School of Life and Medical Sciences

Title of Programme: MSc Environmental Management

Programme Code: HHEM

# Programme Specification

This programme specification is relevant to students entering:
21 September 2020

Associate Dean of School (Academic Quality Assurance):

Dr Stefanie Schmeer

Signature

A programme specification is a collection of key information about a programme of study (or course). It identifies the aims and learning outcomes of the programme, lists the modules that make up each stage (or year) of the programme, and the teaching, learning and assessment methods used by teaching staff. It also describes the structure of the programme, its progression requirements and any programme-specific regulations. This information is therefore useful to potential students to help them choose the right programme of study, to current students on the programme, and to staff teaching and administering the programme.

**Summary of amendments to the programme**

| Date | Section | Amendment |
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If you have any queries regarding the changes please email AQO@herts.ac.uk

# Programme Specification MSc Environmental Management

This programme specification (PS) is designed for prospective students, enrolled students, academic staff and potential employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the teaching, learning and assessment methods, learning outcomes and content for each module can be found in Definitive Module Documents (DMDs) and Module Guides.

## Section 1

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| **Awarding Institution/Body** | University of Hertfordshire |
| **Teaching Institution** | University of Hertfordshire |
| **University/partner campuses** | College Lane |
| **Programme accredited by** | IEMA / CIWEM |
| **Final Award** | MSc |
| **All Final Award titles** | Environmental Management<br>Water and Environmental Management<br>Environmental Management for Agriculture |
| **FHEQ level of award** | 7 |
| **Language of Delivery** | English |

## A. Programme Rationale

The programme has been developed in recognition of the increasing legislative, economic and political drivers for improvement in environmental performance for all organisations. This has created the need for specialist training and education in the management of natural resources and environmental impacts. The programme focuses on the environmental management requirements of organisations that aim to protect and enhance the environment, and meet the requirements of sustainable development.

The programme is designed to recruit graduates who wish to become professionals in environmental management or practitioners in full time employment with environmental management responsibilities who wish to gain environmental management qualifications. The programme offers the following pathways which are designed to serve the needs of a range of organisations and businesses.

- Environmental Management (EM)
- Water and Environmental Management (WEM)
- Environmental Management for Agriculture (EMAg)

The features which distinguish this programme from most in other UK institutions are

- The programme allows successful students to become Associated Members of the Institute of Environmental Management and Assessment (IEMA), and/or graduate members of the Chartered Institute of Water and Environmental Management (CIWEM).
- Block delivery of teaching in short periods (typically 2-3 days) per module, followed by tutorials and assignments which are completed in the following 8-10 weeks. This mode of delivery has been developed to suit students who are studying alongside employment.
- Flexibility to start in either September or January, and to study full time or part time, so suiting the needs of a variety of students.
- The programme offers a broad range of modules and 3 pathways, enabling students to tailor their programme of study towards their individual career aspirations and their professional needs.
- Many modules offer formative feedback on assignments, allowing students to develop and hone their skills during the course.

- The University of Hertfordshire has its own field station at Bayfordbury, as well as impressive laboratory facilities and a learning resources centre at its College Lane Campus in Hatfield.
- Many modules include teaching by visiting lecturers, practitioners engaged in environmental management in businesses or research centres who bring examples of current practice and expertise to modules.
- Some modules provide core textbooks to students.

## B. Educational Aims of the Programme

The programme has been devised in accordance with the University's graduate attributes of programmes of study as set out in UPR TL03.

**Additionally this programme aims to:**

- Provide students with knowledge and understanding to apply the principles of sustainable development to the management of sites and organisations
- Provide students with the knowledge and understanding to equip them to function as professionals to improve the environment, social and ethical performance of organisations, processes, products and services
- Provide students with the knowledge and understanding to equip them to manage the environmental aspects of sites and natural resources
- Provide education and training that is certified by relevant professional bodies

## C. Intended Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas. The programme outcomes are referenced the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2014), and relate to the typical student. Additionally, the SEEC Credit Level Descriptors for Further and Higher Education (2016) have been used as a guiding framework for curriculum design.

# MSc Environmental Management (EM) general pathway

| Knowledge and Understanding of: | Teaching/learning methods & strategies | Assessment |
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| A1- Understand and critically discuss how the concept of sustainability underpins environmental management systems and how the application of environmental management can be used to improve environmental performance and result in a reduction in the environmental impact of an activity or organisation.<br><br>A2- Understand and use the full range of environmental management tools and methods and to assess how | Throughout, the learner is encouraged to undertake independent study both to supplement and consolidate what is being taught / learnt and to broaden their individual knowledge and understanding of the subject.<br>A1, A2, A3, A5, A10, A11 are taught through blended learning (intensive short courses and teaching materials on the virtual learning environment (Studynet/Canvas) and practised through practical exercises.<br><br>Acquisition of A1 is introduced through lectures and workshops | Knowledge and understanding are assessed through A1, A2, A3, A5, A10, A11 which are outcomes for all pathways assessed through a range of written assignments. |

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| they can be used to enhance environmental performance.<br><br>A3- Understand in the International, EU and UK context environmental legislation and regulation and how they are used to improve overall environmental performance. | in the Sustainability and Environmental Systems module and is also dealt with in other modules, see Table 2.<br><br>Acquisition of A2 is introduced through lectures and workshops in Environmental Management Tools and Methods module and is also dealt with in other modules. | |
| A4- Critically discuss the implementation of ISO 14001and the relationship with the ISO1400 series, EMAS and ISO 9000 and be able to explain and apply environmental audit systems to assess environmental performance.<br><br>A5- Explain the skills required and understand the implementation of environmental management systems and CSR in order to effectively manage change in businesses and organisations to achieve environmental benefits. | Acquisition of A3 is introduced through lectures and workshops in Environmental Policy and Governance module and is also dealt with in other modules.<br><br>A4 is taught through blended learning and "hands on" practice in the Foundation in Environmental Auditing module and is also dealt with in other modules.<br><br>Acquisition of A5 is introduced through lectures and workshops in the Managing Change for Environmental Management module and is also dealt with in other modules. | A4 is assessed through group work and an examination. |
| A6- Apply the principles and practices of environmental management to a specific research project.<br><br>A7- Critically select and apply a range of research tools and methods to an environmental management research project. | A6 & A7 are taught through blended learning and the iterative relationship with the project supervisor in the Research Methods module and the Research Project module for each pathway. | A6 & A7 are assessed through written reports and seminars. |
| A9- Understand the concepts of climate change, transport and energy planning and their impact on reporting environmental performance through EMS | A9 is introduced in the Sustainability and Environmental Systems module and is also dealt with in Transport, Policy and Travel Planning, Sustainable Energy, Environmental Management Systems Implementation and other modules. | A9 is assessed through written reports. |
| A10 -Critically discuss the theory and practice of waste minimisation. | A10 is taught through Foundation in Environmental Auditing, and also Integrated Waste and Pollution Management and other modules. | A10 is assessed through examination (FEA) and written reports. |
| A11- Apply principles of ecology and conservation to land management and protection of habitats. | A11 is introduced in the Sustainability and Environmental Systems module and is also dealt with in other modules. | A11 is assessed through reports. |

