



Harper Adams
University



A DEGREE THAT MATTERS.

2022 Undergraduate Prospectus



**A degree that
feeds. A degree
that sustains.
A degree that
solves. A degree
that cultivates.
A degree that
engineers.**

**Harper Adams University
Newport
Shropshire, TF10 8NB
T: 01952 815 000**



**Harper Adams
University**



**If it matters to the world,
it matters to us**

Visit us!

Virtually or in person

Head to harper.ac.uk/open to discover opportunities to find out more about Harper Adams.

Open Days

The full on-campus experience. Live course talks in lecture theatres and classrooms. Campus tours led by student ambassadors. Course exhibitions and opportunities to chat 1-1 with teaching staff and those representing professional services including admissions, student finance, accommodation, student support, learning support, careers & placement and more! Try your hand at course activities and take one of our tractor-trailer tours of the farm and estate.

Visit harper.ac.uk/open to discover forthcoming dates or register your interest to be the first to hear about confirmed events.



Virtual Open Days

All the benefits of a physical open day but...

- Online, interactive campus tour
- Course talk videos
- Text-based course live chats – sometimes with live video stream responses (cameras on us, not you!)
- Dedicated course area hubs full of case studies, staff introductions, course activity videos and more; plus videos, downloads and chat from all of the professional services.
- You can even take a virtual (and warmer) tractor-trailer tour.

Campus Tours

A chance to visit the campus without all of the fuss. Perhaps you have already attended a virtual event, or a previous open day and just want to get a feel for being on campus? Or perhaps you just can't get enough of us. Either way, visit the website to express your interest and get first dibs on places when we get the dates confirmed.



What we believe

Our mission	6
Why choose HAU?	8
The Harper Advantage	10
The food sector needs fresh talent	14
Feed the future... without barriers	16
Become your own boss	18
Discover your dream job	20
Be the future of engineering	22
Imagine the future	24
Protect precious resources	26

What we offer

Let experience be your guide	28
Campus learning	32
Harper & Keele Veterinary School	34
Recognising potential	36
Your wellbeing	38
Get support when it's needed	40
Finance and funding	42
A home from home	46
Campus living	48
Downtime	50
Our place in the world	54
Hungry for more?	56

Contents

What we teach

AGRICULTURE

Agriculture	63
Agriculture with Crop Management	64
Agriculture with Animal Science	65
Agriculture with Farm Business Management	66
Agriculture with Mechanisation	67

ANIMAL SCIENCES AND VETERINARY PROFESSIONS

Animal Behaviour and Welfare	70
Animal Health and Welfare	71
Animal Production Science	72
Veterinary Medicine and Surgery	73
Veterinary Nursing	74
Veterinary Nursing	75
Veterinary Bioscience	77
Veterinary Physiotherapy	78
Wildlife Conservation and Environmental Management	79
Zoology	81

BUSINESS MANAGEMENT

Business Management with Marketing	83
Agri-Business	84
Agri-Food Marketing with Business	85

ENGINEERING

Agricultural Engineering	89
Automotive Engineering (Off-Highway)	90
Mechanical Engineering	91

FOOD TECHNOLOGY AND INNOVATION

Food and Consumer Studies	93
Food Technology and Product Development	94
Food Technology with Nutrition	95

LAND, PROPERTY AND ENVIRONMENT

Rural Enterprise and Land Management (REALM)	97
Rural Property Management	98
Real Estate	99
Environmental Land Management	100

Apprenticeships matter	102
A solid foundation	104
Postgraduate study next steps	106

Our



The world needs new talent. There are problems to solve and we are developing the skills and technology to tackle them. Here at Harper Adams we're taking on global challenges such as food security, sustainable technologies and natural

resource management. Harper Adams graduates are, right now, helping businesses and communities, the rural sector and the world to flourish. Find the degree that matters to you and you could be joining them.

We believe passionately in what we do at Harper Adams and our students share our common agenda. With 7.7 billion people to feed (a figure expected to rise to 9.6 billion by 2050) and a planet to protect, the stakes could scarcely be higher.

mission

Our task is to equip people to find creative, sustainable solutions to the economic and environmental challenges facing the world, both now and in the future. A global outlook is essential, as is the intelligent use of modern technology.

7.7 billion people

to feed and growing*

*United Nations, 2019

Why choose HAU?



To study a degree that matters:

one that will help you to make an impact on the lives of people and the planet.



To be the future of your chosen sector:

to join an industry crying out for new talent, to lead and innovate, drive key issues, and tackle tomorrow's challenges today.



To gain the Harper Advantage and:

improve your graduate career security by gaining work experience during your degree and becoming a recognised, qualified sector professional.

Read on to discover more reasons to choose Harper Adams University, including:

Our stunning rural location - with access to outstanding facilities.

Our community - be a name and not a number; and build both friendships and career networks from day one.

Our Top 10 student experience (NSS) at the UK's highest rated modern university for five years running (The Sunday Times).

Our applied approach to teaching and learning - tackling real-world challenges alongside theory.

Our research-informed, industry backed curriculum - tried, tested and supported by employers.

Our placement year and industry networks.

Our outstanding levels of student support.

A social life to suit every taste - from big nights out to sports clubs to interest-focussed societies.

Number **1** in the UK
for Job Prospects

WhatUni Student Choice Awards 2020

TOP ↑ 30
University

The Times and The Sunday Times
Good University Guide 2021

TEF GOLD
teaching award 

The UK's **HIGHEST** ranked 
Modern University
for 5 years running.

