction to Marine	*Oral presentations
	acquire and advance knowledge	Ecology and Oceanography	(including poster
	and understanding of the Earth's	at level 4 and many other	presentations)
	environmental systems.	modules at levels 5 and 6,	*Field notebooks
		including Environmental	*Fieldwork reports
		Chemistry & Monitoring as well as modules at ECU (e.g.	*Laboratory reports *Exams *Dissertation
		Aboriginal Perspectives on	thesis.
		the Environment)	triesis.
		Hallmarks	
		1,2,3,4,5,6,7,8,9,10 and 11	
A2	Demonstrate comprehension of	Developed through a range	*Literature reviews
	the processes that shape the	of modules, starting with	*Portfolio reports
	natural world at different	Global Environmental	*Oral presentations
	temporal and spatial scales and their influence on and by human	Challenges and Plant, Ecology & Human Impact in	(including poster presentations)
	activities as well as any potential	Level 4 and then other	*Field notebooks
	impact controls and solutions.	modules relating to human	*Fieldwork reports
	,	activity and its impact on the	*Laboratory reports
		environment, including	*Exams *Dissertation
		Energy Resources & the	thesis.
		Science of Zero Carbon,	
		Environmental Chemistry &	
		Monitoring, Hydrology &	
		Geoenvironmental Risk, and	
		Environmental Impact & Assessment.	
		Assessment.	
		Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	
43	Development of methods of	Embedded in all modules,	*Literature reviews
	observing, acquiring,	including mathematics and	*Portfolio reports
	interpreting and analysing	computing units, including	*Oral presentations
	natural and social science	Analysis of the Earth &	(including poster
	information, including relevant	Environment, Geographical	presentations)
	classifications, with a critical	Information Systems and	*Field notebooks
	understanding of the	Remote Sensing,	*Fieldwork reports
	appropriate contexts for their values and use.	Environmental Fieldwork	*Laboratory reports *Exams *Dissertation
	values allu use.	and Professional Skills, Environmental Chemistry	thesis.
		and Monitoring, Scientific	GICSIS.
		and Technical Diving	
		Techniques, Climate Change,	
		and Environmental Auditing	
		and Assessment &	
		Management, as well as	
		through a variety of fieldtrips	

		and the final year	
		Dissertation module.	
A4	Awareness of issues concerning	Developed through the	*Literature reviews
	the finite re-use, availability and	Global Environmental	*Portfolio reports
	sustainability of resources.	Challenges module leading	*Oral presentations
		to other energy related	(including poster
		modules such as Energy	presentations)
		Resources & the Science of	*Field notebooks
		Zero Carbon, Hydrology &	*Fieldwork reports
		Geoenvironmental Risk, and	*Laboratory reports
		Sustainable Water,	*Exams *Dissertation
		Environmental Pollution and	thesis.
		Waste Management.	
		Hallmarks	
		1,2,3,4,5,6,7,8,9,10 and 11	
A5	Appreciation of the major Earth	Developed in the Planet	*Literature reviews
	systems involved in the cycling	Earth, Global Environmental	*Portfolio reports
	of energy, water and matter,	Challenges, Environmental	*Oral presentations
	and the complexity and	Processes & Hazards and	(including poster
	interrelatedness of them.	Introduction to Marine	presentations)
		Ecology and Oceanography	*Field notebooks
		and further explored in a	*Fieldwork reports
		number of other modules	*Laboratory reports
		including Environmental	*Exams *Dissertation
		Chemistry and Monitoring,	thesis.
		Hydrology and Marine &	
		Freshwater Processes.	
		Hallmarks	
		1,2,3,4,5,6,7,8,9,10 and 11	

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 Research, Fieldwork and Professional Skills and the final year Dissertation.  Hallmarks 1,2,3,4,5,6,7,8,9,10 and	*Literature reviews *Portfolio, reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports
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 Analysis of the Earth & Environment, Environmental Chemistry and Monitoring, Geographical Information Systems & Remote Sensing, Environmental Investigation & Monitoring and Dissertation  Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	*Exams.  *Literature reviews *Portfolio, reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams.
B3	Work with confidence from basic principles to apply essential environmental science techniques to unfamiliar situations.	Primarily developed through the Research, Fieldwork and Professional Skills, Environmental Chemistry and Monitoring, Environmental Assessment & Management, River Processes and Environmental Investigation & Monitoring. Other modules, including the final year Dissertation also contribute to achieving this learning outcome.  Hallmarks 1,2,3,4,5,6,7,8,9,10 and	*Literature reviews *Portfolio, reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams.
B4	Estimate and scope the scale of environmental problems and their potential consequences.	Demonstrated within Global Environmental Challenges,	*Literature reviews *Portfolio, reports

		Environmental Assessment & Management, Sustainable Water as well as other pollution-based modules, such as Environmental Pollution and Waste Management.  Hallmarks 1,2,3,4,5,6,7,8,9,10 and	*Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams.
B5	Integrate and critically evaluate relevant information from a variety of sources and contribute to topical environmental debates through the use of specialist knowledge, recognising legal,	Developed through most modules, including Global Environmental Challenges, Energy Resources & the Science of Zero Carbon,	*Literature reviews *Portfolio, reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork
	moral, ethical and social issues in order to propagate informed views.	Aboriginal Perspectives on the Environment, and Environmental Impact Assessment, as well as the Dissertation module.	reports *Laboratory reports *Exams.