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| A12- Students will be able to apply the philosophy and concepts of environmental management to a wide variety of sites and organisations. (EM specific) | | A12 is assessed through written reports. |
| Intellectual skills - able to: | Teaching/learning methods & strategies | Assessment |
| B1- Evaluate the environmental impacts of organisations, processes, products and services on the environment.<br><br>B2- Assess Environmental Risks associated with new developments and projects.<br><br>B3- Interpret the results of environmental assessments of sites and natural resources | Intellectual skills are developed through the blended learning programme in each module.<br><br>Throughout, the learner is encouraged to develop intellectual skills further by independent study.<br><br>Acquisition of B1 and B3 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules, see Table 2.<br><br>Acquisition of B2 is covered through lectures and workshops in the several modules, see Table 2. | Intellectual skills are assessed through the assignments and examination. |
| B4- Develop environmental policies, strategies and management systems to improve the environmental performance of businesses and organizations<br><br>B5- Select economic analysis techniques as appropriate to implementing environmental management.<br><br>B6- Appraise and critically evaluate their own and others work to reach an appropriate professional standard. | Acquisition of B4 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules.<br><br>Acquisition of B5 and B6 is covered in detail in lectures and workshops in the Managing Change for Environmental Management module and is also dealt with in other modules. | |
| B7-Relate the concepts underpinning sustainable developments to environmental management in organisations, business, industry and agriculture.<br><br>B8- Undertake research and apply the knowledge gained | Acquisition of B7 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules.<br><br>Acquisition of B8 is covered in detail in lectures and workshops | |

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| to new situations to improve environmental performance of organisations, business, industry and agriculture.<br><br>B9- synthesise and apply the concepts and theories associated with a broad range of environmental management issues (EM specific)<br><br>B10- evaluate approaches and issues associated with corporate environmental strategies, systems and responsibilities | in the Managing Change for Environmental Management module and is also dealt with in other modules.<br><br>B9 is specific for the EM pathway, taught through blended learning, including practical exercises, in the choice modules.<br><br>B10 is taught through blended learning in the Managing Change for Environmental Management and Environmental Management Systems Implementation modules. | |
| Practical skills - able to: | Teaching/learning methods & strategies | Assessment |
| C1-Apply environmental management methods and tools in order to assess the environmental impact of a business or organisation.<br><br>C2- Apply environmental assessment techniques to natural resource use.<br><br>C3- Design, develop, carry out and report on environmental investigations<br><br>C4- Apply various economic tools to the implementation of environmental management initiatives<br><br>C5- Apply the knowledge gained from research on environmental management systems. | Practical skills C1 to C5 are developed through the blended learning for each module, see Table 2.<br><br>A unique feature of this MSc is to teach through practical field experience in the Water Resources, Water Pollution Control, agricultural and crop modules. | Practical skills are assessed through assignments and examination |
| C6- use environmental management tools in a variety of applications (EM specific)<br><br>C7- construct and communicate an effective business case for adopting an environmental management system and CSR strategy (EM specific) | C6 is specific to the EM pathway and taught through blended learning in choice modules and the Research Project.<br><br>C7 is acquired through blended learning on Environmental Management Tools and Methods, Environmental Management Systems Implementation, Managing Change for Environmental Management modules. | C6 is assessed through written reports.<br><br>C7 is assessed through written assignments. |

| Transferable skills - able to: | Teaching/learning methods & strategies | Assessment |
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| D1- Apply appropriate Information Technology and Information Management skills<br><br>D2- Present both oral and written analysis of case studies.<br><br>D3- Defend the findings of his/her work<br><br>D4- Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks<br><br>D5- Present findings of the project in a style and quality appropriate to a research report at Level 7.<br><br>D6-Work effectively in small groups and reflect on the learning experience. | Transferable skills D1 to D6 are developed through the blended learning programme for each module, and the Study Skills modules, see Table 2.<br><br>Throughout, the learner is encouraged to develop transferable skills by maintaining a record of evidence and completing a personal development | Transferable skills are developed through assignments, examination and the research report. Additional assessment of group work is carried out on specific modules which are compulsory for all pathways. |

# MSc Water and Environmental Management (WEM) pathway

| Knowledge and Understanding of: | Teaching/learning methods & strategies | Assessment |
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| A1- Understand and critically discuss how the concept of sustainability underpins environmental management systems and how the application of environmental management can be used to improve environmental performance and result in a reduction in the environmental impact of an activity or organisation.<br><br>A2- Understand and use the full range of environmental management tools and methods and to assess how they can be used to enhance environmental performance.<br><br>A3- Understand in the International, EU and UK context environmental legislation and regulation and how they are used to improve overall environmental performance.<br><br>A4- Critically discuss the implementation of ISO 14001and the relationship with the ISO1400 series, EMAS and ISO 9000 and be able to explain and apply environmental audit systems to assess environmental performance.<br><br>A5- Explain the skills required and understand the implementation of environmental management systems and CSR in order to effectively manage change in businesses and organisations to achieve environmental benefits.<br><br>A6- Apply the principles and practices of environmental management to a specific research project. | Throughout, the learner is encouraged to undertake independent study both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject.<br><br>A1, A2, A3, A5, A10, A11 are outcomes for all three pathways taught through blended learning (intensive short courses and teaching materials on the virtual learning environment (Studynet/Canvas) and practised through practical exercises.<br><br>Acquisition of A1 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules, see Table 2.<br><br>Acquisition of A2 is introduced through lectures and workshops in the Environmental Management Tools and Methods module and is also dealt with in other modules.<br><br>Acquisition of A3 is introduced through lectures and workshops in the Environmental Policy and Governance module and is also dealt with in other modules.<br><br>A4 is taught through blended learning and “hands on” practice in the Foundation in Environmental Auditing module and is also dealt with in other modules.<br><br>Acquisition of A5 is introduced through lectures and workshops in the Managing Change for Environmental Management module and is also dealt with in other modules. | Knowledge and understanding are assessed through A1, A2, A3, A5, A10, A11 which are outcomes for all pathways assessed through a range of written assignments.<br><br>A4 is assessed through group work and an examination.<br><br>A6 & A7 are assessed through written reports and seminars. |

