

Sustainable Agriculture

MSc, Postgraduate Diploma and Postgraduate Certificate

Join the next generation of agriculturalists, equipped with the skills to shape the future. Benefit from our Digital Innovation Farm and government-funded Agri-Tech Centre.

Subject to validation

[Apply now](#) [Visit us](#)

Key Information

Course Duration: 1-3 years; full-time and part-time options

Level of Study: Master's and PhDs

Typical Offer: 2:1 honours degree

Course information

Overview Entry requirements Employability How you'll study

Pursue big global issues

Pursue key agricultural solutions to today's industry challenges of climate change, sustainability, resource management, food security, food safety and an increasing world population.

Supported by our academic and industry experts, you'll understand how scientific theory can be used to improve both professional and industry practice.

Lead agricultural innovation

Our government-backed £2million Agri-Tech Centre and Digital Innovation Farm project have been designed to make us a leading national voice in agri-science.

You'll be part of this initiative, playing an active role in our smart farming platform where knowledge and digital technology combine. Our smart tech, robotics and precision tools will place you at the forefront of agricultural data and science.

Create a sustainable future

You'll have access to laboratories, our 400-hectare award-winning commercial farm (dairy, beef, sheep and arable) and smart farming initiatives. You'll be supported to maximise learning opportunities in the real-world both inside and outside your studies, to help provide sustainable solutions for modern industry challenges.

Academic

2:1 honours degree in a relevant subject. Students with 2:2 and relevant experience will be considered on a case by case basis.

Non-academic

Students with non-relevant qualifications but with sufficient work experience or professional experience will be considered on an individual basis.

International

In addition to the academic qualification an IELTS 6.5 or equivalent is required.

Please contact us for further information.

[Email us](#)

This master's degree is focused on developing your understanding of how agricultural sciences are applied in industry to ensure that current and future challenges are met successfully.

Industry opportunities

You'll have opportunities to learn directly on our commercial farm that works with Sainsbury's, Muller, Glencore and Frontier, among others. You'll also benefit from our extensive industry networks including GFirstLEP, NFU, Foyle Food Group and Agrii.

Visiting lecturers

You'll hear from a range of academic and industry professionals in lectures who are experts in their field. This will allow you to broaden your knowledge and develop your commercial connections, whilst discussing real world case studies.

Graduate destinations

This programme is well suited for people wishing to progress into higher management within the agricultural industry, work in agricultural consultancy or be active in industry research. It could also allow for excellent routes into

agricultural legislation and policy, animal and plant health, and professional bodies such as NFU, DEFRA and APHA.

[Success Stories](#)

We're committed to supporting you to fulfil your unique potential while you're here so that you can achieve your personal and professional goals. The majority of this course will be delivered face-to-face, allowing you to access the facilities and opportunities available on campus and in the local area.

Duration

One year, full-time

You can study this qualification full-time and subsequently complete it within one year.

Two-three years, part-time

We offer flexible part-time options to help students to manage their studies alongside other commitments. These options can be tailored to suit your own needs, enabling you to complete your qualification in two or three years. Please enquire for further details.

Your support network

You'll benefit from a strong support network from day one. This will range from your lecturers, supervisors and personal tutor to our specialist academic (Achievement and Success Centre), employability (Innovation, Careers and Enterprise) and wellbeing teams.

Your learning experiences

You'll experience a range of teaching methods to strengthen your understanding of topics, including lectures, workshops and practical sessions.

Qualifications and modules

MSc degree Postgraduate Certificate and Postgraduate Diploma Modules

The master's degree focuses on the science of agricultural production, focused on meeting current industry sustainability challenges. You'll understand how livestock management research is informing critical initiatives to address urgent global issues across the next 50 years.

A central theme will be investigating how science can support industry to conserve natural resources; this is increasingly vital as resources become scarce and pressure to meet sustainable developments goals (SDGs) increases. You'll evaluate effective measurement models, understanding how farming systems support the effective management of natural, manufactured and human resources, to maximise sustainability and business profitability. This will include controlling supply, demand and business value chains.

To enhance your learning, you'll engage in new ways with your own professional practice, increasing your ability to relate academic theory to the work environment. This will ensure you're building identified work-related skills - intellectual, transferable and subject specific - to enhance your career.

Through your dissertation, you'll design and deliver a piece of research in line with your interests or professional focus. This could be based in your own workplace or another industry area, for example, an initiative on our commercial farm, Agri-Tech Centre or as part of our Digital Innovation Farm project.

Studying a postgraduate certificate or diploma is ideal for those who want to complete a specific part of this master's degree, without the academic research. In particular, this may suit people who are working in a specific agricultural sector and just want to focus on that one area for their study.

Your PGCert includes the modules focusing on the principles and practices of production and husbandry, sustainable systems and resource management. Please view the specific module breakdown for further details.

The PGDip includes all of the specialist modules without completion of a larger research dissertation. Please view the specific module breakdown for further details.

Below you'll find the compulsory modules for the master's (MSc) course.

If you choose to study a postgraduate diploma or postgraduate certificate, you'll be able to choose from a range of optional modules to suit your interests and career goals. Optional modules change each year in line with student, industry and research demands.

Module credits

Upon successful completion of your modules, you'll gain academic credit that accumulates towards your award. The marks you gain may contribute towards your final master's degree differential award (pass, merit or distinction).

Modules

The Research Process (MSc and PGDip) (15 credits)

This includes discussion of research methodologies and applications, as well as strengths, weaknesses and limitations of different methods.

