



# BSc (Hons) Agriculture with Farm Business Management

<b>UCAS code</b>	D498
<b>Institution code</b>	H12
<b>Duration</b>	4 years (full-time) including a one-year work placement
<b>Start date</b>	September 2019
<b>Location</b>	<a href="#">Harper Adams University campus</a> (and location of work placement)

## The course

The agricultural industry is changing rapidly and in recent years advances in technology have led to an abundance of food production in the western world. This, together with changes in the support mechanisms for agriculture, has affected farm incomes, the countryside, rural communities and the public purse.

Increasingly farmers are looking to diversify their businesses and find alternative uses for rural land. There is an increasing demand for highly skilled practitioners with an understanding of the options available and the business management skills to lead on these developments.

## A-level entry requirements

- Offers tend to be in the region of **96 - 112** UCAS points from a minimum of 3 A levels (the lower offer will be limited to those taking Science A Levels)
- General Studies and Critical Thinking are encouraged but **not** included in grades required
- Students should typically be studying **3 subjects at A2 level** to be considered
- There is a requirement for all applicants to have completed a minimum of 10 weeks work experience on a commercial farm by the 1st August. Gaining the relevant practical experience in advance of the start of the course is preferable. However, for applicants applying for our BSc (Hons) Agriculture programmes, who do not come from a farm background and who do not have the relevant contacts necessary to complete the work experience, we recognise that this may be difficult to achieve. Applicants who are assessed to be in this position, following interview, will be offered the opportunity to enter the course via the [Access to Agriculture](#) programme, where help to gain the relevant practical experience is provided during the first year of study.
- **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)
- **Biology A Level** (or equivalent) preferred (but not mandatory)
- When combining qualifications no more than one Subsidiary Diploma will be considered alongside A levels (two A levels for BSc)
- Overseas applicants please check our [English Language Requirements](#)
- All suitable applicants are expected to attend an interview which will form part of the selection process
- More information about the work experience required for this course can be found by clicking the link below  
[Find out more about work experience](#)

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

## Work placement

You will undertake placement in your third year. Placement may be undertaken in a large integrated farm business or with a farm business consultancy company. Agriculture students from a family farm wishing to undertake a farm placement are required to work at least 50 miles from their home farm and are not usually normally permitted to return to previous employers. Examples of placements have included work as a trainee accountant specializing in agricultural businesses with a chartered accountancy practice, and a placement with the farm business consultancy division of Savills. Harper Adams' excellent graduate employment record shows how employers value the skills, contacts, knowledge and confidence students develop during placement.

## Teaching and learning

### What you study

All agriculture students share a common first year, studying the same modules; this allows students to change course during the first year. The first year of the course provides a general introduction to agriculture in terms of animal and crop production, underpinning biological and environmental science, an introduction to farm business management and marketing, and agricultural mechanisation. In the second year of the course you start to specialise in the area of farm business management, studying areas such as farm business management and economics, farm business operation and planning, and market and supply chain considerations, whilst continuing to study more general aspects of agriculture such as animal and crop production science, grass and forage production, and waste management. In the final year of the course the specialisation in farm business management continues, studying areas such as farm business planning and strategy, business diversification, people management and a research project focused on farm business management. In the final year you continue to study crop and animal production alongside farm business modules.

### Teaching and learning

The course involves a combination of lectures, tutorials and laboratory sessions, together with practical classes on the [University farm](#) designed to demonstrate principles in practice and the application of scientific, technological and business principles to commercial agricultural and food production. In addition, the University has extensive links with other agricultural and food related businesses, and external visits and outside speakers are integrated into the programme. Throughout the course students are expected to apply the skills acquired to solve real-life problems, such that on completion they are able to demonstrate both academic ability and commercial application, which is a combination highly valued by employers. The proportion of independent study increases as the course progresses, particularly in the final year where students have the opportunity to undertake a dissertation in a subject area of their choice.

### Assessment methods

Assessment is via a balance of course work and examination. Weighting varies depending on course and year of study, but weighting is typically around 65 per cent on course work and 35 per cent on examination; this allows individuals to play to their strengths if they are better at course work than examinations or vice versa. Types of assignment include appraising production systems on the [University farm](#), whole farm case studies, laboratory based analyses and literature based reviews. Format of assignments varies and includes written reports, essays, technical notes, presentations and oral examinations. Students receive written feedback on all course work to help them improve. In addition, first year students undertake examinations in two subjects at the end of the first term to enable them to gauge how they are progressing and feedback is provided on these exams. Staff are able to provide advice and guidance on revision, and many modules include revision sessions.