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| A7- Critically select and apply a range of research tools and methods to an environmental management research project.<br><br>A8- Display knowledge and understanding of environmental management of water resources and water catchment areas and understand the source, control and management of water pollution. (WEM specific)<br><br>A9- Understand the concepts of climate change, transport and energy planning and their impact on reporting environmental performance through EMS.<br><br>A10- Critically discuss the theory and practice of waste minimisation.<br><br>A11- Apply principles of ecology and conservation to land management and protection of habitats. | A6 & A7 are taught through blended learning and the iterative relationship with the project supervisor in the Research Methods module and the Research Project module for each pathway.<br><br>A8 is specific to the WEM pathway, taught through blended learning and practical exercises in the Water Resources and Water Pollution Control modules.<br><br>A9 is introduced in SES and is also dealt with in TPTP, SE, EMTM and other modules.<br><br>A10 is taught through Foundation in Environmental Auditing, and also Integrated Waste and Pollution Management and other modules.<br><br>A11 is introduced in Sustainability and Environmental Systems and is also dealt with in other modules | A8 is assessed through written reports.<br><br>A9 is assessed through written reports.<br><br>A10 is assessed through examination (FEA) and written reports.<br><br>A11 is assessed through reports. |
| Intellectual skills - able to: | Teaching/learning methods & strategies | Assessment |
| B1- Evaluate the environmental impacts of organisations, processes, products and services on the environment.<br><br>B2- Assess Environmental Risks associated with new developments and projects.<br><br>B3- Interpret the results of environmental assessments of sites and natural resources<br><br>B4- Develop environmental policies, strategies and management systems to improve the environmental performance of businesses and organizations | Intellectual skills are developed through the blended learning programme in each module.<br><br>Throughout, the learner is encouraged to develop intellectual skills further by independent study.<br><br>Acquisition of B1 and B3 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules, see Table 2.<br><br>Acquisition of B2 is covered through lectures and workshops in the several modules, see Table 2.<br><br>Acquisition of B4 is introduced through lectures and workshops | Intellectual skills are assessed through the assignments and examination. |

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| B5- Select economic analysis techniques as appropriate to implementing environmental management.<br><br>B6- Appraise and critically evaluate their own and others work to reach an appropriate professional standard.<br><br>B7-Relate the concepts underpinning sustainable developments to environmental management in organisations, business, industry and agriculture.<br><br>B8- Undertake research and apply the knowledge gained to new situations to improve environmental performance of organisations, business, industry and agriculture.<br><br>B10- evaluate approaches and issues associated with corporate environmental strategies, systems and responsibilities<br><br>B11- critically appraise water resource and wastewater management and evaluate alternative proposals (WEM specific) | in the Sustainability and Environmental Systems module and is also dealt with in other modules.<br><br>Acquisition of B5 and B6 is covered in detail in lectures and workshops in the Managing Change for Environmental Management module and is also dealt with in other modules.<br><br>Acquisition of B7 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules.<br><br>Acquisition of B8 is covered in detail in lectures and workshops in the Managing Change for Environmental Management module and is also dealt with in other modules.<br><br>B10 is taught through blended learning in the Managing Change for Environmental Management and Environmental Management Systems Implementation modules.<br><br>B11 is specific to the WEM pathway, taught through blended learning exercises in the Water Resources and Water Pollution Control modules. | |
| Practical skills - able to: | Teaching/learning methods & strategies | Assessment |
| C1-Apply environmental management methods and tools in order to assess the environmental impact of a business or organisation.<br><br>C2- Apply environmental assessment techniques to natural resource use.<br><br>C3- Design, develop, carry out and report on environmental investigations<br><br>C4- Apply various economic tools to the implementation of environmental management initiatives | Practical skills C1 to C5 are developed through the blended learning for each module, see Table 2.<br><br>A unique feature of this MSc is to teach through practical field experience in the Water Resources, Water Pollution Control, agricultural and crop modules. | Practical skills are assessed through assignments and examination |

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| C5- Apply the knowledge gained from research on environmental management systems.<br><br>C7- Construct and communicate an effective business case for adopting an environmental management system and CSR strategy.<br><br>C8- Undertake fieldwork and/or laboratory work in relation to water resources and water pollution control | C7 is acquired through blended learning on Environmental Management Tools and Methods, Environmental Management Systems Implementation, Managing Change for Environmental Management modules.<br><br>C8 is specific to the WEM pathway and taught through fieldwork and/or laboratory work | C7 is assessed through written assignments<br><br>C8 is assessed through written reports. |
| Transferable skills - able to: | Teaching/learning methods & strategies | Assessment |
| D1- Apply appropriate Information Technology and Information Management skills<br><br>D2- Present both oral and written analysis of case studies.<br><br>D3- Defend the findings of his/her work<br><br>D4- Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks<br><br>D5- Present findings of the project in a style and quality appropriate to a research report at Level 7.<br><br>D6-Work effectively in small groups and reflect on the learning experience. | Transferable skills D1 to D6 are developed through the blended learning programme for each module, and the Study Skills modules see Table 2.<br><br>Throughout, the learner is encouraged to develop transferable skills by maintaining a record of evidence and completing a personal development | Transferable skills are developed through assignments, examination and the research report. Additional assessment of group work is carried out on specific modules which are compulsory for all pathways. |

# MSc Environmental Management and Agriculture (EMAg) Pathway

| Knowledge and Understanding of: | Teaching/learning methods & strategies | Assessment |
|---|---|---|
| A1- Understand and critically discuss how the concept of sustainability underpins environmental management systems and how the application of environmental management can be used to improve environmental performance and result in a reduction in the environmental impact of an activity or organisation.<br><br>A2- Understand and use the full range of environmental management tools and methods and to assess how they can be used to enhance environmental performance.<br><br>A3- Understand in the International, EU and UK context environmental legislation and regulation and how they are used to improve overall environmental performance.<br><br>A4- Critically discuss the implementation of ISO 14001and the relationship with the ISO1400 series, EMAS and ISO 9000 and be able to explain and apply environmental audit systems to assess environmental performance.<br><br>A5- Explain the skills required and understand the implementation of environmental management systems and CSR in order to effectively manage change in businesses and organisations to achieve environmental benefits.<br><br>A6- Apply the principles and practices of environmental management to a specific research project. | Throughout, the learner is encouraged to undertake independent study both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject.<br><br>A1, A2, A3, A5, A10, A11 which are outcomes for all three pathways are taught through blended learning (intensive short courses and teaching materials on the virtual learning environment (Studynet/Canvas) and practised through practical exercises.<br><br>Acquisition of A1 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules, see Table 2.<br><br>Acquisition of A2 is introduced through lectures and workshops in Environmental Management Tools and Methods module and is also dealt with in other modules.<br><br>Acquisition of A3 is introduced through lectures and workshops in Environmental Policy and Governance module and is also dealt with in other modules.<br><br>A4 is taught through blended learning and “hands on” practice in the Foundation in Environmental Auditing module and is also dealt with in other modules.<br><br>Acquisition of A5 is introduced through lectures and workshops in the Managing Change for Environmental Management module and is also dealt with in other modules. | Knowledge and understanding are assessed through A1, A2, A3, A5, A10, A11 which are outcomes for all pathways assessed through a range of written assignments.<br><br>A4 is assessed through group work and an examination. |