(The Times and The Sunday Times
Good University Guide 2021)

Top **10** in the UK
for Student Satisfaction

NSS 2020


98.8%

graduate
employment

(Graduate Outcomes 2020)



Placement has given me massive confidence in moving forward and applying for jobs after graduating. I did a job that I'd not done before so that also gives you confidence to try out new roles in the future.



Emily Benfield,
Agriculture graduate

The Harper Advantage

Every degree course at Harper Adams includes a placement year.

The reason is simple: employers want graduates who have real-world experience as well as knowing their subject inside out.

You will:

- gain experience and knowledge
- learn new things and address challenges
- meet people and develop networks
- make business decisions and understand planning processes
- manage money and even staff
- use your initiative and take responsibility.

We see the difference in our students when they get back from placement – they're more confident, focused and ready to take on the world! They know better which path they want to take, and what they need to do in their final year of studies to get there.

You'll choose where you want to work and we're here to guide and help. Every subject area has its own placement manager who works with the placement team to help you find and settle into a role and will visit you throughout the year to offer advice and support.

We work with hundreds of employers in the UK and overseas, who advertise through our website, or you can find your own placement job. Most roles are paid; others offer benefits such as accommodation, training or use of a car. Some years in industry are linked to scholarships, which provide funding during study years at the university as well as a paid job for their year in industry. Many students perform so well on placement that they're offered a graduate job after finishing their degree.

Our placement year tuition fee is just £1,850* and most of our students benefit from earning a wage while they gain valuable experience.

*fee at time of publication, for 2020/21

With 98.8% Graduate Employment, we're number 1 in the UK for job prospects.

Graduates Outcomes 2020 and Whatuni Student Choice Awards 2020

**your
passion
in a wide
range of
lectures
and
seminars**

Discover

**your
knowledge
on your
placement
year**

Apply

Develop

**your
interests by
studying
a more
refined
curriculum**

Deliver

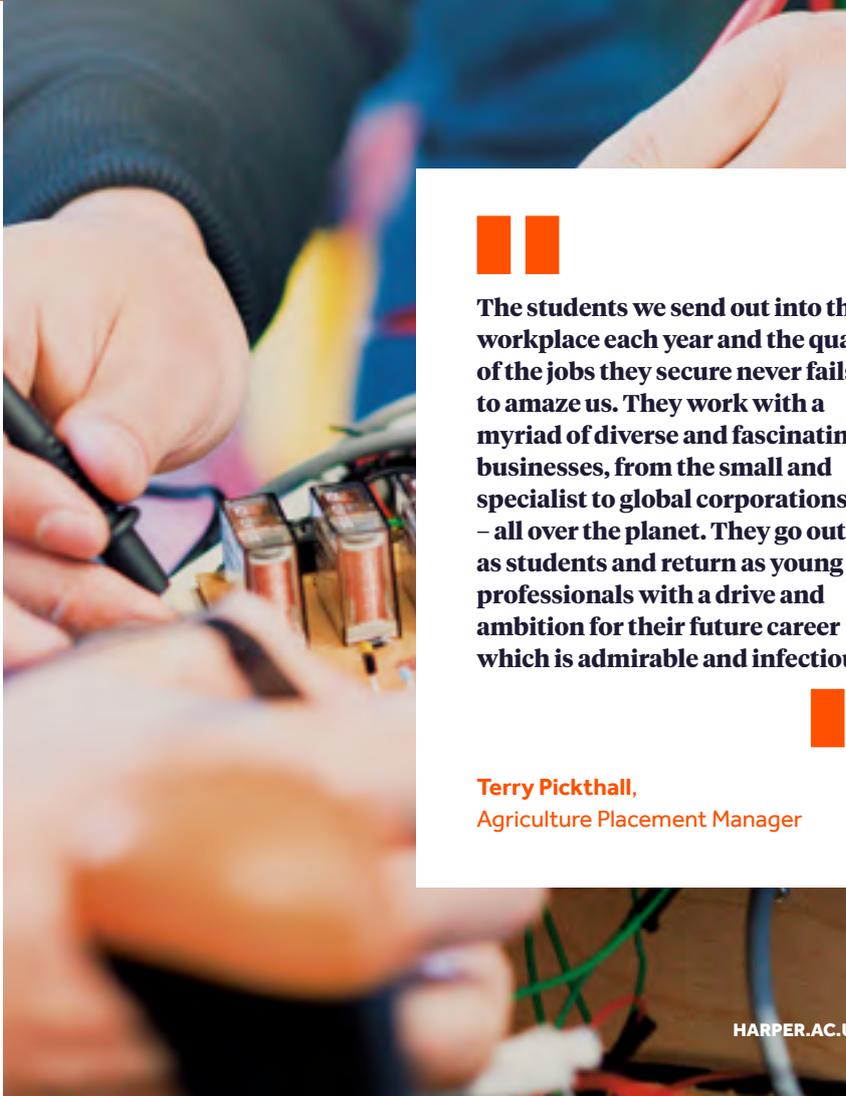
**your practical
expertise
through a
research
project**

Harper Talent

£500,000+ in scholarships – many linked to placement jobs*

Employers are so keen to secure Harper talent that many offer placement-linked scholarships, accessible to students via a competitive selection process. The most common format is a scholarship payment in second year (anything from £1,000 to full fees), a paid placement year job within the sponsoring company or a partner company, and a further payment in final year (subject to performance on placement). Many graduates also go on to work for their sponsor/placement employer after they finish their studies. Non-placement scholarships still offer a financial boost and the opportunity to expand your industry network through the sponsoring organisation. [Harper.ac.uk/scholarships](https://harper.ac.uk/scholarships)

*In 2020, more than £500,000 was shared between 143 students.



