



# BSc (Hons) / BSc Agriculture with Animal Science (Top-up)

<b>UCAS code</b>	BSc: DD4N BSc (Hons): DD4H
<b>Institution code</b>	H12
<b>Duration</b>	1 year (full-time)
<b>Start date</b>	September 2021
<b>Location</b>	<a href="#">Harper Adams University campus*</a>

## The course

Having completed a Foundation Degree or HND programme in Agriculture you may wish to top-up to either a BSc or BSc (Hons) degree, by studying full-time for a further academic year to specialise in the area of Agriculture with Animal Science.

## Entry requirements

- Top-up applicants must have achieved an average of 55% in their Foundation degree to apply for BSc non-honours and 60% to apply for BSc Honours.
- Applicants must have completed a full year's placement as part of their course of study or two years of full-time relevant employment out with the family business after their course.
- In addition to meeting the foundation degree requirements, applicants must also satisfy the GCSE and Level 3 entry requirements of our own Foundation degree courses.

## A-level entry requirements

- **Entry requirements for 2021 entry are not currently available. Please contact Admissions for advice**

## Teaching and learning

### What you study

Top-up programmes are structured around lectures, tutorials and practical classes designed to augment material covered in previous studies and allow students to develop the subject expertise and depth of knowledge required at BSc and BSc (Hons) degree level.

### Teaching and learning

Top up courses at Harper Adams involve a combination of lectures, tutorials and laboratory sessions as

appropriate for the subject area, together with use of the [University farm](#) to demonstrate principles in practice and the application of scientific, technological and business principles to commercial livestock 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. 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. As part of the programme students undertake a dissertation in a subject area of their choice.

\* 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 methods**

Assessment is via a balance of course work and 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.

# What will I study?

## BSc (Hons) Top-up

Year 1	
Honours Research Project (HRPROJC17)	30
Research Methods (C5005C17)	15
Sustainable Animal Production Systems (A6021C17)	15
Advances in Animal Production Science (A6001C17)	15
Animal Improvement and Bioethics (A6005C17)	15
Food Animal Processing and Manufacture (F6008C17)	15

### Honours Research Project

<b>Year of study</b>	1
<b>Code</b>	HRPROJC17
<b>Credits</b>	30
<b>Core/option</b>	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.

### Research Methods

<b>Year of study</b>	1
<b>Code</b>	C5005C17
<b>Credits</b>	15
<b>Core/option</b>	Core
<b>Module contact</b>	<a href="#">Dr Edward Dickin</a>

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.

## **Sustainable Animal Production Systems**

**Year of study** 1  
**Code** A6021C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Professor Liam Sinclair](#)

This module is designed to develop the ability of students to analyse UK and world animal systems, resolve associated problems and to ensure a sustainable, environmentally and animal welfare conscious production system. This will require the application of knowledge and intellectual skills gained throughout the course, and from experience gained within the animal industry.

The learning associated with the module will be achieved primarily through assignments which will be underpinned by keynote lectures, visits, tutorials and laboratory analyses. Each student will undertake an appraisal of components of 4 distinct production enterprises with a free choice between enterprises. Additionally there will be 2 examination papers.

## **Advances in Animal Production Science**

**Year of study** 1  
**Code** A6001C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Dr Claire Kershaw](#)

This module is designed to develop the ability of students to analyse animal systems and developments in technology, including the application of precision techniques. The application of these technologies to sustainable, environmentally and animal welfare conscious production systems will be evaluated.

This module will build on knowledge gained in previous farm animal modules including Farm Animal Production Science, Farm Animal Science and Sustainable Livestock Production Systems.

The learning associated with the module will be achieved primarily through keynote lectures both from university staff and visiting speakers.

## **Animal Improvement and Bioethics**

**Year of study** 1  
**Code** A6005C17  
**Credits** 15  
**Core/option** Core

With the rapid developments in animal breeding technologies an understanding of the processes involved and their application to modern livestock production is required. This module will provide the student with the opportunity to apply the genetic principles underlying animal breeding to a number of species of animals and systems of livestock production. To undertake this, students will require an understanding of the systems used in livestock production and other roles to which animals are currently put and may be used for in the future in the context of the socio-economic environment in which they operate. In addition, the relationship between animals and humans is explored and consideration is given to the ethical implications of the various roles of animals in society and the manipulation of animals by biotechnology.

## **Food Animal Processing and Manufacture**

**Year of study** 1  
**Code** F6008C17  
**Credits** 15  
**Core/option** Core

Animal production forms a key part of the global food system upon which human beings rely. The products of animal production systems – simplistically meat, milk, eggs – are foods in their own right and the essential raw materials used to make numerous manufactured food products. Students undertaking animal science courses need to have a competent grasp of the relationship between animal production and the food industries that utilise animal products. Such understanding should encompass factors affecting the quality and food safety of animal products used by the food industry, the characteristics of the animal products that make them of interest to food manufacturers and consumers, as well as the principal processing and preservation technologies used by the food industry in preparing animal products for consumption as food products.

This module considers the characteristics and use of muscle food derived from terrestrial meat animals – principally beef, pigs, sheep and chicken – as well as fish and other animal products such as milk and eggs. Fundamental to the consideration of animal products will be the science relating to an understanding of the products as food materials, affecting issues such as quality, food safety, functionality and human nutrition, as well as the technologies involved in harvesting, processing and preserving the materials into food products. Consideration is also given to the structure and financial value of the global animal products industries, as well as to legal regulation affecting the harvesting and use of animal products for human food.

## BSc Top-up

Year 1	
Degree Review Project (DRPROJC17)	15
Sustainable Animal Production Systems (A6021C17)	15
Advances in Animal Production Science (A6001C17)	15
Animal Improvement and Bioethics (A6005C17)	15
Food Animal Processing and Manufacture (F6008C17)	15

### Degree Review Project

**Year of study** 1  
**Code** DRPROJC17  
**Credits** 15  
**Core/option** Core

Although Ordinary Degree students are not required to engage in the research based major projects completed by honours degree candidates, it is necessary that they display the ability, at Honours level, to: learn independently and display the skills required for lifelong learning; to demonstrate awareness of the provisional nature of facts and principles and to marshal evidence and apply it in a balanced way in an argument and to draw soundly based conclusions. The development of these skills is the purpose of this module.

### Sustainable Animal Production Systems

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**Code** A6021C17  
**Credits** 15  
**Core/option** Core  
**Module contact** [Professor Liam Sinclair](#)

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**Credits** 15  
**Core/option** Core  
**Module contact** [Dr Claire Kershaw](#)

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