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| A7- Critically select and apply a range of research tools and methods to an environmental management research project.<br><br>A9- Understand the concepts of climate change, transport and energy planning and their impact on reporting environmental performance through EMS<br><br>A10- Critically discuss the theory and practice of waste minimisation.<br><br>A11- Apply principles of ecology and conservation to land management and protection of habitats.<br><br>A13- Students will understand agricultural production systems and the key sources of agricultural pollution and be able to apply appropriate mitigation practices on a wide variety of farms and holdings. (EMAg specific). | A6 & A7 are taught through blended learning and the iterative relationship with the project supervisor in the Research Methods module and the Research Project module for each pathway.<br><br>A9 is introduced in the Sustainability and Environmental Systems module and is also dealt with in Transport, Policy and Travel Planning, Sustainable Energy, Environmental Management Systems Implementation and other modules.<br><br>A10 is taught through Foundation in Environmental Auditing, and also Integrated Waste and Pollution Management and other modules.<br><br>A11 is introduced in the Sustainability and Environmental Systems module and is also dealt with in other modules. | A6 & A7 are assessed through written reports and seminars.<br><br>A9 is assessed through written reports.<br><br>A10 is assessed through examination (FEA) and written reports.<br><br>A11 is assessed through reports.<br><br>A13 is assessed through written reports. |
| Intellectual skills - able to: | Teaching/learning methods & strategies | Assessment |
| B1- Evaluate the environmental impacts of organisations, processes, products and services on the environment.<br><br>B2- Assess Environmental Risks associated with new developments and projects.<br><br>B3- Interpret the results of environmental assessments of sites and natural resources | Intellectual skills are developed through the blended learning programme in each module.<br><br>Throughout, the learner is encouraged to develop intellectual skills further by independent study.<br><br>Acquisition of B1 and B3 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules, see Table 2.<br><br>Acquisition of B2 is covered through lectures and workshops in the several modules, see Table 2. | Intellectual skills are assessed through the assignments and examination. |

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| B4- Develop environmental policies, strategies and management systems to improve the environmental performance of businesses and organizations | Acquisition of B4 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules. | |
| B5- Select economic analysis techniques as appropriate to implementing environmental management.<br><br>B6- Appraise and critically evaluate their own and others work to reach an appropriate professional standard. | Acquisition of B5 and B6 is covered in detail in lectures and workshops in the Managing Change for Environmental Management module and is also dealt with in other modules. | |
| B7-Relate the concepts underpinning sustainable developments to environmental management in organisations, business, industry and agriculture. | Acquisition of B7 is introduced through lectures and workshops in the Sustainability and Environmental Systems module and is also dealt with in other modules. | |
| B8- Undertake research and apply the knowledge gained to new situations to improve environmental performance of organisations, business, industry and agriculture. | Acquisition of B8 is covered in detail in lectures and workshops in the Managing Change for Environmental Management module and is also dealt with in other modules. | |
| B10- Evaluate approaches and issues associated with corporate environmental strategies, systems and responsibilities | B10 is taught through blended learning in the Managing Change for Environmental Management and Environmental Management Systems Implementation modules. | |
| B12- Develop farm management plans using integrated systems approaches and assess environmental impacts and their mitigation. Students choosing ICP will be able to evaluate threats (EMAg specific) | B12 is specific to the EMAg pathway and taught through blended learning and developed by directed independent study in the Integrated Farm Management and Environment and Agriculture modules. | |
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| Practical skills - able to: | Teaching/learning methods & strategies | Assessment |
| C1-Apply environmental management methods and tools in order to assess the environmental impact of a business or organisation. | Practical skills C1 to C5 are developed through the blended learning for each module, see Table 2.<br>A unique feature of this MSc is to teach through practical field | Practical skills are assessed through assignments and examination |

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| C2- Apply environmental assessment techniques to natural resource use.<br><br>C3- Design, develop, carry out and report on environmental investigations<br><br>C4- Apply various economic tools to the implementation of environmental management initiatives<br><br>C5- Apply the knowledge gained from research on environmental management systems. | experience in the Water Resources, Water Pollution Control, agricultural and crop modules. | |
| C7- Construct and communicate an effective business case for adopting an environmental management system and CSR strategy (EM specific) | C7 is acquired through blended learning on EMTM, EMSI, MCEM modules | C7 is assessed through written assignments |
| C9- Develop models and techniques used in agricultural management. Students choosing the ICP module will be able to assess plant pests and diseases in the laboratory (EMAg specific) | C9 is specific to the EMAg pathway and taught through blended learning. Students choosing the ICP module will also do laboratory work | C9 is assessed through management plans and written reports |
| Transferable skills - able to: | Teaching/learning methods & strategies | Assessment |
| D1- Apply appropriate Information Technology and Information Management skills<br><br>D2- Present written and/or oral analysis of case studies.<br><br>D3- Defend the findings of his/her work<br><br>D4- Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks | Transferable skills D1 to D6 are developed through the blended learning programme for each module, and study skills module see Table 2.<br><br>Throughout, the learner is encouraged to develop transferable skills by maintaining a record of evidence and completing a personal development | Transferable skills are developed through assignments, examination and the research report. Additional assessment of group work is carried out on specific modules which are compulsory for all pathways. |

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| D5- Present findings of the project in a style and quality appropriate to a research report at Level 7.<br><br>D6- Work effectively in small groups and reflect on the learning experience. | | |

## D. Programme Structures, Features, Levels, Modules, and Credits

The programme is offered in full-time (13-15 months depending on entry point) mode and part-time mode by blended learning (normally 2-3 years), and leads to the award of MSc. Specialist pathways are available in Environmental Management for Agriculture (EMAg) and Water and Environmental Management (WEM). A general pathway 'Environmental Management' (EM) is also available. Entry is normally at Masters level with suitable first degree qualifications (lower second class degree) or equivalent professional experience (see section G). The programme structure and progression information below is provided for the MSc award (Table 1a, 1b and 1c). Entry is in both Semester A and Semester B. Attendance at block teaching sessions is compulsory for full-time (FT) and part-time (PT) students. Tutorials (generally between 1-3) follow the teaching, and are scheduled for afternoons. All students are invited to attend tutorials offering parity of experience to all students on the course. However, it is acknowledged that part-time students who are in work may find it difficult to attend and so tutorials are not compulsory for part-time students as this could limit their ability to pursue the MSc while working. Part-time students who are unable to attend the tutorials are able to access all tutorial teaching materials through the virtual learning environment Studynet, and may contact the lecturers / module leader by telephone or email for extra advice.

### Professional and Statutory Regulatory Bodies

The programme and pathways are in receipt of professional body accreditation from the Institute of Environmental Management and Assessment (IEMA), and the Chartered Institute of Water and Environmental Management (CIWEM).

Continued accreditation will allow students to apply for graduate level membership of either body.

### Programme Structure

The programme structure and progression information below (Table 1a and 1b) is provided for the award. Any interim awards are identified in Table 1b. The Programme Learning Outcomes detailed above are developed and assessed through the constituent modules. Table 2 (in section 2) identifies where each learning outcome is assessed.

### Table 1a Outline Programme Structure

**Mode of study** Full time. Part time students must complete the same programme of modules, but normally divide modules over 2-3 years of study.

**Entry point** Semester A and Semester B starters take the same modules. The Sustainability and Environmental Systems, Research Methods and Research Project modules are run in both Semester A and Semester B, to accommodate the two intakes.