The students we send out into the workplace each year and the quality of the jobs they secure never fails to amaze us. They work with a myriad of diverse and fascinating businesses, from the small and specialist to global corporations – all over the planet. They go out as students and return as young professionals with a drive and ambition for their future career which is admirable and infectious.

Terry Pickthall,
Agriculture Placement Manager

Our placement year gives you a chance to not only apply the knowledge you have gained at university, but to step out of your comfort zone and excel in areas you never thought possible.



Chloe Gimson

Agriculture student Chloe Gimson had never set foot on a poultry farm until she started her placement at Banham Poultry in Norfolk – and yet went on to achieve an outstanding placement year mark and win the 2020 Axworthy Cup and Robin Faccenda Prize. “My placement project was looking at different water sanitation systems on poultry sites so a lot of my time was spent on-farm taking water samples. When in the office, I would get involved in all aspects of the technical team from writing audits, interpreting data and getting involved with quality assurance. I also spent a week at a poultry specialist vet practice which was a fantastic insight.”



Amy Charnock

“I chose Harper because of the year in industry. It gave me the opportunity to learn on the job and to gain experience in the industry before graduation. “I worked at the Royal Veterinary College for my first six months and loved it! I was able to see a variety of orthopaedic and neurological cases. For my second placement, I worked at Radnage House Stables where I was able to observe the treatment of both rehabilitation cases and also maintenance treatment.”

Amy Charnock, BSc (Hons)
Veterinary Physiotherapy 2020



Annabelle Gardner

“I developed skills which you can’t necessarily teach such as how to conduct meetings, decision-making, networking, what is expected in an office environment, how to work in a team effectively, how to work to different deadlines, what it is like in an office environment, etc. Placement provides a whole new perspective to work.”

Annabelle Gardner, BSc (Hons)
Business Management with
Marketing



Melanie Stokes

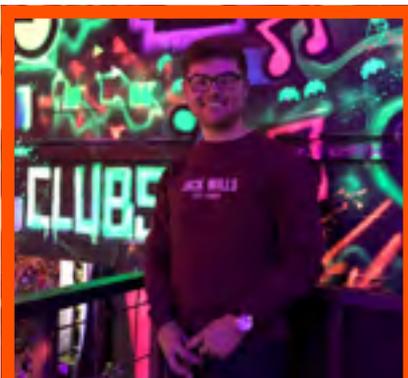
“This experience was invaluable, and I felt like I was able to put the theory I had learnt during my lectures into practice in a real-life commercial situation.” Melanie Stokes, BSc (Hons) Bioveterinary Science undertook her placement at Primary Diets, a division of AB Agri, which specialises in the manufacture of piglet creep and starter feeds, and was so successful that she was offered a graduate position with the company.



When comparing myself now to the individual who started placement over a year ago I can notice a real difference in my attitude and confidence regarding work. I face challenges with a more positive mind-set and can use the skills from placement in future work, within any business I may work with.

Will Nixon,
BSc (Hons) Agriculture





Charlie Whittaker

"My placement was really interesting; I worked for a dog food company in Shrewsbury. Some aspects of the job were really challenging but it was also really rewarding. I enjoyed getting hands-on, I learned which sections of the food industry I liked and I now want to go for a career in procurement for a company or process development. I had two projects which covered those areas and I really enjoyed it," says Charlie, who studies BSc (Hons) Food Technology and Product Development.



The placement year was a reason I chose Harper in the first place, and it did not disappoint!



Annabel Hollis,
BSc (Hons) Rural Enterprise
and Land Management



International opportunities

Sometimes placement takes you overseas to work and/or to complete studies in a partner university. During the first six months of her placement, 2019 graduate **Courtenay Mae, BSc (Hons) Agri-Business**, attended HAS University of Applied Science, Netherlands, studying Food Business and worked on a **global** market entry plan for a new product in conjunction with a **multinational** dairy company.

For the remainder of her placement, Courtenay worked at Monte Creek Winery, Canada as a Tasting Room Associate. Her duties included providing wine tasting - discussing

wine pairings, varietals and tasting notes - as well as **organising** and **representing** Monte Creek at off-site events such as wine festivals and supermarket tastings. "My placement has made me more **confident** for the future; it let me apply my skills to the **real world** as I progressed through University."

Fellow BSc (Hons) Agri-Business student Dan Stones spent his year in industry working as a Marketing Intern for John Deere based in Mannheim in South-West Germany and managed to **expand his horizons** by visiting 10 European countries during his year away from campus.

"Living in Mannheim was an **amazing** experience as it was perfectly located for travelling all around Western Europe, with trains to Switzerland, France, Italy, Netherlands, Luxembourg, Belgium and Austria. This gave me the **opportunity** to travel as much as I wanted and by the end of my internship, I had managed to visit 10 countries! For me, placement is just as important as doing the three years studying at Harper. By getting that **practical experience** to combine with the **knowledge** gained at Harper, it gives you the best chance to **stand out** and get that future job in whatever sector you want to work in."

The UK agri-food sector employs **4.1 million people**** – 13% of national employment. And opportunities are growing as technology advances, consumer preferences change and demand becomes increasingly global.

The benefit of studying at Harper Adams is that our expertise, courses and students span the entire food chain. As such, you will experience the connections of real life food businesses from day one and develop your network as you progress.

