



FdSc Agriculture (with placement)

UCAS code D405

Institution code H12

Duration 3 years (full-time) including a one-year work placement. A two year programme is available for applicants with at least two years, full-time relevant work experience, or all who have completed a 12 month placement as part of another approved course

Start date September 2027

Location [Harper Adams University campus](#) (and location of work placement)

Agriculture has a vital role to play in global food production and security, climate change mitigation, environmental protection, water management and renewable energy creation.

Our Agriculture students are taught by lecturers with extensive industry and research experience to develop and manage sustainable production systems integrating appropriate technologies to maximise economic, social and environmental security. You will be studying in a diverse range of learning spaces located at the heart of our Future Farm alongside students from a wide range of rural and urban backgrounds, whilst establishing a life-long network of friends and professional contacts.

You will soon be putting your learning into practice engaging with real-world scenarios and projects from day one. Supported by an integrated placement year in industry, you will be ready for your future career having developed a range of personal, technical and professional skills that today's employers value. You will be well prepared for careers in farm management, on-farm advisory and consultancy roles, the agri-food industry and both agriculture and environmental policy roles. Additionally, your degree will equip you with the skills to continue in research or education.

The **FdSc Agriculture** degree programme is a three-year course. Opportunities to transfer to the BSc (Hons) Agriculture courses will be made possible at the end of the second year or as a one-year Top-up course upon completion of the FdSc, providing specific academic criteria are met.

A-level entry requirements

- **Entry requirements for 2027 entry are not currently available. Please contact Admissions for advice**

Work Placement

FdSc students undertake placement in their second year. You will have a dedicated Placement Manager, support officer, and tutor to visit you whilst on placement. You will usually undertake paid employment for at least 12 months on modern progressive farms or in the agricultural support industries. . Examples of employers include Velcourt, G's Fresh and Cargill. Students also have the opportunity to access a range of overseas placements, with the support of supporting agents, where possible. Students may undertake placement overseas in the USA, , Australia or New Zealand, for example. Several commercial scholarship opportunities, linked to placement, are available to apply for, with sponsoring companies paying a significant amount towards the tuition fees of successful applicants.

What will I learn?

On successful completion of the FdSc Agriculture award, students will be able to:

- Explain the biological processes that underpin sustainable agricultural production systems.
- Evaluate the impact of agricultural production systems on the environment, the rural economy and wider society.
- Develop and manage sustainable agricultural production systems that can be adapted to address specific social, economic and environmental challenges.
- Identify relevant technologies and apply them within agricultural production systems.
- Identify relevant policy and legislation and apply it within agricultural production systems.
- Explain the relationship between the farming business and the agri-food supply chain.
- Evaluate the influence of global issues on agricultural production systems.
- Develop an evidence-based approach to communicate effectively and sensitively on agricultural issues with diverse groups.

Teaching and learning

- Key principles will be taught in lectures by subject specialists and visiting speakers.
- Small workshops and seminars, lab and farm-based practical sessions will be used to apply the principles from the classroom in a practical context.
- Student engagement and learning experience will be improved through using a variety of learning spaces.
- Directed study will be used to develop life-long learning skills.

Assessment methods

We will assess students' progress using a blend of different methods such as individual and group presentations, technical writing, data handling and analysis, personal development planning and time-constrained assessments. The diverse assessment journey will give students an equitable chance to succeed and develop skills for employment and life-long learning.

Careers

Employability of agriculture graduates is excellent, and there are many diverse career opportunities in all sectors of the food chain. The applied nature of our courses, teaching methods and close links with industry give you the academic, technical and employment skills which are highly sought after by employers.

As an agriculture graduate you may go on to manage farms either at home or elsewhere, for example with Velcourt, Sentry Farming, Dyson Farming, or G's Fresh.

Alternatively, you may opt for a career in the support industries: example employers include Frontier Agriculture, NFU, Savills; or advisory services such as DEFRA and ADAS.

Studying agriculture also develops the skills needed for other graduate careers such as accountancy, teaching, journalism or the civil service.

What will I study?

Year 1		Year 2	Year 3
Introduction to Farm Business Management (C4001HF)	10	Placement year	Final Year Research Project - FdSc (HF) 20
Introduction to Farming Systems (C4002HF)	20		Farm Business Management with Marketing (C5005HF) 20
Agri-Food Supply Chains (C4003HF)	10		Farm Resource Management (C5007HF) 20
Assessing the Efficiency of Farming Systems (C4004HF)	20		Applied Agricultural Science (HF) 20
Agricultural Technology and Digital Farming (C4005HF)	20		Crop Production Systems (C5002HF) 20
Agricultural and Environmental Science (C4006HF)	20		Livestock Production Systems (C5012HF) 20
Skills for Agriculture (C4007HF)	20		

Introduction to Farm Business Management

Year of study 1
Code C4001HF
Credits 10
Core/option Core
Module contact [Professor Andy Wilcox](#)

The requirement to produce more food for a global growing population whilst using less resources has never been more important. To be able to manage an efficient business there is a need to identify the current business performance and analyse areas of performance which can be improved. This module is designed to introduce you to the basic knowledge needed to determine areas of strength and weakness within a farming business. You will be introduced to basic business concepts associated with the recording and reporting of business performance. You will then be introduced to techniques for analysis and evaluation of the data, to include different types and sources of external comparative data.