# MSc Environmental Management general pathway

| Compulsory Modules<br>Module Title | Module Code | Credit Points | Language of Delivery | % Examination | % Coursework | % Practical | Semesters |
|---|---|---|---|---|---|---|---|
| Sustainability and Environmental Systems | 7LFS1028 | 15 | English | 0 | 100 | 0 | A, B |
| Research Methods | 7LFS1029 | 15 | English | 0 | 100 | 0 | AB, BC |
| Study Skills | 7LMS0235 | 0 | English | 0 | 100 | 0 | ABC, BCA |
| Study Skills – Part-time | 7LMS0250 | 0 | English | 0 | 100 | 0 | ABC, BCA |
| Managing Change for Environmental Management | 7LMS0223 | 15 | English | 0 | 100 | 0 | AB |
| Foundation in Environmental Auditing | 7LFS1030 | 15 | English | 50 | 50 | 0 | AB |
| Environmental Policy and Governance | 7LFS1033 | 15 | English | 0 | 100 | 0 | AB |
| Environmental Management Tools and Methods | 7LFS1034 | 15 | English | 0 | 100 | 0 | AB |
| Environmental Management Research Project | 7LFS1040 | 45 | English | 0 | 100 | 0 | BC, CA |

| Optional Modules<br>Module Title | Module Code | Credit Points | Language of Delivery | % Examination | % Coursework | % Practical | Semesters |
|---|---|---|---|---|---|---|---|
| Integrated Waste and Pollution Management | 7LFS1035 | 15 | English | 0 | 100 | 0 | AB |
| Ecology and Conservation | 7LFS1037 | 15 | English | 0 | 100 | 0 | C |
| Transport Policy and Travel Planning | 7LFS1026 | 15 | English | 0 | 100 | 0 | B |
| Sustainable Energy | 7LFS1032 | 15 | English | 0 | 100 | 0 | B |
| Agriculture and Environment | 7LMS0207 | 15 | English | 0 | 100 | 0 | B |
| Environmental Management Systems Implementation | 7LFS1047 | 15 | English | 0 | 100 | 0 | BC |
| Water Resources | 7LFS1038 | 15 | English | 0 | 100 | 0 | BC |
| Water Pollution Control | 7LFS1036 | 15 | English | 0 | 100 | 0 | BC |

# MSc Water and Environmental Management

| Compulsory Modules<br>Module Title | Module Code | Credit Points | Language of Delivery | % Examination | % Coursework | % Practical | Semesters |
|---|---|---|---|---|---|---|---|
| Sustainability and Environmental Systems | 7LFS1028 | 15 | English | 0 | 100 | 0 | A, B |
| Research Methods | 7LFS1029 | 15 | English | 0 | 100 | 0 | AB, BC |
| Study Skills | 7LMS0235 | 0 | English | 0 | 100 | 0 | ABC, BCA |
| Study Skills – Part-time | 7LMS0250 | 0 | English | 0 | 100 | 0 | ABC, BCA |
| Managing Change for Environmental Management | 7LMS0223 | 15 | English | 0 | 100 | 0 | AB |
| Foundation in Environmental Auditing | 7LFS1030 | 15 | English | 50 | 50 | 0 | AB |
| Environmental Policy and Governance | 7LFS1033 | 15 | English | 0 | 100 | 0 | AB |
| Environmental Management Tools and Methods | 7LFS1034 | 15 | English | 0 | 100 | 0 | AB |
| Water and Environmental Management Research Project (WEM) | 7LFS1041 | 45 | English | 0 | 100 | 0 | BC, CA |
| Water Resources | 7LFS1038 | 15 | English | 0 | 100 | 0 | BC |
| Water Pollution Control | 7LFS1036 | 15 | English | 0 | 100 | 0 | BC |

| Optional Modules<br>Module Title | Module Code | Credit Points | Language of Delivery | % Examination | % Coursework | % Practical | Semesters |
|---|---|---|---|---|---|---|---|
| Integrated Waste and Pollution Management | 7LFS1035 | 15 | English | 0 | 100 | 0 | AB |
| Ecology and Conservation | 7LFS1037 | 15 | English | 0 | 100 | 0 | C |
| Sustainable Energy | 7LFS1032 | 15 | English | 0 | 100 | 0 | B |
| Agriculture and Environment | 7LMS0207 | 15 | English | 0 | 100 | 0 | B |
| Environmental Management Systems Implementation | 7LFS1047 | 15 | English | 0 | 100 | 0 | BC |

# MSc Environmental Management for Agriculture

| Compulsory Modules<br>Module Title | Module Code | Credit Points | Language of Delivery | % Examination | % Coursework | % Practical | Semesters |
|---|---|---|---|---|---|---|---|
| Sustainability and Environmental Systems | 7LFS1028 | 15 | English | 0 | 100 | 0 | A, B |
| Study Skills | 7LMS0235 | 0 | English | 0 | 100 | 0 | ABC, BCA |
| Study Skills – Part-time | 7LMS0250 | 0 | English | 0 | 100 | 0 | ABC, BCA |
| Research Methods | 7LFS1029 | 15 | English | 0 | 100 | 0 | AB, BC |
| Foundation in Environmental Auditing | 7LFS1030 | 15 | English | 50 | 50 | 0 | AB |
| Agriculture and Environment | 7LMS0207 | 15 | English | 0 | 100 | 0 | B |
| Environmental Management for Agriculture Research Project | 7LFS1045 | 45 | English | 0 | 100 | 0 | BC, CA |
| Integrated Farm Management | 7LFS1044 | 15 | English | 0 | 100 | 0 | BC |
| Integrated Crop Protection | 7LMS0208 | 15 | English | 0 | 100 | 0 | BC |

| Optional Modules<br>Module Title | Module Code | Credit Points | Language of Delivery | % Examination | % Coursework | % Practical | Semesters |
|---|---|---|---|---|---|---|---|
| Integrated Waste and Pollution Management | 7LFS1035 | 15 | English | 0 | 100 | 0 | AB |
| Ecology and Conservation | 7LFS1037 | 15 | English | 0 | 100 | 0 | C |
| Transport Policy and Travel Planning | 7LFS1026 | 15 | English | 0 | 100 | 0 | B |
| Sustainable Energy | 7LFS1032 | 15 | English | 0 | 100 | 0 | B |
| Water Resources | 7LFS1038 | 15 | English | 0 | 100 | 0 | BC |
| Water Pollution Control | 7LFS1036 | 15 | English | 0 | 100 | 0 | BC |
| Environmental Policy and Governance | 7LFS1033 | 15 | English | 0 | 100 | 0 | AB |
| Managing Change for Environmental Management | 7LMS0223 | 15 | English | 0 | 100 | 0 | AB |
| Environmental Management Tools and Methods | 7LFS1034 | 15 | English | 0 | 100 | 0 | AB |

The award of an MSc degree requires 180 credit points awarded at Level 7, including the independent research project.