## Careers

This course provides consultants and business managers of the future with the diverse skills required for a career in farm business management. It is likely to be particularly attractive to students who wish to pursue a career in agricultural consultancy work (e.g. with Promar, Brown&Co or Bidwells) where an appreciation of business management techniques and the wider rural environment is important. It will also be of value to those who wish to manage farm businesses or estates.

# 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	33%	67%	0%	41%	0%	59%
2	27%	73%	0%	38%	0%	62%
3	0%	0%	100%	0%	0%	100%
4	17%	83%	0%	31%	0%	69%

Year 1	Year 2	Year 3	Year 4
Skills for the Agricultural Professional (C4001C17) 15	Grass and Forage Production and Utilisation (C5004C17) 15	Placement year	Honours Research Project (HRPROJ) 30
Animal Production Systems (A4005C17) 15	Wastes, Manures and Renewables (C5007C17) 15		People Management Skills (R6018C17) 15
Crop Production Systems (C4013C17) 15	Farm Business Management and Economics (R5003C17) 15		Sustainable Agricultural Production Systems (C6013C17) 15
Bioscience for Agriculture (C4011C17) 15	Research Methods (C5005C17) 15		Applied Farm Business Management Case Study (R6004C17) 15
Environmental Science for Agriculture (C4014C17) 15	Animal and Crop Production Science (A5003C17) 15		Farm Business Strategy (R6010C17) 15
Assessment of the Farm Business (R4010C17) 15	Farm Business Operation and Planning (R5001C17) 15		Implementation, Operation and Control of Business Plans (R6012C17) 15
Agri-food Marketing (F4005C17) 15	Marketing and Brand Management for the Agri-sector (F5001C17) 15		Business Diversification (R6005C17) 15
Agricultural Mechanisation and Buildings (E4001C17) 15	Professional Services in Farm Business Management (R5002C17) 15		

## Skills for the Agricultural Professional

**Year of study** 1

**Code** C4001C17

**Credits** 15

**Core/option** Core

**Module contact** [Terry Pickthall](#)

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

1. **Academic skills** including exploring Reading for Success, writing in different ways and information searching.
2. **Professional futures** preparing for placement and employment.
3. **Learning well** which promotes students' self-monitoring and planned improvements in individual approaches to learning.
4. **Digital citizenship** where students review the online and information technology skills that they need to succeed in study and in their professional practice.

Agriculture students will follow a common study programme, but they will be encouraged to spend more time on areas of development that they recognise as challenging. The module is designed to equip students

with skills but also with personal resilience, the ability to take control of their own learning, the ability to study independently and to introduce them to the concept of continuing professional development.

## Animal Production Systems

**Year of study** 1

**Code** A4005C17

**Credits** 15

**Core/option** Core

**Module contact** [Dr John Donaldson](#)

An understanding of livestock production underpins many careers within the land based sector and forms a significant part of the global food industry. As such, an understanding of livestock systems is required across a range of courses.

The module will provide learners with a knowledge of the main livestock systems and how these systems inter-relate with other sustainable land based activities. The various systems will be considered in terms of input requirements, production and husbandry and analysis and interpretation of physical and financial performance data. The module will also consider aspects of sustainable production both in terms of changes to EU support and in light of global population changes.

You will:

- Develop an understanding of the systems of management for the various meat, milk and egg producing systems in the UK and EU and how these are impacted upon by changing legislation and consumer requirements.
- Identify the factors which influence the quality and safety of produce derived from farm animal production systems.
- Relate the requirements of farm animals to land type, building design, equipment and housing systems employed.

## Crop Production Systems

**Year of study** 1

**Code** C4013C17

**Credits** 15

**Core/option** Core

**Module contact** [Mr Matthew Rodenhurst](#)

The module will cover the crop production processes characteristic of NW Europe, including wheat, barley, oilseeds, potatoes, sugar beet, grassland and forage. You will focus on 'best practice' crop production methods for a range of food and non-food crops and will be related to the need for resource efficient, economic and environmentally acceptable production linked, where necessary, to the current EU and UK Single Payment Schemes.

The module will provide the necessary basic understanding of crop production practices and the related regulatory framework appropriate for higher level study. The module will provide underpinning crop production knowledge for a range of crop science and agronomy modules.

