



BSc (Hons) Environmental Land Management

UCAS code	D462
Institution code	H12
Duration	4 years (full-time) including a one-year work placement. A three year programme is available for applicants with at least two years, full-time relevant work experience.
Start date	September 2021
Accredited by	Chartered Institute of Ecology and Environmental Management (CIEEM)
Location	Harper Adams University campus (and location of work placement)

Modern environmental land management is a challenging multi-disciplinary field, and this course will train you as an effective practitioner with good knowledge and understanding of the relevant scientific, policy and legislative frameworks as well as sound people and project management skills.

Strategies to protect our environment and to promote the sustainable use of natural resources at national, European and international levels are traditionally founded on principles of applied ecology and sustainable environmental management. However, in line with broader socio-economic changes, the practice of environmental land management has become more sophisticated, placing greater demands on the skills of staff at all levels of employment.

As a result, Environmental Land Management graduates will be equipped with a thorough understanding of the underlying technical, economic and managerial principles, and the cultural, ethical and policy context of the sustainable management of the countryside.

Skills learned will include:

- species and habitat identification and surveying skills
- habitat management, planning and evaluation
- pollution control and monitoring
- project planning
- interpreting legal framework documents
- planning and mitigation
- environmental management systems
- co-ordinating species and habitat assessments

Key features include:

- Residential field trips in years 1 and 4 to underpin and contextualise what you learn.
- A range of field trips and visits to relevant local and national organisations to provide real life experience and to meet professionals in their field of work.
- Emphasis on applied environmental science.
- A focus on the practical application of theory to give you the skills to succeed.

Duration

4 years (full-time) including a one-year work placement. A three year programme is available for applicants with at least two years, full-time relevant work experience. Please contact [Admissions](#) for further information on this option.

A-level entry requirements

- Offers tend to be in the region of **88 - 104** UCAS points (from A2 exams only)
- Students should typically be studying **3 subjects at A2 level** to be considered
- An understanding of a science based subject, whether through a taught qualification, beyond GCSE level, or independent learning, would be preferable. Evidence of independent learning should be included within your personal statement.
- **4 GCSEs at grade C/4 or above**, including English Language, Maths and a Science
- Applicants can expect to receive offers including specific grades in specific subjects (for example, a B or C at A level, or an M or D for BTEC modules)
- Key Skills (and other level 2 variants) and First Certificates/Diplomas are not accepted in place of GCSE passes
- Overseas applicants please check our [English Language Requirements](#)
- The majority of candidates will not be called for an interview and a decision will be made via UCAS Track. However, for some students a telephone interview or campus based guidance session will be required. We will simply want to meet you to understand if the course is the right choice for you and to discuss your application in more detail. We will be keen to know your reasons for choosing the course and your career aspirations.
- We have developed a range of measures and initiatives to give everyone the best chance to access our undergraduate degree programmes. The main feature of **Access to Harper** is our contextualised offer scheme. A contextualised offer is an offer which is reduced, by one grade or more from the standard entry requirement and is made to those applicants who may have experienced personal circumstances which put them at a disadvantage during their education, such as attending a low achieving school, living in an area of low participation in Higher Education or being a Care Leaver. The aim of this is to make the University more accessible for those applicants who may not have previously thought that they were eligible to apply. We have also introduced reduced entry requirements for those applicants who are over 21 years of age and further initiatives to make the application process easier for those applicants who need it.

To check if you qualify please visit the [Access to Harper](#) page.

Note: Entry Requirements are for guidance only, please check the UCAS website or contact Admissions for further information.

Work placement

Studying Environmental Land Management opens up a range of graduate careers. You will spend your placement year working in a key sector of your choice. Placements can be matched to your career aspirations to help you develop skills, knowledge and understanding that will improve your employability.

Current placement employers include public bodies such as; Natural England, Environment Agency, Forestry Commission, Local Authorities, through to organisations/consultancies such as; RSK ADAS, Eurofins, Game & Wildlife Conservation Trust, National Trust, The Wildlife Trusts, Field Studies Council. Placement gives you unique prospects as employers value the combination of theory and hands-on experience.

Accreditation



This course has been awarded Chartered Institute of Ecology and Environmental Management (CIEEM) accredited degree course status. We are one of the first UK universities to receive this accreditation.