Table 1b Final and interim awards available

The programme provides the following final and interim awards:

| Final Award | Award Title | Minimum requirements | Available at end of (normally): | Programme Learning Outcomes developed (see above) |
|---|---|---|---|---|
| MSc | Environmental Management, Water and Environmental Management, Environmental Management for Agriculture | 180 credit points including at least 150 at level 7 | 3 Semesters | All programme learning outcomes (see Table 2) |
| **Interim Award** | **Award Title** | **Minimum requirements** | **Available at end of Level** | **Programme Learning Outcomes developed (see above)** |
| Postgraduate Diploma | Environmental Management | 120 credit points, including at least 60 at level 7 | 2, 3 Semesters | A1,A2,A3,A4,A5,A9, A10,A11,A12<br>B1,B2,B3,B4,B5, B6,B9,B10,<br>C1,C2,C4,C5,C6,C7<br>D1,D2,D6 |
| | Water and Environmental Management | | | A1,A2,A3,A4,A5,A8,A9, A10,A11,A12<br>B1,B2,B3,B4,B5, B6,,B10,B11,<br>C1,C2, C4,C5,C6C7,C8<br>D1,D2,D6 |
| | Environmental Management for Agriculture | | | A1,A2,A3,A4,A5,A9, A10,A11,A12,A13<br>B1,B2,B3,B4,B5, B6, B10, B12<br>C1,C2, C4,C5,C6C7,C9<br>D1,D2,D6 |
| Postgraduate Certificate | Environmental Management | 60 credit points, including at least 30 at level 7 | 1-2 Semesters | A1,A2,A3,A4,A5,A12<br>B1,B2,B3,B4 B5<br>C1,C3<br>D1,D2,D4 |

Masters and Diploma awards can be made "with Distinction" or "with Commendation" where criteria as described in UPR AS14, Section D and the students' handbook are met.

## Programme-specific assessment regulations

The programme is compliant with the University's academic regulations (UPR AS11, UPR AS12 or UPR AS13, UPR AS14) with the exception of those listed below, which have been specifically approved by the University:

None

Further programme-specific regulations (requiring School-level approval) are given below:

- In exceptional circumstances final compensatory credit may be given but would not lead to IEMA or CIWEM membership.

- A pass grade in the Masters project is required to gain the award of MSc.
- All students must enrol on the Study Skills module 7LMS0235 (FT) or 7LMS0250 (PT) in their first semester.
- Students must successfully complete 7LMS0235 (FT) or 7LMS0250 (PT) in order to achieve the MSc award.

## E. Management of Programme & Support for student learning

### Management

The programme is managed and administered through:
- A Programme Leader to help students understand the programme structure
- Student representatives on programme committees
- A designated programme administrator
- Module leaders

### Support

Students are supported by:
- A Programme Leader to help students understand the pathway/programme structure
- An induction week at the beginning of each new academic session
- Overseas Orientation
- An extensive Learning Resources Centre, incorporating a library and computer centre within an attractive modern study environment where student can access extensive digital and print collections of information resources.
- A substantial Student Centre that provides advice on issues such as finance, University regulations, legal matters etc.
- Office of Dean of students, incorporating Chaplaincy, Counselling and nursery.
- An Accommodation Office
- Embedded English and study skills non-credit rated module
- University disability advisors
- Equality office
- Careers, enterprise and employment services
- Personal Tutors to provide academic and pastoral support
- Student representatives on programme committees
- The Students' Union
- Guided student-centred learning through the use of Studynet
- A mathematics drop in centre
- Medical centre
- Careers and Employment Service

## F. Other sources of information

In addition to this Programme Specification, the University publishes guidance to registered students on the programme and its constituent modules:
- A Programme (or Student) Handbook;
- A Definitive Module Document (DMD) for each constituent module;
- A Module Guide for each constituent module.

The Ask Herts website provides information on a wide range of resources and services available at the University of Hertfordshire including academic support, accommodation, fees, funding, visas, wellbeing services and student societies.

As a condition of registration, all students of the University of Hertfordshire are required to comply with the University's rules, regulations and procedures. These are published in a series of documents called 'University Policies and Regulations' (UPRs). The University requires that all students consult these documents which are available on-line, on the UPR web site, at: http://www.herts.ac.uk/secreg/upr/. In particular, UPR SA07 'Regulations and Advice for Students' Particular Attention - Index' provides information on the UPRs that contain the academic regulations of particular relevance for undergraduate and taught postgraduate students.

In accordance with section 4(5) of the Higher Education and Research Act 2017 (HERA), the UK Office for Students (OfS) has registered the University of Hertfordshire in the register of English higher education providers. The Register can be viewed at: https://www.officeforstudents.org.uk/advice-and-guidance/the-register/the-ofs-register/. Furthermore, the OfS has judged that the University of Hertfordshire delivers consistently outstanding teaching, learning and outcomes for its students. It is of the highest quality found in the UK. Consequently, the University received a Gold award in the 2018 Teaching Excellence and Student Outcomes (TEF) exercise. This award was made in June 2018 and is valid for up to 3 years. The TEF panel's report and conclusions can be accessed at: https://www.officeforstudents.org.uk/advice-and-guidance/teaching/tef-outcomes/#/provider/10007147

## G. Entry requirements

The normal entry requirements for the programme are:

- A first or second class Honours degree in environmental science/management, another science, geography, technology, engineering, law, economics, or a business related subject (EM, WEM); or
- A first or second class Honours degree (BSc or BA) in agriculture, botany, ecology, horticulture, plant sciences, zoology, or a related subject (EMAg); or
- Holders of degrees with third class Honours or without Honours, or holders of an HNC or HND or equivalent qualification, plus a strong professional background in the areas of environmental, waste, quality, health and safety or quality management. A strong professional background may be demonstrated by relevant professional body recognition, and/or an ability to demonstrate relevant skills or knowledge. This will need to be evidenced through employment references highlighting relevant past and current employment responsibilities in such areas as reporting writing, and various aspects of environmental management.
- A strong professional background in the areas of environmental, waste, quality, health and safety or quality management. A strong professional background may be demonstrated by relevant professional body recognition, and/or an ability to demonstrate relevant skills or knowledge. This will need to be evidenced through employment references highlighting relevant past and current employment responsibilities in such areas as reporting writing, and various aspects of environmental management.
- Those who have passed the International Pre-Masters Programme at the University of Hertfordshire, following a relevant degree.

Candidates must show proficiency in English as demonstrated by an approved test: IELTS score 6.5 overall.

The programme is subject to the University's Principles, Policies and Regulations for the Admission of Students to Undergraduate and Taught Postgraduate Programmes (in UPR SA03), along with associated procedures. These will take account of University policy and guidelines for assessing accredited prior certificated learning (APCL) and accredited prior experiential learning (APEL).

If you would like this information in an alternative format please contact: icadmin@herts.ac.uk

If you wish to receive a copy of the latest Programme Annual Monitoring and Evaluation Report (AMER) and/or the External Examiner's Report for the programme, please email a request to aqo@herts.ac.uk

