Agriculture with Crop Science

BSc (Hons)

If you want to progress into an agricultural management career, helping to find solutions to the world's most pressing issue of food production and land use, then this is the ideal course for you.

You don’t need to have an agricultural background; you simply need the passion and drive to work within a fast-changing industry and make that difference.

Apply now via UCAS Book an open day

Key Information

Course Duration: 3 or 4 years full time; part-time available

UC UCAS Code: D402

Part or Full Time: Full Time / Part Time

Level of Study: Undergraduate Degrees

Placement Year: Optional

Typical Offer: 96-112 UCAS tariff points or equivalent

Course information

Download a PDF

Overview Entry requirements Employability How you'll study

You’ll how to build a productive, resilient and sustainable industry - whether as a farm manager, agronomist, economist, policymaker, researcher, scientist or consultant – career opportunities are diverse.

The extensive industry experience of lecturers, an on-campus commercial farm that supplies Muller, Sainsbury's and Glencore, as well as a modern Agri-Tech Centre will prepare you to make that positive impact on the future.

You'll have access to 400 hectares of commercial farmland, offering plenty of opportunities to get hands-on. This, alongside real-world business briefs and industry placements. You’ll benefit from up to 300 hours engaging in and with the industry as part of your degree. This includes a supported work placement during

the first year of study that counts as credits towards your degree meaning you'll graduate ready for employment.

- **UCAS** | A typical offer for this course is 96-112 UCAS tariff points or equivalent.

- **GCSE** | A minimum of 5 GCSE A* to C, (or 9 to 4 where numeric grades are being awarded) or equivalent, to include English Language and Mathematics.

- **A-Level** | Typical offer is CCC-BBC or equivalent. This must include a minimum of two A Levels.

- **Vocational Award** | Typical offer is MMM-DMM in an Extended Diploma or equivalent in a relevant subject.

- **Access** | Typical offer is 96-112 UCAS tariff points in an Access to Higher Education Diploma.

- **IB** | Typical offer is 96-112 UCAS tariff points in an IB Diploma, to include a minimum of two Highers at H3 or above.
  This must also include Maths and English Language at a minimum of Standard Level S3 if equivalent GCSEs have not been obtained.

- **Scottish Highers** | Typical offer is 96-112 UCAS tariff points in Scottish Highers. This must include a minimum of one Advanced Higher and one Higher.

- **Irish leaving Certificate** | Typical offer is 96-112 UCAS tariff points in the Irish Leaving Certificate. This must include a minimum of two Highers. This

must also include Maths and English Language at a minimum of Ordinary Level.

- **OCR Cambridge Technical** | Typical offer is a MMM-DMM in a Cambridge Technical Extended Diploma or equivalent in a relevant subject.

- **T Level** | Typical offer is Pass (C or above on the core) in your T Level overall grade in a relevant subject.

- **Other** | Some evidence of practical experience in agriculture or similar land based studies is desirable.

Some evidence of practical experience in agriculture or similar land based studies is desirable.

We may interview mature applicants and those with non-traditional qualifications to ensure this is the right course for you.

The minimum academic entry requirement for this programme is 72 UCAS tariff or equivalent providing this is combined with relevant experience.

Please contact us for further information.

Email us

Your career

Industry opportunities on this course are diverse, to ensure you develop the skills, experience and connections needed for your graduate career. Many of our students get their graduate roles with their work placement employers.

Work placements and experience

These form part of core modules, alongside an optional integrated placement year. We'll support you to find a placement within a sector of the industry to match your interests and career goals. Placements can be paid or unpaid, depending on

position. Students have worked with organisations such as the ADAS, Woodheads, Foyles as well as on a range of commercial farms and enterprises.

Success Stories

Your support network

You'll benefit from a strong support network from day one to be the best you can be. This will range from your personal tutor and specialist academic support team (our Achievement and Success Centre) to dedicated wellbeing and employability (Innovation, Careers and Enterprise) centres.

Academic support

You'll have your own personal tutor while you're here who will support you to succeed in your studies. You'll also have access to our academic and wellbeing support teams who run regular workshops and one-to-one sessions on campus and online.

Alongside this, we have a comprehensive bank of online study skills resources to help you make the most of your qualification.

Your learning experiences

You'll experience a range of teaching methods to strengthen your digestion of topics, including lectures, workshops and practical sessions, as well as supported work placement learning as part of many courses.

Your career

Each year of your course will be made up of two semesters, within which you'll study compulsory and optional modules on different industry-focused topics, enabling you to develop your own unique portfolio of knowledge, skills and experience, ready for your career. The course is taught in English.

Modules

Overview Level four (year one) Level five (year two) Integrated placement year (optional) Level Six (final year)

What you'll study

This course covers a broad range of fundamental agricultural topics through core modules. From the introductions to crop science, sustainability, agricultural technologies, economics and soil management, to agronomy, developments in crop

science and the management of the supply chain with business management and sustainability embedded throughout.

Module credits

On successful completion of your modules, you'll gain academic credit that accumulates towards your award. The marks you gain in your second and third years may contribute towards your final degree classification.