Sustainable Agricultural Production (MSc, PGDip and PGCert) (45 credits)

The module will support the students to evaluate the importance of all aspects of sustainable production with the modern industry, the legal and other frameworks governing agricultural management and review the philosophies within sustainable agricultural production, allowing for critical appraisal of current systems and assured produce production schemes.

Through this, the students will be able to select appropriate strategies for achieving sustainable targets and highlight the commercial possibilities and the uncertainties associated with such systems whilst understanding integrated land use strategies for livestock and crop production systems that manage land in a sustainable manner, giving due consideration to environmental protection, conservation of natural resources and economic growth.

Sustainable Resource Management in Agriculture (MSc, PGDip and PGCert) (15 credits)

Focus your attention on the importance of sustainable resource management within industry to enable you to effectively measure the capacity and efficient use of critical resources (natural, manufactured and human).

This will help you to balance resource supply / demand, maintain control over sustainable resource utilisation and improve cost efficiency to ensure business viability.

Sustainable Development (MSc and PGDip) (30 credits)

Increase your ability to relate academic theory to the work and business environment to sustainably meet individual and industry aims and objectives. This will include developing self and business to meet one health (people, planet, animals) targets aligned to sustainable development goals.

Postgraduate Dissertation (MSc only) (60 credits)

Develop and undertake a research project of your choosing on a topic related to agricultural sciences.

Applied Animal Welfare Assessment (MSc and PGDip) (15 credits)

Bring together your understanding of ethical frameworks, animal welfare science, and animal behaviour measurement. You will then be able to navigate the complexities of assessing animal welfare in the real world.

Teaching modes

The modules contain a mixture of scheduled learning including lectures, practical sessions, seminars and group tasks scheduled alongside independent learning. Students are expected to dedicate at least two to three hours of independent study per contact hour.

The course is taught in English.

	Contact learning	Placement learning	Independent learning
MSc degree	10%	11%	79%
Postgraduate Diploma	16%	0%	84%
Postgraduate Certificate	16%	0%	84%

Teaching contact time

Teaching contact time and method will vary depending on the module that you're studying. However, postgraduate modules on this course normally involve 24 hours of taught contact time with staff per module.

Assessment and Feedback

You'll be assessed through a mixture of practical assessments, oral presentations 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.

Written feedback will be provided to you for each assessment that you submit and you'll be able to discuss your feedback by arranging a tutorial with the respective module leader.

	Written exam	Practical exam	Coursework
MSc degree	0%	36%	64%
Postgraduate Diploma	0%	48%	52%
Postgraduate Certificate	0%	75%	25%

Timetables

The full-time master's programme is taught over three semesters, normally consisting of 12 weeks of scheduled teaching across two semesters and then assessment weeks.

This programme has been designed to fit around those working, volunteering or completing internships within the sector. As such, timetables have been designed carefully to provide you with sufficient time to perform external opportunities and responsibilities. Timetables are normally available during registration.

It is recommended that you discuss potential timetables and how this may fit alongside working or volunteering with a member of Hartpury staff in person prior to beginning the course or during the induction days.

[View term dates](#)

Fees and funding

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.

Studentship scheme

Our [Postgraduate Studentship Scheme](#) provides a fantastic development opportunity, enabling you to complement your postgraduate study with important real-world research within a paid position at Hartpury.

Short courses

You'll have the opportunity to undertake British Weightlifting qualifications during your course at a subsidised fee. Please enquire prior to application for the most up-to-date costs.

Clothing and footwear

Although you don't need to purchase specialist kit for this course, it is essential that you have typical sports kit including trainers, shorts/trousers and a T-shirt in order to participate and contribute to sessions.

Performance Sports Academy membership

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

[Explore Sports Academies](#)

Hartpury gym

Find out about [costs and details for joining the Hartpury gym](#).

[Discover more](#)

Accommodation and living costs

Please [visit our student accommodation page](#) for details.

Further course details

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

[Resource library](#)

Book an appointment

Discuss this course with an Academic Programme Manager

Prospective students can book an online appointment with one of our programme managers to discuss our courses and options for postgraduate study at Hartpury University.

[Find out more](#)

Fees & Funding

It's a good idea to think about fees and funding around your course as early as you can. We can help you to understand and take control of your finances. Here's everything you need to know at a glance.

Facilities

Our specialist facilities match our specialist nature. Students benefit from access to some of the most advanced facilities in the world at an educational institution.

Visit us

Find out more about our courses, professional learning environments and commercial industry connections. Learn about our world-class facilities and speak with our academic teams about how our qualifications could help to change or progress your career.

Top 20

We're a top 20 UK university for postgraduate teaching, engagement, assessment, organisation and support (PTES 2023).

World leading

Our research has been recognised as 'world-leading' and 'internationally excellent' (Research Excellence Framework 2021).

Research and Innovation

Every year we support projects across a wide range of subject areas that help drive positive change in animal and equine wellbeing, agriculture, sports performance and public health. Research undertaken at Hartpury is regularly published and presented to audiences worldwide.

[Research & Innovation](#)



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A real-world setting

At Hartpury, an agriculture degree is about so much more than farming. It's about working with people to create behaviour change, applying agri-tech data to increase yield and welfare, and translating scientific research and business theory into real solutions that address industry challenges.

You don't need an agricultural background, you just need the passion and drive to make a difference to our planet, people, and animals.

[Watch via YouTube](#)