**MSc Environmental Management**

## Table 2: Development of Programme Learning Outcomes in the Constituent Modules

The following maps identify where the programme learning outcomes are assessed in the constituent modules for each of the 3 pathways. They provide (i) an aid to academic staff in understanding how individual modules contribute to the programme aims (ii) a checklist for quality control purposes and (iii) a means to help students monitor their own learning, personal and professional development as the programme progresses. **Key**: Learning Outcome which is assessed as part of the module

| | | MSc Environmental Management general pathway Programme Learning Outcomes (as identified in section 1 and the following page) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Knowledge & Understanding | | | | | | | | | | | | | Intellectual Skills | | | | | | | | | | | | Practical Skills | | | | | | | | | Transferable Skills | | | | | |
| **Modules** | **Module Code** | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | A10 | A11 | A12 | A13 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | B10 | B11 | B12 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | D1 | D2 | D3 | D4 | D5 | D6 |
| **Compulsory modules** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sustainability and Environmental Systems | 7LFS1028 | ■ | | | | | | | | ■ | | ■ | | | ■ | | ■ | ■ | | | ■ | ■ | | | | | ■ | | ■ | | | | | | | ■ | ■ | ■ | ■ | | |
| Environmental Policy and Governance | 7LFS1033 | | | ■ | | | | | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | ■ | | ■ | ■ | ■ | | | | | ■ | ■ | ■ | ■ | | |
| Foundation in Environmental Auditing | 7LFS1030 | | | | ■ | | | | | | ■ | | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | | ■ | ■ | | | | ■ | ■ | ■ | ■ | | ■ |
| Environmental Management Tools and Methods | 7LFS1034 | | ■ | ■ | | | | | | ■ | | | ■ | | ■ | ■ | | | | | | | ■ | ■ | | | | ■ | | | ■ | ■ | | | | ■ | ■ | ■ | ■ | | |
| Environmental Management Systems Implementation | 7LFS1047 | | | | ■ | | | | | ■ | | ■ | ■ | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | | ■ | | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Managing Change for Environmental Management | 7LMS0223 | ■ | ■ | | | ■ | | | | ■ | | | ■ | | ■ | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Research Methods | 7LFS1029 | | | | | | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | ■ | | | | | | | ■ | ■ | ■ | ■ | ■ | |
| Environmental Management Research Project | 7LFS1040 | | | | | | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | ■ | |
| Study Skills | 7LMS0250/ 7LMS0235 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | |
| **Optional modules** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water Resources | 7LFS1038 | | | | | | | | ■ | | | | ■ | | ■ | | ■ | ■ | | ■ | ■ | | ■ | | ■ | | | ■ | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | | |
| Water Pollution Control | 7LFS1036 | | | | | | | | ■ | | | | ■ | | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ | | ■ | | | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ | ■ | ■ | | |
| Integrated Waste and Pollution Management | 7LFS1035 | | | | | | | | | | ■ | | ■ | | ■ | ■ | ■ | | ■ | ■ | ■ | | ■ | | | | ■ | ■ | | ■ | | ■ | | | | ■ | ■ | ■ | ■ | | |
| Ecology and Conservation | 7LFS1037 | | | | | | | | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Sustainable Energy | 7LFS1032 | | ■ | ■ | ■ | | | | | ■ | | | | | ■ | ■ | | | | | | | ■ | | | | ■ | ■ | | | | ■ | | | | ■ | ■ | ■ | ■ | | ■ |
| Transport Policy and Travel Planning | 7LFS1026 | ■ | ■ | ■ | | ■ | | | | ■ | | | ■ | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | | ■ | | ■ | ■ | ■ | | | | | ■ | ■ | ■ | ■ | | |
| Agriculture and Environment | 7LMS0207 | ■ | | ■ | | ■ | | | | | | | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | | ■ | | | | ■ | ■ | ■ | ■ | | |

| Modules | Module Code | MSc Water and Environmental Management pathway Programme Learning Outcomes (as identified in section 1 and the following page) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Knowledge & Understanding | | | | | | | | | | | | | Intellectual Skills | | | | | | | | | | | | Practical Skills | | | | | | | | | Transferable Skills | | | | | |
| | | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | A10 | A11 | A12 | A13 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | B10 | B11 | B12 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | D1 | D2 | D3 | D4 | D5 | D6 |
| **Compulsory modules** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sustainability and Environmental Systems | 7LFS1028 | ■ | | | | | | | | ■ | | ■ | | | ■ | | ■ | ■ | | | ■ | ■ | | | | | ■ | | ■ | | | | | | ■ | ■ | ■ | ■ | | |
| Environmental Policy and Governance | 7LFS1033 | | | ■ | | | | | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | ■ | | ■ | ■ | ■ | | | | ■ | ■ | ■ | ■ | | |
| Foundation in Environmental Auditing | 7LFS1030 | | | | ■ | | | | | | ■ | | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | | ■ | ■ | | | ■ | ■ | ■ | ■ | | ■ |
| Environmental Management Tools and Methods | 7LFS1034 | | ■ | ■ | | | | | | ■ | | | ■ | | ■ | ■ | | | | | | | ■ | ■ | | | | ■ | | | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Environmental Management Systems Implementation | 7LFS1047 | | | | ■ | | | | | ■ | | ■ | ■ | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | | ■ | | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Managing Change for Environmental Management | 7LMS0223 | ■ | ■ | | | ■ | | | | ■ | | | ■ | | ■ | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Research Methods | 7LFS1029 | | | | | | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | ■ | | | | | | | ■ | ■ | ■ | ■ | ■ | |
| Water and Environmental Management Research Project | 7LFS1040 | | | | | | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| Water Resources | 7LFS1038 | | | | | | | | ■ | | | | ■ | | ■ | | ■ | ■ | | ■ | ■ | | ■ | | ■ | | ■ | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | | |
| Water Pollution Control | 7LFS1036 | | | | | | | | ■ | | | | ■ | | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ | ■ | ■ | | |
| Study Skills | 7LMS0250/ 7LMS0235 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | ■ | | |
| **Optional modules** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integrated Waste and Pollution Management | 7LFS1035 | | | | | | | | | | ■ | | ■ | | ■ | ■ | ■ | | ■ | ■ | ■ | | ■ | | | | ■ | ■ | | ■ | | ■ | | | ■ | ■ | ■ | ■ | | |
| Environmental Management Systems Implementation | 7LFS1047 | | | | ■ | | | | | ■ | | ■ | ■ | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | | ■ | | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Ecology and Conservation | 7LFS1037 | | | | | | | | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Sustainable Energy | 7LFS1032 | | ■ | ■ | ■ | | | | | ■ | | | | | ■ | ■ | | | | | | | ■ | | | | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | | ■ |
| Agriculture and Environment | 7LMS0207 | ■ | | ■ | | ■ | | | | | | | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | | | ■ | | ■ | ■ | ■ | | | ■ | | | ■ | ■ | ■ | ■ | | |



