Date: 16-09-2021

Extended Foundation Degree Programme Agriculture

UCAS code	D407
Institution code	H12
Duration	4 to 5 years (full-time) including a one-year work placement
Start date	September 2022
Location	Harper Adams University campus (and location of work placement)*

The course

Harper Adams has specialised in providing higher education in agriculture for more than a century, producing highly capable graduates to drive this large and dynamic industry forward through an exciting range of career opportunities. If you are in any doubt as to the importance of the industry in the UK, remember about 75 per cent of the land area is used for agriculture! There are around 400 students here studying agriculture at degree or foundation degree level, either as a single subject or combining it with a related area such as engineering, animals or business. Agriculture students – or 'agrics' as they like to be known – aren't just farmers' sons and daughters. They come from many different locations and backgrounds, both urban and rural, and their reasons for studying agriculture are as diverse as their career plans.

Choosing Agriculture (with Year 0) will lead to either a foundation or bachelor's degree in Agriculture, depending on how well you perform during your first year. Please note that you will need to have some relevant work experience.

Entry requirements

You must be at least 17½ years old, and have 6 GCSE passes at grade C/4 or above, to include English language, maths and science (or 5 GCSE passes at grade C/4 or above, to include English language, maths and science if you also have a level 3 qualification such as A level or BTEC) . The required GCSEs must be completed prior to application.

Suitable applicants will be invited to attend an interview where they will be able to discuss their course choice in more detail. Interviews will take place either on campus or virtually taking into account any Covid-19 restrictions or government advice in place at the time.

For the Agriculture route you need at least 10 weeks relevant work experience.

For the Agriculture route there is a requirement for all applicants to have completed a minimum of 10 weeks work experience on a commercial farm by the 1st September of year one. This can be part-time work, accumulated over weekends and vacations, and does not have to be completed as a 10 week block. Gaining the relevant practical experience in advance of the start of the course is preferable. Applicants admitted with less than 10 weeks practical experience must have completed this by 1st September of year one in order to progress on the course. For applicants 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 the work experience requirement 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 Access to Agriculture.

A-level entry requirements

- **Entry requirements for 2022 entry are not currently available. Please contact Admissions for advice**

Teaching and learning

Eight specially selected modules in the first year will provide you with the academic and study skills you need to prepare for the rest of your higher education qualification. There are four entry routes to choose from, each of which, upon successful completion of the preparatory year, Year 0, will lead to a foundation or honours degree, depending on the percentage mark you pass with .

We have given examples of foundation or bachelor's degrees you could consider, but as long as you meet the required percentage mark, the specific work experience needed, and have studied the relevant modules at Year 0, you will be considered for many of our courses (subject to course manager's approval). You must pass all modules (earning 120 credits) to pass the first year.

* During the Covid-19 Pandemic the University is delivering blended learning. Government guidance is being constantly reviewed to establish the learning events which can be delivered face to face. Please refer to our frequently asked questions for further details.

Assessment

Assessment is via a balance of coursework and examination. Weighting is typically 50 percent course work and 50 percent exams, although certain modules, such as Academic Skills are 100 percent coursework assessed. Environmental Engineering Science and Mathematics Applications and Statistics are assessed 100 percent by examination.

What will I study?

Year 1	
Introduction to Animal Biology (A3003C17)	15
Animal Management and Welfare (A3002C17)	15
Environmental Engineering Science (C3003C17)	15
Plant Production Science (C3004C17)	15
Mathematics Applications and Statistics (E3002C17)	15
Information and Communication Technology (E3001C17)	15
Academic Skills (R3001C17)	15
Team Challenge (R3004C17)	15

Introduction to Animal Biology

Year of study 1
Code A3003C17
Credits 15
Core/option Core

This module will examine the fundamentals of Animal Biology applied to a range of domesticated animals, including companion animals, horses and livestock. The module will examine the structure and function of animal cells along with fundamentals of genetics and inheritance. The module provides the underpinning knowledge of animals' biology, including anatomy and physiology, essential for Animal, Veterinary Nursing or Agricultural degree programmes. Lectures will be supported by practical laboratory work.

You will:

- Recognise and understand the structure and function of animal cells and organelles including genetic material.
- Understand the physiological processes that occur within a mammalian body for a range of domesticated species, including companion animals, horses and livestock.
- Explain the relationship between structure and function of animal body systems.

Animal Management and Welfare

Year of study 1
Code A3002C17
Credits 15
Core/option Core

This module aims to give you an understanding and appreciation of the management and welfare of a range of animals including farmed animals and domestic pets. Topics covered will include the provision of resources to ensure optimum management, frameworks for assessing animal welfare and factors that can positively and negatively affect welfare in a range of animal species. It will be an essential module for

students aiming to study further courses in animal health, welfare or management and veterinary nursing. For students on the Animal Management and Welfare route it will complement the Introduction to Animal Biology module.