Teaching and learning

What you study

This course will give you comprehensive training in modern environmental management techniques and will introduce you to key concepts of biodiversity, sustainability, ecology and environmental systems.

You will develop a broad understanding of the scientific principles needed to effectively manage our environment, which is coming under increasing pressure as a result of human activities. You will gain hands-on experience of collecting, analysing and interpreting data for the conservation and management of our natural environment.

The strongly vocational nature of this course is supported by field visits to a diverse range of habitats, which include woodlands, nature reserves, conservation areas and other key UK landscapes.

Field trips

All first year ELM students attend the Introduction to Ecology field trip as part of their course. The trip provides students with practical ecological field skills and techniques of quantitative analysis. It normally takes place in May at the Field Studies Council Slapton Ley Field Centre in Devon. This is a seven night residential course, and costs £50*.

All final year ELM students attend a five-night residential field course, currently situated on Anglesey. The course provides students with an opportunity to investigate a real world issue of relevance to the environment and provides advanced data collection, analysis, project management and presentation skills. The trip normally takes place in the autumn term and costs £30*.

*cost includes all meals, accommodation and transport to and from the field centre, and are correct as of the 2018/19 academic year.

Teaching and learning

Here at Harper Adams, we are committed to high standards in teaching and learning.

Teaching methods include student centred learning, resource based learning, independent project work, all of which is delivered in a variety of formats: including lectures, seminars and tutorials. In addition to this, research-led learning is encouraged where students can be exposed to relevant research in a number of ways, from learning about the work of others and its relevance to wildlife resource management to conducting their own studies and field experiments.

To further underpin the applied nature of this course visiting speakers from within the sector are used and practical fieldwork and site visits form essential elements in the learning method as they provide the contextual relevance for students to establish the link between theory and practice.

Assessment methods

Assessment of student learning is conducted using a variety of methods. Each course module is assessed by a combination of coursework and an end of year exam. A part of the assessment process, student feedback forms an important element in the learning process. All students receive verbal and written feedback on their coursework and exam scripts.

Example of assessment methods include:

- Time constrained exams
- Flora and fauna Identification test
- Management plans
- Essays / case studies
- Field reports
- Practical examinations
- Poster presentations

Careers

The breadth and flexibility of this course means our students will have the opportunity of careers in a wide range of areas. Environmental Land Management students at Harper Adams have a strong reputation in the graduate jobs market. This stems from our balanced and up-to-date course structure, good links with the industry and the placement year.

There are many career opportunities in the field of Environmental Land Management including the following examples: Environmental Surveyor and Auditor, Environmental Manager, Forestry Officer, Land-based and Environmental Consultant, Renewable Energy Officer, Countryside Manager, and Environmental Education Officer. Employers in the sector include environment and land-based consultancies, land agents, statutory bodies like the Environment Agency and Natural England, local authorities, National Trust and Wildlife Trusts.

What will I study?

Year	Study time (The percentage of time spent in different learning activities)			Assessment methods (This is the breakdown of assessment methods)		
	% time in lectures, seminars and similar	% time in independent study	% time on placement	Written exams	Practical exams	Coursework
1	35%	65%	0%	50%	0%	50%
2	33%	67%	0%	23%	0%	77%
3	0%	0%	100%	0%	0%	100%
4	22%	78%	0%	25%	0%	75%

Year 1	Year 2	Year 3	Year 4
Skills for the Environmental Scientist (C4009C17) 15	Research Methods for Environmental Scientists (C501017) 15	Placement year	Honours Research Project (HRPROJC17) 30
Introduction to Ecology (C4004C17) 15	Planning and Development (R5011C17) 15		Geographical Information Systems and Land Use (C6009C17) 15
The Natural Environment and Climate Change (C4006C17) 15	Wildlife Identification and Conservation (C5011C17) 15		Environmental Assessment and Management (C6008C17) 15
Introduction to Sustainable Agriculture and the Environment (C4015C17) 15	Pollution, Ecology and Brownfield Reclamation (C5012C17) 15		Ecosystems and Environmental Resource Management (C6006C17) 15
Environmental Survey Technologies and Field Skills (C4003C17) 15	Professional Services for the Environmental Land Manager (R5025C17) 15		Property Development and Management (R6019C17) 15
Contemporary Countryside and Environmental Issues (C4012C17) 15	Farming Systems and the Environment (R5015C17) 15		Developing and Managing Environmental Projects (C6005C17) 15
Rural Geography and Economics (R4006C17) 15	Climate Change and Environmental Valuation (R5024C17) 15		Options
Valuation and Estate Management (R4007C17) 15	Forestry and Forest Products (C5013C17) 15		UK and Global Forest Systems (C6015C17) 15
	Forestry, Game and Land Management (C5014C17) 15		Sustainable Energy (R6022C17) 15
			Events Management and Diversification (R6008C17) 15