A vast range of food-related companies seek qualified graduates from Harper Adams University, valuing their industry linked education, rounded experience gained through the placement year, and knowledge developed from the application of relevant science.

The Harper Advantage:

- Accredited food degrees (IFST) or business degrees (ILM) and CIM.
- Full placement year in industry to apply skills and knowledge and determine future direction.
- Dedicated facilities – including the Food Academy with a range of technical rooms, for example, development kitchen, sensory evaluation suite and analysis room.
- Live research into topics including the supply chain, food hygiene, shelf life, nutrition, packaging and more.

Where could food take you?

New product development? Don't just tinker with recipes for your friends and family, drive forward whole new products to take to market.

Sustainable solutions: intrigued by alternative proteins? Perhaps bugs are

your bag? Or you could be the brains behind the next sports must-have snack?

Waste not want not? Are you prepared for the challenge of feeding more people while creating less waste? Use our food innovation hub to make your ideas a reality.

That's a wrap? Bothered by wasteful, non-planet friendly packaging? Do something about it, then learn to style and market your solution.

Buy it right. Bothered by the produce you find on supermarket shelves? Work your way into the supply chain and put it right. Many of our graduates are now lead buyers for retailers large and small.

*Food and Drink Federation

**gov.uk 2019

The food sector needs fresh talent

Everyone has to eat. In the UK, the food and drink industry is the biggest private manufacturing sector*. With new professionals needed in every role from field to fork. What are you waiting for?

COURSES

Business and Agri-Food, page 82

Food Technology and Innovation, page 92



Upcycling waste food?



Can you take waste products from the development of other foodstuffs and upcycle them into something not only edible but desirable?

That's what Morgan Metcalfe explored for his honours research project (dissertation) – creating black pudding from butchers' and brewers' waste.

"There was much talk about greater food sustainability and how technology can reduce waste, so I came up with the idea of using by-products from two different industries to make black pudding," said Morgan, from a Welsh family of butchers, who completed his placement year in pork processing with Dalehead Foods.

"My study involved brewers' spent grain which, at the moment, is only used in animal feed, and using blood from the pork processing industry. I wanted to answer if this grain is a viable option to replace oats in black pudding - upcycling and adding value to by-products which have little or no value." He soon discovered that he was treading new ground.

"The only research I could find centred on bakeries and bread – making it an exciting new topic, way ahead of its time

and something I'm sure will grow much bigger in the future," he added.

"The trials went well, using technology and science to get the characteristics and flavour of beer into black pudding. I experimented with the amount of spent grain used and found that replacing 50 per cent of oats was ideal. I also looked at particle fineness, and was happy with the products as there wasn't much change to the texture.

"Varying products were presented to a panel at Harper Adams who stated their preferences. It was found that adding more than 50 per cent of spent grain resulted in loads of different effects but 50 per cent was just right – the ideal cut-off point. It was also more viable financially and was high in fibre, making it of exceptional nutritional value.

"Sustainability is a huge trend within the food industry. People are working hard to be greener so using by-products in this way is really something to shout about."

Morgan, who completed his degree in Food Technology with Product Development in 2020, has gone on to study towards a Masters degree at Harper Adams.

Careers:

- retail buyer
- packaging designer
- food quality management
- food technical management
- human nutrition
- animal nutrition
- sales & marketing
- supply chain logistics



Food has profound meaning for humans, allowing people to express their culture, provide comfort and above all it has the power to bring people together.

Rachel Carroll,
BSc (Hons) Food
and Consumer Studies

Feed the future... without barriers

The world needs talented, highly-skilled and technologically sophisticated farmers, managers and advisors to ensure this essential and diverse industry is fit for the future. Harper Adams is the best place to develop your talent. Our students don't all come from farming families. What they have in common is a desire to make a difference.

Megan Edwards

Megan Edwards never found her non-agricultural background a setback, going on to be named the British Farming Awards Agriculture Student of the Year 2020.

Inspired by working outdoors, Megan undertook a variety of different roles from flower confetti maker to herdsman. This, coupled with her knowledge from her BSc (Hons) Agriculture and Animal Science degree, has given her insight into many industries and career opportunities.

On winning the award, Megan said: "I am overwhelmed to have received such a prestigious award in recognition of my hard work and dedication to such an incredible industry. Coming from a non-farming background, I feel humbled and it means a lot to be recognised for the hard work I have put in. This degree has not only allowed me to focus on my passion, it has also provided me with a well-rounded knowledge due to modules in business, crop management and marketing, amongst numerous others."





I am female in a male-dominated industry; I'm from the city and a non-farming background. That can be tough enough, without adding the gay card. That's why I am delighted to be a part of Agrespect. The growing support and understanding the movement is receiving from the farming industry makes the future look happier, hopeful and more inclusive!



Amie Burke

Amie Burke was a city girl, raised in Birmingham. At 18 she decided to escape the big smoke and started a business degree at Harper Adams. Now she is a Skills Manager for the Agriculture and Horticulture Development Board (AHDB), an Oxford Farming Conference Emerging Leader, and AgRespect champion – promoting and supporting diversity in the countryside through the rural LGBTQ+ network.

"You can apply business to any industry or job role. After growing up in the city, I wanted to move into the countryside: that's how I came across Harper Adams. It opened my eyes to a new world: agriculture and all the incredible opportunities within it.

"I have had quite a diverse career. My first role was with the AHDB – I was recruited as a Business Improvement Manager in the arable sector, working with farmer groups to calculate the cost of producing wheat, barley and oats and identify areas to focus on.