You will:

- Identify the essential requirements for the establishment, growth, development and market requirements of a range of crops.
- Explain and interpret the underlying concepts and principles of crop production associated with current best practice.
- Relate the short and long term factors influencing crop management to appropriate farm practice.
- Interpret qualitative and quantitative data relevant to crop production practices.
- Assess the wider consequences of crop production activities in the context of sustainable production systems.

## Bioscience for Agriculture

**Year of study** 1  
**Code** C4011C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Dr Laura Vickers](#)

This module will develop an understanding of the basic physiological processes that occur in both plants and animals. By the end of this module students should have an understanding of co-ordination and digestion in farm animals, the importance of morphology, photosynthesis, translocation and water relations in plants, and the diverse roles that micro-organisms play in plant and animal production systems. In addition, this module provides an introduction to basic laboratory skills.

The information gained in this module forms a foundation for later Animal Science and Crop Science modules.

You will:

- Describe underpinning biological and chemical processes in agricultural and applied sciences, and apply basic laboratory techniques in the study of animals, plants and micro-organisms.
- Identify the similarities and differences in the key biological processes taking place in microbes, plants and animals and relate how these processes contribute to growth and replication.
- Explain the necessity for co-ordination in animals and plants and describe how this is achieved via chemical and nervous control mechanisms.
- Identify and explain the functions of major anatomical structures and their roles in plants and animals.

## **Environmental Science for Agriculture**

**Year of study** 1  
**Code** C4014C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Dr William Hartley](#)

The aim of the module is to provide students with an understanding of how agriculture interacts with the surrounding environment. There will be an emphasis on sustainability and the ecological consequences of unsound management decisions on conservation. The nature of soil and water systems will be investigated, and the factors which influence natural soil systems identified, soil formation, soil properties and hydrological relationships will be studied whilst the effect of climate change on soils and water will also be investigated.

You will:

- Define the effects of natural and human-induced processes upon soil formation.
- Explain the effects of climatic change on soils.
- Classify different soil types and recognise simple soil profiles.
- Identify the distribution of valuable habitats in lowland and upland environments.
- Describe the hydrological cycle in detail and its importance to agricultural sustainability.

## **Assessment of the Farm Business**

**Year of study** 1  
**Code** R4010C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Wyn Morgan](#)

This module is designed to introduce students to the basic knowledge needed to determine areas of strength and weakness within a farming business. Students will be introduced to basic business concepts associated with the recording and reporting of business and enterprise performance. They will then be introduced to techniques for analysis and evaluation of the data, to include different types and sources of

external comparative data.

You will:

- Explain the role and scope of management in the farm business.
- Prepare and interpret a set of farm management accounts.
- Identify and analyse the performance of individual enterprises.
- Discuss the administrative methods/systems that are required in order to produce management data.

## **Agri-food Marketing**

**Year of study** 1  
**Code** F4005C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Patricia Parrott](#)

This module will provide students with knowledge of the marketing systems and market opportunities of major agricultural commodities open to primary producers. It will consider and evaluate the global and dynamic market forces affecting the interdependent players of the agri-food supply chain from primary producer to the end consumer and the extent to which this influences the primary producer's approach to agri-food production and marketing. It will cover the concept of 'farm to fork' and where alternative opportunities exist for primary producers and agricultural businesses. The role of market planning and management of risk along with methods by which this may be achieved will be reviewed in order to result in higher levels of efficiency, effectiveness and market returns.

You will:

- Identify and explain the factors influencing changes in production, channels of distribution and consumption within the UK for major farm commodities.
- Appraise the global business and market environmental factors that influence the UK agri-food supply chain.
- Identify the role of market planning in UK farm businesses and methods to maximise producer returns and manage risk.
- Discuss the alternative marketing systems and options open to primary producers for best use of resources and sustainability.

## **Agricultural Mechanisation and Buildings**

**Year of study** 1  
**Code** E4001C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Dr Simon Woods](#)

Modern farming systems rely heavily on mechanisation and farm infrastructure. 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 machinery is combined to perform different tasks. This module is designed to enable the student to understand the operating principles of the more common agricultural machines and equipment and to comprehend the management of mechanisation systems in to which they are integrated.

To successfully complete this module, students will have to demonstrate understanding of a broad range of scientific, economic and business concepts and principles relevant to farm mechanisation.