LO	Learning outcome	Learning and Teaching	Assessment
number		methods	methods
C1	Plan, conduct and report on scientific investigations, including the use of secondary data.	C1-C3 are features of many units within the Environmental Science and Management Programme. C1-C3 are particularly stressed in Environmental Chemistry and Monitoring, Hydrology & Geoenvironmental Risk, Geographical Information Systems and Remote Sensing, Research, Fieldwork and Professional Skills, Environmental Assessment & Management, Environmental Investigation & Monitoring and the Dissertation. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	*Literature reviews *Portfolio reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams *Dissertation thesis.
C2	Collect, record and analyse data using appropriate techniques in the field and laboratory.	Outlined above.	*Literature reviews *Portfolio reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams *Dissertation thesis.
C3	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 (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams *Dissertation thesis.
C4	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	*Literature reviews *Portfolio reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams *Dissertation thesis.

		such units are Global	
		Environmental Challenges,	
		Introduction to Marine	
		Ecology and Oceanography,	
		Energy Resources & the	
		Science of Zero Carbon, as	
		well as the final year	
		Dissertation modules.	
		Dissertation modules.	
		Hallmarks	
		1,2,3,4,5,6,7,8,9,10	
		and 11	
C5	Demonstrate the ability to		*Careers portfolio
	identify and work towards	C5-C7 are stressed explicitly	*Mock graduate recruitment
	targets for personal,	within the tutorial system	assessment
	academic and career	(particularly at levels 5 and	*Mock job application,
	development, and where	6), and in the Research,	*CV and job interview.
	appropriate adapt	Fieldwork and Professional	
	approaches to study and	Skills and Dissertation	
	work necessary for self-	modules, as well as a number	
	managed and lifelong	of other modules where site	
	learning.	visits and guest speakers	
		provide students with	
		experience and	
		understanding of the	
		workplace, such as	
		Environmental Pollution, &	
		Waste Management,	
		Environmental Chemistry &	
		Monitoring and Energy	
		Resources & the Science for	
		Zero Carbon.	
		Hallmarks	
		1,2,3,4,5,6,7,8,9,10 and 11	

Learning outcome	Learning and Teaching methods	A
		Assessment methods
Communicate effectively 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 Global Environmental Challenges, Environmental Chemistry & Monitoring, Hydrology & Geoenvironmental Risk, Research, 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.	*Literature reviews *Portfolio reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams *Dissertation thesis.
Demonstrate an appreciation of issues surrounding sample selection, accuracy, precision and uncertainty during collection, recording and later analysis of data in the field and laboratory, using computer and non-computer techniques where appropriate.	and 11 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 Introduction to Marine Ecology and Oceanography, Analysis of the Earth & Environment, and Ecology, Plant and Human Impact and further developed at later stages in modules such as Environmental Chemistry & Monitoring, Research, Fieldwork and Professional Skills, Geographical Information systems and Remote Sensing, Hydrology and Geoenvironmental Risk, Environmental Investigation & Monitoring and the final year Dissertation.	*Literature reviews *Portfolio reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Dissertation thesis.
	Demonstrate an appreciation of issues surrounding sample selection, accuracy, precision and uncertainty during collection, recording and later analysis of data in the field and aboratory, using computer and non-computer techniques	required to undertake group discussions, and give oral and poster presentations to staff and their peer group, including Global Environmental Challenges, Environmental Challenges, Environmental Risk, Research, 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.  Demonstrate an appreciation of issues surrounding sample selection, accuracy, precision and uncertainty during collection, recording and later and non-computer techniques where appropriate.  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 Introduction to Marine Ecology and Oceanography, Analysis of the Earth & Environment, and Ecology, Plant and Human Impact and further developed at later stages in modules such as Environmental Chemistry & Monitoring, Research, Fieldwork and Professional Skills, Geographical Information systems and Remote Sensing, Hydrology and Geoenvironmental Risk, Environmental Investigation & Monitoring and the final year

D3	Use the internet critically and professionally as a means of communication and a source of information.	First addressed in modules such as Analysis of the Earth & Environment, Introduction to Marine Ecology and Oceanography and Global Environmental Challenges, 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.  Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews *Portfolio reports *Oral presentations (including poster presentations) *Field notebooks *Fieldwork reports *Laboratory reports *Exams
D4	Identify and critically reflect upon individual and collective goals and responsibilities and perform in a manner appropriate to these roles.	D4 and D5 are addressed in a number of modules, including Global Environmental Challenges, Environmental Chemistry and Monitoring, Research, Fieldwork and Professional Skills. 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  *Individual oral presentations (including posters)  *Written assessments.

## **Academic Regulations**

The current University of Portsmouth <u>Academic Regulations</u>: <u>Examination & Assessment Regulations</u> will apply to this course. This course has an Approved Course Exemption.

## **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. Personal tutors provide academic and personal support throughout the degree programme. They help students make the transition into higher education and, if necessary, signpost to academic and personal support services. Students meet with their personal tutor in scheduled group and one-to-one sessions and available outside of timetabled tutorials to help with urgent issues or concerns.

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 <u>Policy for Listening to and Responding to the Student Voice</u> where you can also find further information.

### **Reference Points**

The course and outcomes have been developed taking account of:

- University of Portsmouth Curriculum Framework Specification
- University of Portsmouth Strategy 2025
- 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 for Earth Sciences, Environmental Sciences and Environmental Studies
- Quality Assurance Agency Framework for Higher Education Qualifications
- Requirements of Professional and/or Statutory Regulatory Bodies: Institution of Environmental Sciences <u>The Committee of Heads of Environmental Sciences</u>, <u>Professional Accreditation for the</u> Institution of Environmental Sciences
- Vocational and professional experience, scholarship and research expertise of the University of Portsmouth's academic members of staff
- National Occupational Standards

## Changes to your course/modules

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.

## Copyright

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