"Later, as an Account Manager with AB Agri, a large organisation that is part of Associated British Foods (Primark, Hovis, Twinnings, Frontier etc.), I worked with sustainability assessors and agricultural managers at Sainsbury's to produce 3,000 on-farm carbon footprint assessments, data insights and producer discussion groups.

"Within two years, I was promoted to the International Audit team and spent two years travelling the world, completing sustainability audits for companies such as Coca-Cola and Heineken.

"I made the tough decision to change career again and returned to AHDB, now working to improve skills across the supply chain."

Access to Agriculture: helping you to succeed from a non-farming background

To study Agriculture at Harper Adams you are required to have least ten weeks' work experience on a commercial farm (but up to four weeks of other relevant experience is acceptable).

This is important to ensure applicants have an understanding of the type of industry that they are committing to, to help contextualise and underpin teaching in the early stages of the course; and to help to ensure that students have some basic practical skills prior to entering their placement year.

In recognition of the difficulty that this presents for some students from non-farm or non-rural backgrounds, we have developed the Access to Agriculture programme that will be offered to selected Agriculture applicants if, at interview, we can see that you face real barriers to obtaining work experience.

The programme allows participants to gather their work experience during their first year at the university, which is supported by a dedicated tutor and accessed for free or at reduced rates to courses provided through our Land Based Skills Programme. For full information see harper.ac.uk/a-2-a.

For details of other programmes to help you access study at Harper Adams please see pages 36-37.



Anybody can succeed in agriculture, regardless of their barriers or background. I sincerely hope this award encourages other young people to pursue their career ambitions and seize the endless opportunities modern agriculture has to offer.



Matthew Rollason,

Agricultural with Animal Science graduate, on receiving silver in the Student of the Year category at the British Farming Awards 2018. Matt was not from a farming background.

Become your

This is where like-minds come together, in an uplifting location that inspires innovation; where entrepreneurial spirit and sustainability are the lifeblood of activity; and where students are recognised and nurtured as individuals, but engage and connect with each other and the wider world to form powerful networks. At Harper Adams you'll have the opportunity to thrive and carve out not just a career, but an entire business.



Zoe Evans

Our placement year often inspires research – but can also be an entrepreneurial springboard!

Agri-food Marketing with Business alumna Zoe Evans spent her placement at Majestic Wine Warehouses, growing an interest in viticulture. After graduating and continuing her new-found **passion** in New Zealand, working for Marisco Vineyards, Zoe returned to **diversify** her family farm in Shropshire, launching Rowton Vineyard with her twin sister. "Placement was such a **valuable** experience. I wouldn't be where I am now without it," Zoe said. harper.ac.uk/zoevin



Josh Dowbiggin

To fund his degree, Agriculture graduate Josh Dowbiggin established his own Hereford stud business, marketing imported embryos and semen online. His "**innovation** and **entrepreneurialism**, excellent stockmanship and **people skills**" resulted in him winning the Farmers Weekly Agricultural Student of the Year accolade. harper.ac.uk/jdow



Emma Buckley

"Buckley's bees was born out of absolute passion and an evidence-based belief in the amazing value of the honey bee and the good they do in the world." Buckleysbees.com Emma Buckley runs a blossoming business that combines honey production with **vital** education.

Agri-Business graduate Emma always knew she wanted to set up her own business. Her love of bees was inherited from her father, David, a successful beekeeper for more than 53 years. With her dad's experience, and her passion to raise **awareness** of the honey bee and how vital they are to agriculture, Emma set up Buckley's Bees to promote apiculture – the **skill** of bee-keeping – to younger generations. "A lot of people don't realise how important bees are to us. That was one of the main **driving** points for myself and for the business. Your supermarket shelves wouldn't have half the amount of food on them without bees." says 26-year-old Emma, who reigns over 40 bee colonies in Cheshire. harper.ac.uk/ebb

own boss



Zoe Harrison

Butterbelle founder and former food student Zoe Harrison's success in **devising, developing, launching** and **growing** her own business has been so impressive that she has returned to the university as a guest lecturer and "entrepreneur in residence". Butterbelle began in Zoe's home, where she would make nut butter for her friends, **experimenting** with carefully chosen natural ingredients. At Harper, Zoe perfected the recipes and began supplying local shops while also completing her placement year working for the Catering Department.

To ensure she could juggle the rest of her degree with the fledgling business, Zoe made Butterbelle the basis of her final year project. She was soon working around the clock crushing nuts, travelling throughout the country **promoting** and **selling** her products and winning awards: taking the top spot at the Rural Business Awards in the Best Rural Food and Drink Business



category and being voted runner up in the Observer Food Monthly Awards' Ethical Food category in 2019.

Zoe now assists in teaching a range of entrepreneurship and business modules across food technology and business degrees, to share her wealth of industry knowledge. "It feels like I'm back home," she says. harper.ac.uk/zoebell

"The people you meet, the information you gain, and the life experience are all going to be vital in your life post university."

Kiron Phillips,
HAU graduate and vodka entrepreneur.
harper.ac.uk/rkvod



Private Practice

Owning your own business enables you to be hands on - in more ways than one - as Maisie Fischer (pictured) and Katie Noble have discovered.

As alumni of the veterinary physiotherapy degree pathway, both respectively have set up their own businesses in the up and coming industry. While both actively wanted to work with the animals they have trained to care for, they are now learning about the business side of being self-employed and **gaining new skills** along the way.