Introduction to Farming Systems

Year of study 1
Code C4002HF
Credits 20
Core/option Core
Module contact [Dr John Donaldson](#)

As the global population continues to grow, increasingly in modern agriculture, there is an appreciation of the importance of adopting a systems approach to food production. Farming enterprises seldom operate in isolation and sustainable solutions are often identified where a synergy exists between different production elements. This module will provide the fundamentals of crop and animal production systems, including basic husbandry and farming practices intended to optimise outputs in a sustainable way. In doing so it will demonstrate the benefits to be gained operating within a particular system and will introduce the concept of integrated systems. The relationship between input costs, production outputs and their implication on farm profitability will be introduced here, in preparation for the subsequent Assessing the Efficiency of Farming Systems module.

Agri-Food Supply Chains

Year of study 1
Code C4003HF
Credits 10
Core/option Core
Module contact [Mr Luís de Aguiar](#)

This module aims to enhance your knowledge and understanding from an agri-food marketing perspective of a range of key commodity sectors in the UK. The module also aims to instil the notion of a dynamic agri-food sector so that you will be able to address challenges and identify opportunities for primary producers and organisations. The module will equip you with practical tools to better understand internal and external market forces affecting those within the agri-food sector. In addition, you will become familiar with market and consumer trends and opportunities. Fundamentally, the module will provide a field to fork integrated overview of the sustainable agri-food supply chain i.e., farmers, processors, retailers and consumers and their interactions.

Assessing the Efficiency of Farming Systems

Year of study 1
Code C4004HF
Credits 20
Core/option Core
Module contact [Dr John Donaldson](#)

In this module, you will further develop your knowledge of both crop and animal production systems, gained from the Introduction to Farming Systems module, and begin to consider the impact of policy and legislation on profitable farming systems. Using the concepts gained from the Introduction to Farm Business Management module, in the first part of the year, you will apply techniques for analysis and evaluation of the economic and environmental sustainability of farming systems. Using published data from a range of sources, including AHDB and Farm Business Survey, you will assess the physical and financial performance of individual enterprises and farming systems, to better understand the importance of benchmarking.

Agricultural Technology and Digital Farming

Year of study 1
Code C4005HF
Credits 20
Core/option Core
Module contact [Dr Simon Woods](#)

Modern farming systems rely heavily on technology and farm data. Those involved in the farming industry need to be familiar with the basic operating principles and management of these assets and require an understanding of how technology is combined to perform different tasks. This module is designed to enable you to understand the operating principles of the more common agricultural machines and equipment and to comprehend the management of mechanisation systems into which they are integrated. Farm data and other digital assets are increasingly important for the efficient use of resources and this module will facilitate access, analysis and interpretation of data from a range of farm sources. To successfully complete this module, you will have to demonstrate an understanding of a broad range of scientific, economic and business concepts relevant to farm technology and data.

Agricultural and Environmental Science

Year of study 1
Code C4006HF
Credits 20
Core/option Core
Module contact [Dr Laura Vickers](#)

This module intends to provide you with the foundation knowledge within the fields of Biology and Environmental Science that underpin Agricultural Science. It provides the framework of knowledge and understanding to allow you to progress on your chosen Agriculture specialism by providing you with an understanding of the ubiquitous and universal processes that occur in plants, animals and microbes, and the fundamental components of physiology and anatomy. This module will also bring you to a level of understanding to competently undertake your second-year natural resource management module by covering the hydrological cycle and soil properties, linking their importance to agriculture, and touching on how human activities can impact their quality.

Skills for Agriculture

Year of study 1
Code C4007HF
Credits 20
Core/option Core
Module contact [Terry Pickthall](#)

You will develop the skills and attributes required for your success in the Agriculture course, focusing on Academic (including research), Professional (including securing a placement or other employment), Digital and Learning skills. The course will be delivered with the aim of developing you to become an independent and resilient learner and introduce the importance of being able to reflect on personal development achieved and required across all 4 areas of skills focus.

Placement year

Year of study 2
Core/option Core

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

Final Year Research Project - FdSc

Year of study 3
Code HF
Credits 20
Core/option Core

The module is designed to enable you to plan and undertake research that is of interest and relevance to your future career. You will be supported by an academic supervisor who will provide guidance around the agreed project title which must address a practical problem in your field of study. The project will require you to produce a literature review and research protocol (to be submitted at the end of the first term). A practical element (such as a case study, business analysis or survey) will be conducted, with results being written up, statistically analysed (where appropriate) and discussed (to be submitted at the end of the second term). You will then conduct an oral presentation and respond to questions to further explain the project and justify the conclusions

Farm Business Management with Marketing

Year of study 3
Code C5005HF
Credits 20
Core/option Core
Module contact [Professor Andy Wilcox](#)

This module will build on knowledge from the first-year modules Introduction to Farm Business Management and Assessing the Efficiency of Farming Systems by introducing you to whole farm business planning techniques in the context of the assessment of the external business environment.