You will:

- Identify systems commonly used to house and manage a range of captive and domesticated animal species and the consequences of good and poor management.
- Explain what is meant by the term 'animal welfare', frameworks that exist for assessing welfare and relevant legislation.
- Apply the principles of animal welfare assessment to animals in a variety of captive/domestic situations including: intensively and extensively farmed; companions (dogs and cats); laboratories; entertainment (zoos and circuses) and the wild.

Environmental Engineering Science

Year of study 1
Code C3003C17
Credits 15
Core/option Core
Module contact Dr Simon Woods

This module provides the grounding to environmental chemistry and physics. The module focuses on five key areas including geology, soil production and compaction; the water cycle and irrigation; use of fertilisers for soil nutrition; waste management to include sustainability and contribution to climate change; and finally power generation. Introduction to scientific terms and units is also provided within the disciplines of chemistry and physics.

You will:

- Identify and describe the management of natural resources in the environment.
- Explain the movement of fluids in natural and non-natural systems.
- Explain the process of organic and inorganic fertiliser production and its application in soil nutrition.
- Describe simple power generation systems from non-renewable and renewable sources with respect to economic efficiency.

Plant Production Science

Year of study 1
Code C3004C17
Credits 15
Core/option Core
Module contact Dr Andrew Watson

This module will examine the fundamental aspects of plant biology and links this to the processes of commercial plant production. A clear understanding of the interactions between plant biology and physiology with the external influences of pathogens, pests and weeds is fundamental to the sustainable production of any crop. Therefore these skills are essential for anyone wishing to study agriculture or a land based course which will involve plant production or plant conservation.

You will:

- Describe the biology of plants from a cellular level to their structure and function, including germination, root and stem systems, photosynthesis and reproduction.
- Relate a knowledge of the biology of pathogens, pests and weeds which influence cropping systems and how an understanding of this can influence strategies for their management
- Relate the understanding of biology to commercial cropping systems in the UK and globally.

Mathematics Applications and Statistics

Year of study 1
Code E3002C17
Credits 15
Core/option Core

Numeracy skills are vital in Higher Education, and for future employment and life in general. Students on all Harper Adams' courses need the ability to process and interpret numerical data and present results effectively. This module aims to consolidate and improve these skills and improve your confidence in the use of mathematics. Some topics (percentages, statistics and graphs) link with the Information and Communication Technology module, being practised as spreadsheet exercises. The mathematical topics will be extensively applied to practical situations and higher education applications to facilitate achievement in your subsequent years of study.

You will:

- Select and apply mathematical principles to numerical, algebraic and analytical problems.
- Recognise and solve problems pertaining to space and shape applications.
- Recognise and solve problems pertaining to statistical and data handling problems.
- Recognise and solve problems pertaining to mechanical and accounting systems.

Information and Communication Technology

Year of study 1
Code E3001C17
Credits 15
Core/option Core
Module contact Mrs Kath Leigh

This module develops your ability to use, adapt and apply ICT skills effectively to suit different purposes, through practical tasks. You need ICT skills, to use as a tool, to complete further studies and will, therefore, need to know how to find, develop and present information; recognise safe working practice; communicate effectively using electronic means; and manage files accurately.

You will:

- Manage data for easy retrieval and to minimise loss and demonstrate effective communication via electronic means.
- Design and develop structures and enter information; search for and find information; and integrate and present information using word processing software.
- Design and develop structures and enter information; search for and find information; and integrate and present information using presentation software.
- Design and develop structures and enter information; search for, find and develop information; and derive new information using spreadsheet software.

Academic Skills

Year of study 1
Code R3001C17
Credits 15
Core/option Core
Module contact Emma Tappin

This module provides a grounding in the essential academic skills required to be effective during university study. The module will offer you a swift insight into expectations the university has in relation to report writing, good and poor academic practice, referencing, presentations and time-management, along with insights into revision and examination techniques. These skills will be developed throughout this module and are relevant to all areas of study in higher education.

You will:

- Produce well-constructed, correctly referenced written material using appropriate sources (e.g. journal articles, books and electronic sources).
- Demonstrate oral presentation techniques and effective use of visual aids.
- Develop the ability to give and receive feedback effectively.

Team Challenge

Year of study 1
Code R3004C17
Credits 15
Core/option Core
Module contact Emma Tappin

This module aims to support the development of group working skills and capabilities required by you during your degree study and placement at Harper Adams University. You will gain a stronger insight into your individual team working skills through delivering group activities and tasks. This learning will benefit you both when undertaking group assignments for your degree but also whilst on placement with employers. You will undertake a series of tasks and challenges which allow you to test your skills in a supportive environment. The substantial assessed team challenge will be tailored to your subject interests. You will reflect on these experiences in order to develop stronger self-awareness and improve skills for use in your future academic careers.

You will:

- Develop awareness of team working skills and an individual's role in a team.
- Analyse subject related challenges and seek appropriate solutions through team working.
- Undertake personal reflection and increase self-awareness.