Skills for the Environmental Scientist

Year of study 1
Code C4009C17
Credits 15
Core/option Core
Module contact [Mrs Kath Leigh](#)

This module helps develop students' confidence and competence in the academic skills and professional practices that will enable success within their Environment course. The module has four main strands or themes:

- 'Academic skills' including exploring reading for success, writing in different ways and information searching.
- 'Professional futures' - preparing for placement and employment.
- 'Learning well' which promotes students' self-monitoring and planned improvements in individual approaches to learning
- 'Digital citizenship' where students review the online and information technology skills that they

need to succeed in study and in their professional practice.

Introduction to Ecology

Year of study 1
Code C4004C17
Credits 15
Core/option Core
Module contact [Nicky Hunter](#)

Ecology is about understanding the dynamic changes in individuals, populations, communities and ecosystems in relation to each other and the physical environment. This requires knowledge of the essential processes that determine the distribution and abundance of organisms and the variety of complex biotic and abiotic interactions that take place. This module is designed to provide students with a general understanding of the ecology of living systems together with an introduction to basic ecological theory. This module will include a field studies element which will deliver the practical elements of identification, sampling and analysis of data collected.

The Natural Environment and Climate Change

Year of study 1
Code C4006C17
Credits 15
Core/option Core
Module contact [Simon Irvin](#)

The countryside and the quality of the rural environment are inextricably linked to studies in the natural environment. This module is designed to investigate the many aspects of the natural environment which impact on the British countryside. This will include the study of rainfall patterns in the UK and causes of climatic change, which has a marked effect on the range of natural habitats in the British countryside. The variety and nature of soils in the UK and how these affect the land quality will be considered. Conservation and the assessment, creation and management of habitats commonly found in, and around agricultural lowland sites and the impact of pollution from agricultural sources will be investigated.

- Outline the causes and effects of climatic change on the natural environment.
- Identify and assess soil relationships, including soil texture, structure, organic matter and soil processes such as erosion.
- Appraise the need for conservation of species and habitat protection.
- Recognise a variety of UK habitats and outline how these can be managed to the benefit of the environment.

Introduction to Sustainable Agriculture and the Environment

Year of study 1
Code C4015C17
Credits 15
Core/option Core
Module contact [Simon Irvin](#)

Please contact the course manager for details of this module.

Environmental Survey Technologies and Field Skills

Year of study 1
Code C4003C17
Credits 15
Core/option Core
Module contact [Simon Irvin](#)

This module provides an essential understanding of the main components of applied contemporary field survey / monitoring techniques and procedures. It provides experience in the practical application of these techniques and procedures across a representative range of habitats and environments and vital awareness of risk assessment in field survey work.

The skills and knowledge gained will enable students to undertake survey and monitoring work using a range of practical methods, understand the range of techniques involved and their relative strengths and limitations and to present and interpret data in a coherent and appropriate way.

This module complements the modules at level 4: The Natural Environment and Climate Change and Introduction to Ecology and links to the level 5 module Habitat Ecology and Conservation Management. These modules are core modules for all routes accessing this module and form a fundamental knowledge and practical base for any student entering the environmental and wildlife sector. The module content will also provide material which directly relevant to placement work undertaken by the majority of the students.

Contemporary Countryside and Environmental Issues

Year of study 1
Code C4012C17
Credits 15
Core/option Core
Module contact [Dr Jonathan Cooper](#)

This module is designed to provide students with a background to contemporary countryside and environmental issues and their implications for resource management.

The principal focus for the module will be the UK, with appropriate international comparison and contextualisation.

The module will provide a background to the pressures and conflicts that occur within UK and global countryside and environmental management. It will show how government and other organisations use a range of methods to ensure sustainable management of the countryside, landscapes and natural / semi-natural environments and how environmental change influences the way in which the countryside is managed.