The module incorporates applied agricultural economics to develop an understanding of the wider issues and drivers affecting prospects in the main commodity sectors encountered in the UK market. It focuses on the assessment of productivity factors integral to the business (land; labour; capital) and building on strengths and weaknesses within the business identified through the application of appropriate assessment techniques. The module introduces you to the fundamentals of marketing and the sourcing of market data and research to help formulate credible forward budgets.

You will be introduced to forward budgeting and planning techniques from enterprise to the whole business level.

Farm Resource Management

Year of study 3
Code C5007HF
Credits 20
Core/option Core
Module contact [Louisa Dines](#)

Agricultural production and management are inherently linked to, and supported by both natural and human resources.

Global population growth and human lifestyles, as well as agricultural activities, are increasingly putting pressure on our natural resources and agriculture is also well placed to provide part of the solution to some of today's environmental challenges. You will be identifying the threats to soil, water and air quality as well as biodiversity from agriculture and evaluating the strategies and policies in place to protect these resources. You will also be identifying the opportunities within agriculture to provide solutions to environmental challenges more widely.

Human resources are no less important to the success of agricultural businesses and you will develop an understanding of human motivation and management style, the responsibilities of employer and employee and an appreciation of how to manage effective interpersonal relationships at work, particularly drawing on experiences from placement. Group work and digital activities will be used to help you develop the graduate skills required for the rapidly changing workplace environment.

Applied Agricultural Science

Year of study 3
Code HF
Credits 20
Core/option Core
Module contact [Dr Andrew Beacham](#)

This module will build on the fundamental aspects of biology and biological processes you have studied at Level 4 (including in the Introduction to Farming Systems and Agriculture and Environment Science modules) in order for you to develop further knowledge and understanding of their importance in the context of efficient and sustainable crop and animal production systems. You will investigate how these processes can be manipulated to influence the efficiency of productivity and environmental impact and the interactions of plants and animals with their environment. This will involve you engaging with material through lectures and tutorials, undertaking visits to the Harper Adams Farm, and learning through laboratory practical classes and visiting speakers.

Crop Production Systems

Year of study 3
Code C5002HF
Credits 20
Core/option Core
Module contact [Louisa Dines](#)

This module will build on the fundamental principles of crop production from the Level 4 module Introduction to Farming Systems to further develop your understanding of the production processes for specific crops. The module will identify the markets and quality requirements for a range of cereals, combinable break crops, root crops, grass, forage and fresh produce crops commonly grown in the UK and North Western Europe. Appropriate production techniques from establishment through to harvesting and storage for each crop will be explained with a focus on sustainable approaches to production and the integration of precision techniques to aid crop management. The key decision-making timings to optimise production and meet the required quality throughout the production cycle will be identified. The impact of assurance schemes and current regulations on crop production processes will be evaluated.

Students who successfully complete this module will be able to:

- Identify the markets and quality requirements for a range of cereals, combinable break crops, root crops, grass, forage and fresh produce crops commonly grown in the UK and North Western Europe.
- Explain the soil preparation and establishment techniques used for a range of cereals, combinable break crops, root crops, grass, forage and fresh produce crops commonly grown in the UK and North Western Europe.
- Identify growth stages and key agronomic decision-making timings that influence yield and quality during the production cycle of a range of cereals, combinable break crops, root crops, grass, forage and fresh produce crops commonly grown in the UK and North Western Europe.
- Explain the harvesting and storage techniques used for a range of cereals, combinable break crops, root crops, grass, forage and fresh produce crops commonly grown in the UK and North Western Europe
- Evaluate the impact of assurance schemes and current regulations on crop production processes.

Livestock Production Systems

Year of study 3
Code C5012HF
Credits 20
Core/option Core
Module contact [James McCaughern](#)

This module will build on the fundamental principles of livestock production established during the Introduction to Farming Systems module previously undertaken at level 4. Its overall aim is to further develop your understanding of the production processes for specific farm animal livestock species. The module will identify the markets and quality requirements for a range of livestock enterprises found in the United Kingdom and North Western Europe to include: pig, beef, sheep, poultry (broilers and layers), and dairy enterprises. Appropriate production techniques relating to the overall topics of nutrition, health, and infrastructure from breeding through to end market will be examined, with a focus on sustainable approaches to livestock production systems. The key interventions to optimise production and meet product quality requirements throughout the production cycles will be identified, and the impact of the wider socio-economic landscape on livestock production systems will also be considered.