Your first year will focus on introducing and developing your underpinning knowledge of crop production, soil and grassland management, sustainable production systems and economics. You'll also develop your academic, professional and transferable skills that will equip you to study at higher levels. Although the programme focuses on crop production, you'll gain an insight of how livestock production impacts on crop production. This will allow you to understand the link between the two key sectors in the industry. You'll also complete 280 hours of placement within industry to support your development.

Compulsory Modules

Introduction to Sustainable Agriculture

This module aims to address key principles that impact sustainable agriculture systems and will include a short study trip.

Introduction to Agricultural Economics

This module provides an introduction to key economic principles that are at work within the agricultural industry and their interaction with farm businesses and farm business performance.

Introduction to Agricultural Technologies

The module offers an introduction to the varied technologies involved in current agricultural production and how these can contribute to environmental sustainability, increased animal welfare and efficient business performance.

Soil and Grassland Management

The aim of the module is for students to become familiar with the principles and practices of soil and grassland management focussing on sustainable agricultural production objectives, but also considering ecological purposes.

Introduction to Crop Science

This module provides the student with an overview of crop production both in the United Kingdom and globally. Opportunities will be provided to see how scientific principles are applied in crop science, including; how plants grow in the field. Students will discuss how crop production is influenced by biotic and abiotic factors, how crop genetics are utilised in breeding and developing varieties and biotechnology.

Skills for Agriculture

The Skills for Agriculture module supports students in developing key professional, personal and academic and skills required for a career in the industry. This is to ensure students maximise the benefits of their degree programme and improve their employability prospects on graduation. The following areas are covered: academic skills; the research process and relevant potential projects; reflective thinking and the importance of health and safety (application and dissemination).

Agricultural Placement

The Agricultural Placement module supports students in developing key professional, personal, and employment skills and competencies. This is to ensure students maximise the benefits of their degree programme and improve their employability prospects on graduation. The following areas are covered: work placements (preparation for and undertaking of) and employability; technical agricultural competencies; reflective thinking in the workplace.

Core modules include farm business management and agricultural policy, agronomy, vegetable and soft fruit production, forage crops, industry engagement and a research process module.

Compulsory Modules

Agronomy

Students will observe crops on the college farm (and during visits) and will develop their agronomy skills and make recommendations for crop protection.

Vegetable and soft fruit production

The module will focus on the key principles of crop husbandry and crop production within field vegetable and soft fruit production.

Farm Business Management and Agricultural Policy

This module provides an introduction to the principles of business management and how they are applied to the modern agricultural business. This will enable you to plan and manage staffing, capital and resource use on the farm, and prepare effective budgets and business plans for future development of the business. In addition, it will allow you to consider the legislative and policy boundaries that the modern farmer has to work within, enabling them to understand, manage and plan within guidelines and offer consultation to others.

Research Methods for Agricultural and Animal Scientists

This module introduces you to the process of academic research, methods of research and analysis, helping to prepare you for reading research literature and conducting research projects in the future.

Forage Crops

The module will allow students to understand the annual production cycle of sustainable forage crops and their interaction with the environment, soil, and animal health.

Industry Engagement in Agriculture

The focus of this module is to develop students' autonomy in an industry context through practice of personal, applied, and professional skills gained through a period of engagement aligned to their future career direction.

The optional integrated placement year between your second and final years gives you the opportunity to put your knowledge and skills into practice and gain valuable industry experience.

Your final year core modules allow you to focus on a research project aligned to your own area of interest, developments in crop science, agricultural social licence and one health, the supply chain and strategic management.

Compulsory Modules

Animal and Agriculture Dissertation

This module involves independent research and analysis in an animal or agriculture-related field with oneto-one support from an academic.

Supply Chain Management

In this module students will discover the mechanisms by which the agrifood supply chain takes our food supply from farm to fork. They will discuss current research

and contemporary issues affecting, the agrifood supply chain which will enable them to grasp current practices and trends and consider the impact these may have on the producer. They will learn about the relationships between actors in the agrifood supply chain and how these influence the business practices currently employed. They will analyse and evaluate supply chain management practices with a focus on the drive towards sustainable supply chain management (SSCM) and the mechanisms by which this can be delivered. The module will also involve a non-assessed project that enables students to gain hands on experience within the sector. Previous projects have included the making of their own cider with a local cidermaker to be marketed by the students.

Strategic Management

This module allows students to explore the strategic practices and principles utilised by global companies. Through an appreciation key external and internal impact factors students will put theory into practice and create a new strategic direction for an allocated organisation.

Agricultural Social Licence and One Health

The module investigates the concepts of social licence and one health within the agricultural industry and their impact on all stakeholders and decision making related to sustainability.

Developments in Crop Science

The module will investigate a broad range of topics that will allow the student to gain further knowledge and understanding of the key scientific developments within sustainable crop production, crop protection and crop management and be able to critically analyse and evaluate the scientific impact of developments on all stake holders in the industry (producers, processor and consumers).