Rural Geography and Economics

Year of study 1
Code R4006C17
Credits 15
Core/option Core
Module contact [Mrs Susan Ragbourne](#)

This module underpins the second year module *Planning and Development*, providing students with an understanding of key changes in rural areas and the need to balance economic, social and environmental demands on the countryside. The module also underpins the second year module *Farming Systems and the Environment* and the final year module *Farm Business Management* by introducing core economic concepts and studying agricultural and agri-environment support and subsidy mechanisms.

Valuation and Estate Management

Year of study 1
Code R4007C17
Credits 15
Core/option Core

Valuation and estate management are both central concerns of the estate manager and valuer. There is a tendency at a later stage in a professional career for these topics to diverge into separate disciplines. It nevertheless remains the case that a sound grasp of the essentials of asset value and valuation are a crucial consideration in the formulation of estate management plans and strategy. Equally the valuer must appreciate the day to day workings of a rural estate or land holding if he or she is to appreciate the nuances which might affect the value of that asset in one way or another. This module therefore offers students a thoughtful introduction to these two important themes of study.

Research Methods for Environmental Scientists

Year of study 2
Code C501017
Credits 15
Core/option Core
Module contact [Dr Andrew Cherrill](#)

The module develops the skills and knowledge necessary to successfully complete the Honours Research Project. Enhanced research confidence will also be an employability skill for the Placement Period and careers on graduation.

The module will cover the key elements of the research process, set in the context of the student's own course discipline. Students will examine the academic role of research and how it informs professional and managerial practice. They will enhance their ability to locate, select and critically evaluate information associated with a particular problem, using a range of sources and particularly peer reviewed empirical studies. By carrying out statistical analysis using appropriate software, the students will develop their ICT skills and further their understanding of the role of statistics in the research process.

Planning and Development

Year of study 2
Code R5011C17
Credits 15
Core/option Core
Module contact [Emma Pierce-Jenkins](#)

This module seeks to build-upon the level 4 modules, Introduction to Rural Geography and Economics and Contemporary Countryside and Environmental Issues. The module provides a broad understanding of the statutory spatial planning system, covering both national and local planning policy, whilst exploring the particular challenges associated with rural development and the delivery of sustainable development.

This will include an analysis of policy and practice in a range of topics such as housing, agriculture, renewable energy, infrastructure planning and protection of designated areas.

The module will provide a grounding in spatial planning, upon which the level 6 modules, such as Environmental Assessment and Management, can be developed.

Wildlife Identification and Conservation

Year of study 2
Code C5011C17
Credits 15
Core/option Core
Module contact [Nicky Hunter](#)

This module aims to provide students with an extension of knowledge from the level 4 ecology module and to focus primarily on the synthesis and analysis of the ecological requirements of species and habitats, and the issues around conservation and funding currently in the UK. In order to fully understand the ecology of species, correct identification and adaptation features for the major groups of fauna and flora needs to be recognised.

A practical knowledge and skills-based understanding of the selection and use of identification keys and community classification systems is one of the corner stones to effective assessment of biodiversity for conservation. Students will develop practical knowledge of, and skills in, the use of species identification techniques. Particular attention will be focused on species that are associated with the UK countryside, but the module will also address globally applicable general principles and concepts. Essentially a hands-on approach to learning is encouraged introducing students to the flora and fauna found in a range of habitats which will reinforce the competences of survey skills studied previously.

Pollution, Ecology and Brownfield Reclamation

Year of study 2
Code C5012C17
Credits 15
Core/option Core
Module contact [Dr William Hartley](#)

The aim of the module is to interpret the effects of anthropogenic pollution on ecosystems. You will evaluate, monitor and quantify the ecological impact of environmental pollution and the scientific and methodological problems associated with contaminated land reclamation. You will investigate patterns of environmental contamination, accumulation and chronic toxicity caused by toxic metals and other hazardous wastes and the response of plants and animals to pollution, the evolution of pollution tolerance and the effectiveness of bioremediation treatments.