Owner of her self-named business, Katie is thriving so far: "I like being self-employed and I really believe that Harper helped prepare me for it in terms of **confidence**. I love that I'm my own boss and, in theory, can do what I want!

"It is so important to **build relationships** with lots of different people and **create a good network** of other like-minded professionals and the vet physio course at Harper really focussed on aspects of this." harper.ac.uk/maisievp
harper.ac.uk/katievp

Discover your dream job

Identifying your dream job isn't easy. Most people aren't quite sure what they want to do, or don't end up in the area they planned for. But the structure of our courses and the way they connect make it easy to explore new fields, try a variety of roles and take a vital step closer to finding the perfect fit.



Ollie French

**BSc (Hons) Agriculture
with Crop Management**

"I always knew farming would be for me but coming from a non-farming background made that vision a challenge. Working on local dairy and sheep farms through my teen years was great experience but made me realise that my dream job would be to become a farm manager - and for that I would need more experience in arable crops." Ollie's placement was with JSR Farms. The experience of large, commercial farms helped to secure his current role of Assistant Farm Manager on a large organic estate in Norfolk. "The role is fast paced, complex and challenging but completely rewarding and exciting... The possibilities are endless within this industry and on the back of my time at Harper Adams, utilising the knowledge I developed there, I can go on to achieve my ambitions."



Jess Alvarez

**BEng (Hons) Automotive
Engineering – Off Highway**

I had always dreamt of working at Jaguar Land Rover. I remember walking in for my interview and saying 'I would love to work at Jaguar Land Rover but I think that's probably a distant dream!'"

However, the dream was not so distant as Jess Alvarez had assumed. Having both practical skills and a working knowledge that she developed in the first year of her degree, Jess managed to secure a three month internship with Jaguar Land Rover, working in the Off Road Capability team, to which she later returned for her placement year; and again as a graduate engineer.

"I have managed to push myself further than I ever thought possible and really delve deep into what it is I want to do with my future... I'm very excited about where Jaguar Land Rover will take me."



Thomas Kirby

BSc (Hons) Agriculture

Thomas's enrolment onto the course at Harper Adams evolved from the thwarting of a life-long dream to become a military officer.

"A degenerative eye disorder was met with successful surgery within a matter of months, however a change of career was needed instantly. I'd always loved the outdoors, testing environments and working hard. All these fitted perfectly into the employment I secured within days of my diagnosis; working on a local farm."

"Having lost one dream I had found another; swapping camouflage for tweed and a rifle for a shotgun but keeping the appalling British weather, I was set."

"Working on the mixed arable farm for eighteen months taught me the foundation for arable practices and I was able to work under an extremely knowledgeable and respected farm manager."

"I saw Harper Adams with its renowned reputation and excellent facilities, as the perfect setting to study agriculture."



Kym Smith

**BSc (Hons) Food Technology
with Nutrition**

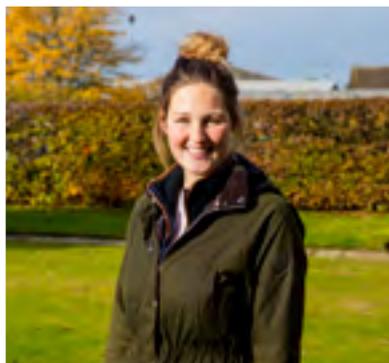
Food and nutrition studies are what brought Kym Smith to study at Harper Adams in her late 30s. But on placement she discovered a whole new field that sparked her passion: agronomy.

"I chose to study food because I wanted to understand the truth behind all the media messages that are continually confusing people about what they should eat and why.

"I applied to do my placement at a local farm. My intention was to work within the technical department, as they also pack baby leaf mixes, spinach and celery.

"My employers decided that to understand their business, my first role would be to work on an iceberg harvest rig. Then I went to work for the technical department, but straight away I was longing to go back outdoors. Over the winter I was part of a project looking at plants being grown under LED lights in the greenhouse. It made sense to my boss that, in Spring, I continued this project to see if the lights had improved the plants' health.

"This led to me being asked to spend the summer in charge of all the trials of new varieties. I learned a lot and the job showed me that it was exactly what I wanted to do."



Hannah Baldwin

**BSc (Hons) Agriculture
with Animal Science**

"I've always loved cows but hadn't ever considered I could work with them on a day to day basis. I studied a variety of A-Levels for a different career path but ultimately changed my mind... and I decided I should follow my true passions to work in a field I really love."

Hannah Baldwin didn't come from a farming background so she took some time to familiarise herself with the sector. "I completed a Level 3 extended diploma at college where I gained more of an insight into crops, farm business management and other areas of agricultural work. Despite all of this, I knew livestock was the thing I cared about most... having the specialism of animal science seemed the perfect choice. Through various work experience opportunities I've had the chance to work with livestock in all manner of ways. I've been given so much help and advice which has only made me more passionate about livestock.

"I'd really advocate for trying something new. I worked on a poultry farm as something I wouldn't ordinarily have access to; I did enjoy the experience but it definitely confirmed that I love cows and sheep the best. Now I can say with certainty that I made the right choice!"



Lucy Baughurst

**BSc (Hons) Veterinary
Physiotherapy**

"I have always wanted to work with animals in some way," says Lucy Baughurst. "Initially I wanted to be a vet. However, I soon realised I would rather work with animals all day, to help rehabilitate them. That was when I discovered the role of a veterinary physiotherapist which appealed to me greatly.