## **Grass and Forage Production and Utilisation**

**Year of study** 2  
**Code** C5004C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Louisa Dines](#)

Feed and forage costs are one of the largest drivers of cost of production on livestock units. Improving the quantity and quality of forage a business can produce and utilising it efficiently, is a crucial element to maintaining competitiveness in the current economic climate. Small improvements in the productivity and utilisation of these crops can have a major impact on the economic performance and therefore viability of livestock production systems. These improvements can include better variety and site selection, better establishment and agronomic management, more accurate assessment of appropriate harvesting/grazing time and method, appropriate storage conditions and more accurate assessment of nutritional quality.

This purpose of this module is to introduce the key features of grassland and the main alternative forage crops and describe their suitability for different sites and production systems. It covers the principles and practices of production, harvesting, storage and effective utilisation of a range of grass and forage crops whilst considering the impact of forage production and utilisation on the environment and how any potential negative effects can be mitigated.

## **Wastes, Manures and Renewables**

**Year of study** 2  
**Code** C5007C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Paul Lewis](#)

Population growth and human lifestyle are increasingly putting pressure on the earth's natural resources, with many activities being far from sustainable. Waste production and waste/energy management are key issues for policy makers and advisors. A major influence on future planning is climate change, which may impact on many of our natural resources and agricultural systems. Careful, appropriate and innovative approaches to managing resources are therefore necessary.

This module focuses on three key areas, waste production and management, organic manures, both farm and off-farm, and renewable energy. In detail it investigates how waste can be minimised and utilised for secondary value, particularly within agriculture. It includes study of the waste hierarchy and its implementation, manure management, energy conservation and renewable energy. The approach will be wide-ranging but there will be an overarching emphasis on agricultural and rural examples with environmental implications.

## **Farm Business Management and Economics**

**Year of study** 2  
**Code** R5003C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Tony Asson](#)

This module builds on knowledge from the first year module Assessment of the Farm Business by introducing students to whole farm business planning techniques in the context of the assessment of the external business environment.

The module incorporates applied agricultural economics (differentiated from neo-classical economics and economic theory and formulation expected on an Ag Econ programme) to develop an understanding of the wider issues and drivers affecting prospects in the main commodity sectors. Incorporating further assessment of the productivity factors of the business (Land; labour; capital etc.) and building on identified strengths and weaknesses within the business identified through the application of assessment techniques, students will be introduced to forward budgeting and planning techniques at enterprise and whole business levels.

## Research Methods

**Year of study** 2  
**Code** C5005C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Dr Edward Dickin](#)

This module is the fourth in the Professional Scholarship Programme (PSP). The module particularly develops the skills and knowledge necessary to successfully complete the Honours Research Project, which will also enhance 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 and industrial 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. In addition the students will plan, and justify the need, and investment for research in an effort to develop their insight into the management of practical research. By carrying out statistical analysis using appropriately accessible software, the students will develop their ICT skills and further their understanding of the role of statistics in the research process.

While the intended learning outcomes are common to all students across the University, this module provides discipline specific focus with content, learning and assessments that are tailored for subject/course needs, which will then lead to value interpretation and communication of research outcomes.

## Animal and Crop Production Science

**Year of study** 2  
**Code** A5003C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Dr Emma Bleach](#)

The ability of farmers to manipulate the outputs of animal and crop production systems and consequently their productivity, environmental impact and profitability depends on the successful application of animal and crop sciences. This module will build on the first year Agricultural Science, Animal Production Systems and Crop Production Systems modules and will cover the essential principles of reproduction, breeding, nutrient requirements, growth, health and disease.

## Farm Business Operation and Planning

**Year of study** 2  
**Code** R5001C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Wyn Morgan](#)

This module is designed for those students studying Agriculture with Farm Business Management and Agribusiness. It builds on the introductory techniques incorporated in Farm Business Management and Economics. Its aim is to ensure those students on the specialist Farm Business Management or Agribusiness route are able to fully appreciate the complex inter-relationships that exist within a farm budget, thus enabling them to understand the impact of changes on profit, cash and equity. It will also aim to equip the students with the necessary skills to allocate overhead costs to produce net margin for individual enterprises – thus allowing the decision of which enterprises are to be selected to include considerations beyond the scope of a marginal costing system. Finally the module will consider alternative means of expanding the farm business through the use of joint ventures.

## Marketing and Brand Management for the Agri-sector

**Year of study** 2  
**Code** F5001C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Patricia Parrott](#)

This module is concerned with the understanding and application of marketing principles and management to the marketing of goods and services in the agri-food sector. Farm businesses may operate in a variety of supply chain scenarios with some having a limited opportunity for interaction with the end customer or consumer, while others have short supply chains selling direct to the end customer or consumer. The module will develop knowledge in marketing management and the importance of branding along with the management considerations in the development of a marketing strategy for competitive advantage.