Professional Services for the Environmental Land Manager

Year of study 2
Code R5025C17
Credits 15
Core/option Core
Module contact [Simon Irvin](#)

This module provides students with the skills that they will need to interact professionally with a range of clients. As aspiring members of the Royal Institution of Chartered Surveyors and other professional bodies, it is important that Environmental Land Managers understand how to handle personal client data, to act ethically and avoid conflict in their future roles. They also need to skills to plan and interpret the performance their own or their employers businesses.

Farming Systems and the Environment

Year of study 2
Code R5015C17
Credits 15
Core/option Core
Module contact [Dr Mark Simcock](#)

Please contact the course manager for details of this module.

Climate Change and Environmental Valuation

Year of study 2
Code R5024C17
Credits 15
Core/option Core
Module contact [Simon Irvin](#)

Climate change is predicted to have increasing implications for the management of land and environmental resources. Natural resources, such as farmland and woodland, can contribute to strategies for minimising the impacts of climate change through carbon sequestration and flood regulation, but the value of these so-called ecosystem services is rarely costed fully in economic assessments of management decisions.

This module introduces the science behind climate change, strategies for mitigation and adaptation, and integrates approaches to market valuation with approaches for valuation of non-market goods (exemplified by the climate regulation provided by ecosystem services). The module will examine traditional economic methods of valuing land and property before focussing on valuation of natural capital and non-market ecosystem services. Land use changes arising from alternative climate change scenarios will be used as case studies to explore these valuation methods, while giving insights to the implementation of mitigation and adaptation strategies.

Forestry and Forest Products

Year of study 2
Code C5013C17
Credits 15
Core/option Option
Module contact [Jim Waterson](#)

Forestry and forest products have an increasingly important role in the management of land and in making a series of significant contributions to sustainable living and development. This is closely reflected in national and international policy.

This module will give students a comprehensive and detailed understanding of sustainable forest management policy and practice in the UK. It will also provide an overview of global forestry issues and a full appreciation of both traditional and contemporary products and services sourced from forests and forest management.

Students completing the module will be able to critically evaluate different approaches to silviculture and forest management in terms of the range and quality of products/services supplied and the economic, social and environmental implications of the management and conservation processes adopted.

Forestry, Game and Land Management

Year of study 2
Code C5014C17
Credits 15
Core/option Option

Please contact the course manager for details of this module.

Placement year

Year of study 3
Core/option Core

Read our dedicated [Placement Learning](#) pages for information on the many benefits of the placement year.

Honours Research Project

Year of study 4
Code HRPROJC17
Credits 30
Core/option Core

To qualify for an honours degree a student must demonstrate the capacity for sustained, independent and high quality work. One of the most important vehicles for the demonstration of this capacity, and for developing the necessary skills, is the individual Honours Research Project. Each student will therefore be required to complete such a project under the general supervision of a member of staff and present the results in a project report and in a *viva voce* exam, with two tutors, which will also test to a high level, skills of communication and rational argument. This major exercise represents one-quarter of the final year studies and will therefore have an important influence on the classification of award.

Geographical Information Systems and Land Use

Year of study 4
Code C6009C17
Credits 15
Core/option Core
Module contact [Dr Andy Wilcox](#)

Land management is a complex process involving a combination of agricultural, environmental, recreational and social issues. Geographical Information Systems (GIS) allow storage, analysis and dissemination of spatial information are an essential tool for resource management. This module will provide students with an overview of GIS theory, application and software and allow students to develop practical skills relating to spatial data capture, analysis and presentation using the ESRI ArcGIS platforms.

Environmental Assessment and Management

Year of study 4
Code C6008C17
Credits 15
Core/option Core
Module contact [Emma Pierce-Jenkins](#)

Environmental protection and enhancement is a crucial element of achieving sustainable development and features heavily in International, European and UK legislation and policy, a key requirement of which is that potential environmental impacts of human activities are identified and considered in decision making.

In seeking to protect our environment and deliver sustainable development it is crucial that we are able to recognise when and how human activity will impact upon the environment and how best to mitigate and manage those impacts. This module will examine the relevance and relative merits of a range of formal processes for assessing likely environmental impacts of human interaction with our environment. It will build upon earlier modules relating to environmental policy and legislation, as well as developing conservation, environment and planning themes from earlier modules.

It studies in detail Environmental Impact Assessment (EIA) and Environmental Management Systems (EMS) in terms of legislative compliance, assessment techniques, environmental protection and mitigation strategies etc. and introduces Strategic Environmental Assessment (SEA)/ Sustainability Appraisal.