"I chose Harper because I liked the close community feeling on campus and the wide range of facilities available, including the canine hydrotherapy pool, treadmill and the physio treatment rooms. I also liked the idea of a placement year and the hands-on experience that Harper offers.

"What particularly stands out is the practical experience with the horses and dogs for the majority of weeks which solidified my knowledge. Through this practical experience, my interest in the equine side of my studies has grown - but my main interest is still with the canines!"

Be the future

Why study engineering at Harper Adams?

Because we take an applied science approach to developing every individual engineer and preparing them for the specialist sectors they wish to work in.

At Harper Adams you won't just learn about engineering – you will learn to be an engineer with the professional skills that will allow you to start making a difference from day one on placement and after you graduate.

You can expect to work on real-world projects – not just solving problems but also pitching your solutions to clients and project managing them into operation.

Our industry-accredited degrees, the experience and expertise of our staff, our facilities and our extensive industry connections make Harper an excellent choice for anyone seeking to start a career in mechanical, automotive or mechatronic engineering roles, working with everything from tractors to 4x4s, rally cars to autonomous vehicles operating on and off-highway and a huge variety of other machines and technology.

Just look at some of the employers our graduates are working for right now: Bentley, JCB, Vauxhall, Rail-Ability, M-sport, GKN, Grainger & Worrall, Westfield Sportscars, HCI Systems, Jaguar LandRover, Caterpillar, BAE Systems, Mercedes Benz; Terex, AGCO, Avara, Muller, McLaren Automotive, to name just a few.

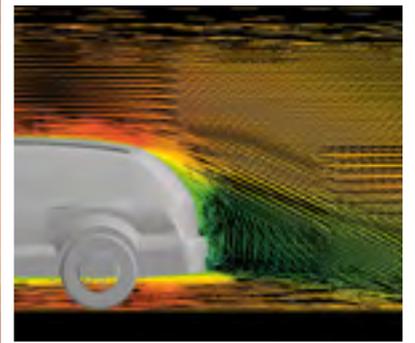
For course information see pages 86-91.



Protect the land

Soil health is one of the biggest challenges facing today's agriculture, as an ever-growing population applies more **pressure** to the global food production chain. While bigger and heavier equipment can increase the volume of crops harvested, it also **compacts** soil, making it less suitable for farming. In his final year, Agricultural Engineering Masters graduate James Vining worked on a new mechanical system that changes the way tyres move across the land, to **reduce soil damage**. "It could prove to be part of the important aim of maximising **efficiency** while maintaining maximum soil health," he said.

harper.ac.uk/jamesvsoil



Set the pace

A new men's cycling land speed **record** was set in 2019 using a bike tethered behind a custom-built Porsche with a large **slipstreaming** canopy fixed to the back to protect rider Neil Campbell from the wind and help him reach 174.3mph. Harper Adams graduate, former Bentley engineer and now lecturer, James Croxford, used 3D models of the car and a virtual **wind tunnel** to develop the all-important canopy that made the **feat** possible.

The team is now targeting the all-time world record of 220mph and James has now engaged Harper Adams engineering students in the project.

harper.ac.uk/cyclespeed1

95%

GRADUATE EMPLOYMENT

across all engineering routes

(DiscoverUni, 2020)

of engineering



Break records

Guy Martin drove the tractor that set the World's **Fastest** Tractor record in 2019, but a group of Harper Adams graduates and a current student were part of the team that made it happen! Guy worked with a team from JCB to create the Fastrac 2 that **powered** into the Guinness World Records book as the world's fastest tractor by reaching a **speed** of 131.191mph. The project manager was alumnus Alex Skittery, who said: "My agricultural engineering degree from Harper really did help me get the job done. The great thing about Harper is that you don't just spend loads of time learning about things in the lecture theatre, you learn how to apply **knowledge** to the real world."

harper.ac.uk/fastesttractor



Drive efficiency

A placement student made a huge difference to the way his employer now runs their department. Adam Stephen, an MEng Mechanical Engineering student, spent his year working for Muller and successfully **improved** the Overall Equipment Effectiveness of manufacturing during that time. Highlighting areas of **concern**, Adam made improvements on several activities including a significant **reduction** in line downtime, contributing to the improved **efficiency** onsite. Using the voice of the customer, Adam underlined how improvements could be made and actioned these to bring about a **positive change** that has been recognised by Muller's director.

Adam attributes his success to **communication**: "Communication is a vital part of a successful business and is especially important when presenting technical information. This is something that will stick with me and I will continue to improve."
harper.ac.uk/rollcage



Break down barriers

From a young age Ellie Payne was very practically minded, interested in how vehicles worked and in **solving real world problems**. She says "no other university except Harper Adams" had a course that offered all three plus the chance to work in the **industry** while she studied. Ellie was one of the founding members of Stellar Harper Engineers and continues to **encourage** more women to get into STEM careers, "If you are doing something you love you'll feel the **satisfaction** throughout. Harper helps you to find the bit you love."

harper.ac.uk/stellar





Imagine the future



Imagine machines that can talk to each other to ensure efficient working.

Imagine the two of them, and more, carefully making their way from shed to field, without bumping into each other or people or animals.

Imagine seeds drilled with precision, guided by satellites; plants will be sprayed with minimal treatments, thanks to being applied exactly where and when they are needed.

Imagine cattle monitored by smart watches, with data gathered used to improve herd health.

Imagine sheep being led across the field by a drone, because they know it will take them to food.

Drones will rise above the whole operation, providing a vital bird's eye view, taking pictures, readings and grain sampling. They might even, one day, be legally used to spray crops.