## Professional Services in Farm Business Management

**Year of study** 2  
**Code** R5002C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Martin Wilkinson](#)

The management of a farm business will from time to time require the input of specialist professionals. This module is designed to develop an awareness and approach in specific areas related to development (planning); taxation and law. While not expecting land and farm managers to have expertise in these areas of specialist professional advice, managers require sufficient understanding to appreciate when the services of professionals is needed.

The module focuses on the processes behind the various professional services, but in the context of the implications and consequences for the manager and management processes.

## 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** HRPROJ  
**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.

## People Management Skills

**Year of study** 4  
**Code** R6018C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Nigel Hill](#)

The structure of UK agriculture over recent years has resulted in an increase in size of farms and a reduction in the number of employed staff. However, the cost to farm businesses of poor people management skills is substantial, so it is essential that students have an understanding of the effective management of people.

This module is designed to 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 particularly will develop the graduate skills required for the rapidly changing workplace environment.

## **Sustainable Agricultural Production Systems**

**Year of study** 4  
**Code** C6013C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Dr Andrew Watson](#)

This module is designed to develop the ability of students to analyse animal and crop production systems, resolve associated problems and to ensure a sustainable, environmentally sensitive approach whilst ensuring animal welfare and human safety concerns are addressed. Agri-environment schemes and biodiversity will also be covered within this. The module will then bring these two areas together in the context of Integrated Farm Management (IFM). This will require the application of knowledge and intellectual skills gained throughout the course, and from experience gained within the industry.

The student will develop the ability to formulate whole farm cropping and livestock systems that integrate technology, economic management, and environmentally sensitive practices which are sustainable.

## **Applied Farm Business Management Case Study**

**Year of study** 4  
**Code** R6004C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Wyn Morgan](#)

The ability to take an overview and plan whole farm systems which integrate technical, business and managerial aspects is a key managerial skill. This is a project based module which aims to bring together earlier farm business management modules together with the knowledge gained from technical subject areas and apply these to an industry based, real life agricultural business. Students will be required to apply their accumulated knowledge and skills to solve complex, inter-related farm business problems or opportunities to create a viable and sustainable farming business.

## **Farm Business Strategy**

**Year of study** 4  
**Code** R6010C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Martin Wilkinson](#)

Successive UK Governments have promoted issues of resilience and competitiveness in agriculture. Aligned with similar EU objectives set out in the context of the Common Agricultural Policy reform, it seems

clear that individual farm businesses need to develop and implement plans capable of delivering competitive advantage and meeting the long terms personal and business goals of the owners.

This module is designed to introduce students to concepts and principles of strategic management. It explores the meaning and value of mission and vision statements; techniques for assessment of the wider business environment, in the context of the mission (purpose of the business) and culminates in formulation of a strategy to deliver the vision.

The module addresses longer term business development typically over a timeframe 10 to 20 years or more. The module is set in the context of sustainable production systems designed to meet the market requirements of the supply chain. It addresses the external drivers affecting the industry and the planning techniques used to incorporate the external drivers in to the strategic plan.

## **Implementation, Operation and Control of Business Plans**

**Year of study** 4  
**Code** R6012C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Tony Asson](#)

This module will address the issues associated with implementing the business plan to achieve the objectives (mission, vision) of the owners and stakeholders, addressing the tactical and operational planning processes. Students will be required to evaluate the proposed business plan to identify the Critical Success Factors (CSF) and Key Performance Indicators (KPI) and demonstrate how these can be incorporated in to the tactical management process for a business.

The module will also address the stakeholder reporting issues associated with progression of the plan over time (Business owners; bank manager; buyers, customers, government agencies, JV parties).

## **Business Diversification**

**Year of study** 4  
**Code** R6005C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Wyn Morgan](#)

The redeployment of the basic agricultural resources (land, labour, buildings, machinery and capital) to alternative and potentially more financially beneficial uses has been a long term trend in the industry. This move has been further encouraged by EU and UK government policies increasing emphasis on environmental, social responsibility, and sustainability issues as well as economic and global trading. The move towards such "diversified" enterprises is not without its difficulties, and in particular the need for the traditional commodity based producers to acquire and develop new business skills. These include such areas as market research, promotion and marketing, advertising, innovation, legal matters and dealing with customers and staff.

Development of alternative enterprises requires an understanding of the range of suitable options, the required skill sets, funding opportunities as well as detailed financial business planning and costing.