Ecosystems and Environmental Resource Management

Year of study 4
Code C6006C17
Credits 15
Core/option Core
Module contact [Paul Lewis](#)

This module is specifically designed to progress the practices and principles taught in the level 4 module, Environmental Monitoring and the level 5 module Environmental Quality and Protection. Countryside ecosystems are diverse, whether terrestrial or aquatic, and are associated with wide ranging habitats, functions, management and services. All such ecosystems have considerable links to, and impacts on the environment and the resources of water, soil and air. The maintenance of high quality resources is an essential component of sustainable development and land use. This module will allow the student to analyse abiotic factors associated with countryside terrestrial and aquatic ecosystems, whether managed or natural, and consider associated environmental processes and science in detail. Ecosystem services, sustainability indicators and sustainable land use systems will be core elements throughout this module's delivery. There will be an emphasis on UK systems, both agricultural and natural, but consideration will also be given to overseas case-studies and examples.

Property Development and Management

Year of study 4
Code R6019C17
Credits 15
Core/option Core
Module contact [Mr Simon Keeble](#)

This module is designed to familiarise students with property development and the management of buildings and other assets as part of a property portfolio.

Land managers need to be familiar with planning policies, land assembly, surveys, economic appraisal and valuations for development sites. They also need to manage property portfolios for clients, undertaking operational and strategic facilities management.

Developing and Managing Environmental Projects

Year of study 4
Code C6005C17
Credits 15
Core/option Core
Module contact [Emma Tappin](#)

Countryside and environmental management are complex and multi-disciplinary areas of practice. For both non-governmental organisations such as National Parks, Wildlife Trusts and the National Trust and government agencies such as Natural England, short term projects are an important mechanism to achieve desired environmental and social changes. This drive towards project delivery is as a result of funding sources increasingly being linked to short-term projects.

The implementation and success of these projects requires a sound understanding of the principles of project management. This module aims to give students insight into project development and management for clients. This module will be action-based learning where students actively work on live projects for clients, developing proposals and competing for 'support' or 'funding'. Students will gain insights into writing project proposals, competing in this bidding process, working and negotiating with clients and implementing projects proposals. They will be encouraged to develop as reflective practitioners in order that they can improve their skills for future practice.

UK and Global Forest Systems

Year of study 4
Code C6015C17
Credits 15
Core/option Option
Module contact [Jim Waterson](#)

Forestry and forest products have significant functional importance in the management and conservation of land, the supply of raw and processed materials, environmental protection and in contributing to sustainable living and development. This is closely reflected in UK and global forest policies.

This module will enable a comprehensive and detailed understanding of sustainable forest management policy and practice in the UK. It will also provide a current overview of global forestry issues and an appreciation of mainstream and innovative products and services sourced from forests and sustainable forest management worldwide.

Students completing the module will be able to critically evaluate different approaches to forest management in terms of the range and quality of products/services supplied and the economic, social and environmental implications of the management and conservation processes adopted.

Sustainable Energy

Year of study 4
Code R6022C17
Credits 15
Core/option Option
Module contact [Emma Pierce-Jenkins](#)

Concerns about the sustainability of fossil fuels with their inherent greenhouse gas impacts, finite reserves and vulnerable supply chain have led people to consider whether there are more sustainable alternatives and to look at ways in which scarce, expensive energy supplies can be used more efficiently. This module examines both these issues, with an exploration of the potential to reduce energy consumption within buildings and an evaluation of the energy production potential of renewables, together with the feasibility of their development and consent processes. The sustainability of land use change associated with such developments will also be considered.

Events Management and Diversification

Year of study 4
Code R6008C17
Credits 15
Core/option Option
Module contact [Andrew Black](#)

Hundreds of thousands of people attend public events each year, however only a fraction of these visitors will have any comprehension as to the level of planning and organisation that goes into planning, delivering and financing a safe and successful event.

This module is designed to develop and evaluate the student's awareness and appreciation of how a successful event is planned, designed, costed, implemented and assessed. Whilst the module will primarily focus on events taking place in a rural setting (for example as a diversification on a country estate), many of the skills and techniques learnt will be relevant to the successful operation of any public event.