Teaching modes

The modules contain a mixture of scheduled learning – lectures, workshops and practical sessions. You are expected to dedicate at least two to three hours of independent study per contact hour. Your course may also include work placement learning as part of some modules.

Year	Contact learning	Placement learning	Independent learning
Level four (year one)	21%	15%	64%
Level five (year two)	27%	0%	73%

Year	Contact learning	Placement learning	Independent learning
Placement year (optional)	1%	80%	19%
Level six (final year)	17%	0%	83%

Assessment and Feedback

You will be assessed through a mixture of written exams, practical exams and written assignments. Many of the modules will be marked based on a mixture of assessment types, whilst others will be based solely on one type of assessment. Feedback will be given via a mixture of written bullet point-style feedback and/or oral feedback.

Year	Written examination	Coursework	Practical examination
Level four (year one)	0%	50%	50%
Level five (year two)	16%	44%	40%
Placement year (optional)	0%	100%	0%
Year six (final year)	0%	55%	45%

Timetables

Each year of this course is taught over two semesters, normally consisting of 12 weeks of scheduled teaching and then assessment weeks, with an overview below:

- Scheduled teaching takes place between 8:30 to 20:30 Monday to Friday
- Wednesday afternoons are normally reserved for sports and cultural activities
- Work placements may entail different days and hours
- Part-time students may need to attend learning activities five days each week, depending on modules selected
- Timetables are available during enrolment week

View term dates

Fees and funding

Tuition fees and financial support

Please visit our student finance page for information on tuition fees and student loans, as well as non-repayable grants, bursaries and scholarships, eligible to different groups, to support with study costs.

Clothing and footwear (circa £100)

You'll need to purchase appropriate clothing and footwear before you enrol, or during enrolment week. We'll let you know exactly what you need to purchase in your enrolment guide – everything is available from our supplier's online shop for approximately £100.

Optional field trips

Students are encouraged to engage in various trips and visits as part of the programme. While many of these are included in the course fees, there is the opportunity to engage in additional study tours with additional costs involved. In year one the sustainable agriculture field trip will cost in the region of £40 per student.

Short Courses

Hartpury also subsidises optional short courses for a reduced cost that allows students to gain relevant experience and qualifications prior to graduation. Short courses include PA1, PA2, PA6, All Terrain Vehicle training, chainsaw maintenance and basic operations and Telescopic Handler (RTTLT Loadall).

Performance Sports Academy membership

Find out costs and details for joining one of our performance Sports Academy teams.

Accommodation and living costs

Please visit our student accommodation page for details.

Hartpury gym

Find out about costs and details for joining the Hartpury gym.

Fees & Finance

Further course details

For further details about this course, including the programme specification and module descriptions, please visit our document library.

Resource library

Accommodation

Settle into an accommodation option to suit your taste and budget – at Hartpury University, undergraduate students can choose to live on-campus surrounded by Gloucestershire's beautiful countryside or off-campus in the heart of Gloucester City centre. Enjoy the best of both worlds.

Finance

We can help you understand how it all works, and what you need to do next. Find out everything you need to know about tuition fees, student loans and bursaries and scholarships. In 2021/22, we provided assistance to over 1/3 of our students through bursaries, scholarships and grants, totalling a little under £1million.

Support

When you become a student at Hartpury, you become part of our community. As a small university, we provide personalised support based on your individual requirements and aspirations. Our teams cover wellbeing, achievement and success, learning support, careers, and more. From wellbeing, safety and employability, to finance, accommodation and IT, our staff will answer your questions or get you set up with someone who can.

TEF Gold

Our undergraduate provision has been awarded Teaching Excellence Framework (TEF) Gold in all aspects - Overall, Student Experience, and Student Outcomes.

Teaching quality

Ranked in the top 10 universities for teaching quality (The Times and The Sunday Times Good University Guide, 2024).

Graduate employability

97% of our graduates are in employment, further study or other purposeful activity (Graduate Outcomes, 2023).

Academic support

We've been named as the top university in England for academic support (National Student Survey, 2023).

380-hectares of award-winning commercial farmland

Agriculture facilities

If you've got the passion to drive the sector to a more sustainable future, we've got everything else you need to put your learning into practice and contribute to studies that are helping to drive the industry forward sustainably.

You'll have access to 380-hectares of award-winning commercial farmland across five sites, with the latest agricultural technology available as part of our 10-year Digital Innovation Farm project.

Agriculture facilities

You, as future agriculturalists, are critical to tackling this challenge.

Agri-Tech Centre

At Hartpury, we'll support you to do just that. Through our new £2million Agri-Tech Centre you'll gain experience with the latest smart farming technologies and

have opportunities to collaborate on real-world projects to improve productivity and profitability across the county.

We'll help you to gain applied knowledge and make informed business decisions. You'll do your bit to feed Gloucestershire, the UK and, ultimately, the world – whilst preparing yourself for an exciting agricultural career where you'll get to make a real difference. It's this real experience that will give you a head start.

The centre has been developed in partnership with GFirst LEP. Complementing existing agricultural projects in Gloucestershire, the centre includes unique demonstration, bio-security and livestock areas to showcase the potential of smart farming.