University of Hertfordshire UH

| Modules | Module Code | MSc Environmental Management for Agriculture Programme Learning Outcomes (as identified in section 1 and the following page) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Knowledge & Understanding | | | | | | | | | | | | | Intellectual Skills | | | | | | | | | | | | Practical Skills | | | | | | | | | Transferable Skills | | | | | |
| | | A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | A10 | A11 | A12 | A13 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 | B9 | B10 | B11 | B12 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | D1 | D2 | D3 | D4 | D5 | D6 |
| Compulsory modules | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sustainability and Environmental Systems | 7LFS1028 | ■ | | | | | | | | ■ | | ■ | | | ■ | | ■ | ■ | | | ■ | ■ | | | | | ■ | | ■ | | | | | | | ■ | ■ | ■ | ■ | | |
| Integrated Farm Management | 7LFS1044 | ■ | ■ | ■ | | ■ | | | | | | | ■ | | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | | | ■ | ■ | | ■ | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| Agriculture and Environment | 7LMS0207 | ■ | | ■ | | ■ | | | | | | | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| Integrated Crop Protection | 7LMS0208 | ■ | | ■ | | | | | | | | | | | ■ | ■ | | ■ | | ■ | | ■ | | | | ■ | | | | | ■ | | | | ■ | ■ | ■ | ■ | | |
| Foundation in Environmental Auditing | 7LFS1030 | | | | ■ | | | | | | ■ | | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | | ■ | ■ | | | | ■ | ■ | ■ | ■ | | ■ |
| Research Methods | 7LFS1029 | | | | | | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | ■ | | | | | | | ■ | ■ | ■ | ■ | ■ | |
| Environmental Management for Agriculture Research | 7LFS1045 | | | | | | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | ■ | ■ | ■ | |
| Study Skills | 7LMS0250/ 7LMS0235 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | |
| **Optional Modules** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Environmental Policy and Governance | 7LFS1033 | | | ■ | | | | | | | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | ■ | | ■ | ■ | ■ | | | | | ■ | ■ | ■ | ■ | | |
| Environmental Management Tools and Methods | 7LFS1034 | | ■ | ■ | | | | | | ■ | | | ■ | | ■ | ■ | | | | | | | ■ | ■ | ■ | | | ■ | | | ■ | ■ | | | | ■ | ■ | ■ | ■ | | |
| Water Resources | 7LFS1038 | | | | | | | | ■ | | | | ■ | | ■ | | ■ | ■ | | ■ | ■ | | ■ | | | ■ | | ■ | ■ | ■ | | | | | ■ | | ■ | ■ | ■ | ■ | | |
| Water Pollution Control | 7LFS1036 | | | | | | | | ■ | | | | ■ | | ■ | | ■ | ■ | ■ | | | ■ | ■ | | | ■ | | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ | ■ | ■ | | |
| Integrated Waste and Pollution Management | 7LFS1035 | | | | | | | | | | ■ | | ■ | | ■ | ■ | ■ | | ■ | ■ | ■ | | ■ | | | | | ■ | ■ | | ■ | | ■ | | | ■ | ■ | ■ | ■ | | |
| Ecology and Conservation | 7LFS1037 | | | | | | | | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Sustainable Energy | 7LFS1032 | | ■ | ■ | ■ | | | | | ■ | | | | | ■ | ■ | | | | | | | ■ | | | | | ■ | ■ | | | | ■ | | | ■ | ■ | ■ | ■ | | ■ |
| Managing Change for Environmental Management | 7LMS0223 | ■ | ■ | | | ■ | | | | ■ | | | ■ | | ■ | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |



University of Hertfordshire UH

**Key to Programme Learning Outcomes**

A1. Understand and critically discuss the concept of sustainability which underpins environmental management systems. Explain how the application of environmental management can be used to improve environmental performance and result in a reduction in the environmental impact of an activity or organisation. (EM, WEM, EMAg)

A2. Understand and use the full range of environmental management tools and methods and to assess how they can be used to enhance environmental performance. (EM, , WEM, EMAg)

A3. Understand in the International, EU and UK context environmental legislation and regulation and how they are used to improve overall environmental performance. (EM, WEM, EMAg)

A4. Critically discuss the implementation of ISO 14001and the relationship with the ISO1400 series, EMAS and ISO 9000 and be able to explain and apply environmental audit systems to assess environmental performance. (EM, WEM, EMAg)

A5. Explain the skills required and understand the implementation of environmental management systems and CSR in order to effectively manage change in businesses and organisations to achieve environmental benefits. (EM, WEM, EMAg)

A6. Apply the principles and practices of environmental management to a specific research project. (EM, WEM, EMAg)

A7. Critically select and apply a range of research tools and methods to an environmental management research project. (EM, WEM, EMAg)

A8. Display knowledge and understanding of environmental management of water resources and water catchment areas and understand the source, control and management of water pollution. (WEM specific)

A9. Understand the concepts of climate change, transport and energy planning and their impact on reporting environmental performance through EMS.

A10. Critically discuss the theory and practice of waste minimisation.

A11. Apply principles of ecology and conservation to land management and protection of habitats.

A12. Students will be able to apply the philosophy and concepts of environmental management to a wide variety of sites and organisations. (EM)

**Practical Skills**

C1. Apply environmental management methods and tools in order to assess the environmental impact of a business or organisation

C2. Apply environmental assessment techniques to natural resource use.

C3. Design, develop, carry out and report on environmental investigations.

C4. Apply various economic tools to the implementation of environmental management initiatives.

C5. Apply the knowledge gained from research to environmental management systems.

C6. Use environmental management tools in a variety of applications. (EM specific)

C7. Construct and communicate an effective business case for adopting an environmental management system and CSR strategy.

C8. Undertake fieldwork and/or laboratory work in relation to water resources and water pollution control. (WEM specific)

C9 . Develop models and techniques used in agricultural management. Students choosing ICP modules will be able to assess plant pests and diseases in the laboratory. (EMAg specific)

A13. Students will understand agricultural production systems and the key sources of agricultural pollution and be able to apply appropriate mitigation practices on a wide variety of farms and holdings. (EMAg specific)

**Intellectual Skills e.g.**

B1. Evaluate the environmental impacts of organisations, processes, products and services on the environment.
B2. Assess Environmental Risks associated with new developments and projects.
B3. Interpret the results of environmental assessments of sites and natural resources.
B4. Develop environmental policies, strategies and management systems to improve the environmental performance of businesses and organisations.
B5. Select economic analysis techniques as appropriate to implementing environmental management.
B6. Appraise and critically evaluate their own and others work to reach an appropriate professional standard.
B7. Relate the concepts underpinning sustainable developments to environmental management in organisations, business, industry and agriculture.
B8. Undertake research and apply the knowledge gained to new situations to improve environmental performance of organisations, business, industry and agriculture.
B9. Synthesise and apply the concepts and theories associated with a broad range of environmental management issues. (EM specific)
B10. Evaluate approaches and issues associated with corporate environmental strategies, systems and responsibilities.
B11. Critically appraise water resource and wastewater management and evaluate alternative proposals. (WEM specific)
B12. Develop farm management plans using integrated systems approaches and assess environmental impacts and their mitigation. Students choosing ICP will be able to evaluate threats. (EMAg specific)

**Transferable Skills**

D1. Apply appropriate Information Technology and Information Management skills.
D2. Present written and/or oral analysis of case studies.
D3. Defend the findings of his/her work.
D4. Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks.
D5. Present findings of the project in a style and quality appropriate to a research report at Level 7.
D6. Work effectively in small groups and reflect on the learning experience.

# Section 2

## Programme management

| | |
|---|---|
| **Relevant QAA subject benchmarking statements** | None |
| **Date of validation/last periodic review** | Feb 17 |
| **Date of production/ last revision of PS** | July 2020 |
| **Relevant intakes** | Level 7 entering September 2020 |
| **Administrative School** | School of Life and Medical Sciences |

### Table 3 Course structure

| **Course details** | | |
|---|---|---|
| Course code | Course description | HECOS |
| HHEM | MSc (Hons) Environmental Management<br>MSc (Hons) Water and Environmental Management<br>MSc (Hons) Environmental Management for Agriculture | 100469 |