But farmers won't be out of work or idle. They will be scientists, programmers, data analysts, economists.

When it comes to animal care, hands will always be required. But for crops? We've already proven they can be produced without setting foot in the field.

harper.ac.uk/handsfreefarm



The Hands-Free Hectare: a world-first

In 2017, the Hands-Free Hectare team achieved a world-first, using automated machines to grow an arable crop remotely, without operators in the driving seats or agronomists on the ground.

Jonathan Gill, mechatronics researcher, said: "There's been a focus in recent years on making farming more precise, but the larger machines the sector has been using are not compatible with this method of working. They're so heavy that they're damaging farmers' soils.

"We believe the best solution is for farmers to manage fleets of smaller, autonomous vehicles. These will be able to go out and work in the fields, allowing the farmer to use their time more effectively and economically.

"But it's going to take new talent entering the industry to develop the technology. We hope that this project has helped to inspire some people and shown them the range of interesting and innovative jobs that are available now in agriculture."

And now it's a Hands-Free Farm

After taking the Hectare through two successful cropping cycles, to national and international acclaim, the project has attracted funding and partnerships to broaden it out across a 35-hectare farm at Harper Adams.

Martin Abel, from partner Precision Decisions, added: "We're looking to solve problems such as fleet management and swarm vehicle logistics and navigation. We're moving away from the perfect hectare and to real world situations. The fields will be irregular, there'll be obstacles, undulating land and pathways."

Kit Franklin, Senior Agricultural Engineering Lecturer, said "We want the farm to become a testbed for agricultural innovation. Once the farm's established, we'll be encouraging companies to come and test and evaluate their technologies.

It's also great that the project will remain on the University campus so that students will be able to learn from it, watch our progress and see how dynamic and innovative the agricultural engineering industry is."



Protect precious resources

If you're interested in tackling some of the most urgent challenges facing mankind, then an environment-related degree from Harper Adams will put you in a position to make a real difference. You will learn about sustainable management practices, the impact of domestic and international policies, and how changes in the environment and land use affects wildlife, society and the economy. And the countryside will be your classroom.

You will put theory into practice in the rural and urban habitats and

communities surrounding our campus. You'll also develop highly transferable job skills such as teamwork, problem-solving and managing people and projects.

Almost everybody is concerned about climate change and the environment these days and rightly so. Pollution, population growth, climate change and habitat loss are posing grave challenges everywhere. An environmental degree can help you go on and work with any number of powerful environmental organisations – lobbying groups, third

sector organisations and charities, or publicly funded bodies like The Environment Agency, Forestry Commission, Natural England or the Marine Management Organisation.

At Harper Adams, we will give you the skills and qualifications you need to go out and start protecting planet Earth.



DEGREES ((THAT)) MATTER

Georgina Reith, 21, from Chesterfield, Derbyshire, looked into the public perception of rewilding in the UK for her Honours Research Project (HRP), part of her BSc (Hons) degree in Countryside Management.

Rewilding is the reintroduction of animal species, which used to be native but have since disappeared, in the hope it will help with the management of the countryside. It's increasingly being used globally as a conservation tool.

“There are already projects reintroducing species into the UK, such as beavers, sea eagles and pine martens” said Georgina.

“One of the greatest rewilding success stories is the reintroduction of wolves into Yellowstone Park in America. They were reintroduced in 1995 and since then the elk numbers have declined, beaver numbers have increased and willow is surviving longer.

“I found the topic of rewilding interesting after studying it during a module on countryside management course and decided to use my HRP as an opportunity to look into it further.

“Due to the decision for the UK to leave the EU, a government enquiry has been investigating the future of the natural environment, and elements of rewilding have been discussed as part of the future strategy.

“There's no scientific evidence saying what will definitely happen if these species are reintroduced and there's also no firm evidence of the additional opportunities that can come out of it, for example, an increase in tourism.

“For my project, I want to see how the public's perception of rewilding compares with that of conservation organisations. Animals that could be reintroduced into the UK include elk, lynx, wolves and goshawks.”





Let experience

A holistic view – Bex Payne

“My experience across lots of sectors and sizes of business gives me a holistic view of how businesses function.” Rebecca ‘Bex’ Payne, Heads the Land and Agribusiness Department, bringing to the role experience as a finance

officer in local government, a software trainer for IBM, Business Development Consultant for a large IT consultancy, an economic development organisation, and a director of an SME before she made the switch to academia.



Inspirational knowledge – Alastair Boot

After he graduated from Harper Adams, Senior Lecturer Alastair Boot spent 15 years in the food retail industry before returning to inspire the next generation “The variety within my background helps me relate to a broad range of people, roles and businesses.

Food retail - in all its forms - faces challenges and needs the best quality graduates. Even if students do not want to work in retail, everyone in the industry should have an understanding of this important, dynamic and demanding sector.”



"Food safety sits at the heart of so many aspects of food technology, and I relish the challenge of getting students to appreciate its importance."

Dr Lynn Macintyre's career in food safety has taken her across the globe and she brings that experience to her ongoing teaching and research.

"I see that lightbulb moment for many students happening during a case study, an industry

guest lecture, a factory visit or on placement. I run a lot of practical sessions in my module teaching to engage students in 'real life' activities (including health and safety!), and use results generated by students for assessments as well. Wearing a lab coat and safety specs is second nature to me and I want my students to feel as comfortable in that environment as they do in other food-related activities and environments."



be your guide

At Harper Adams, we value real-world experience.

Not only do we ensure you get plenty of it during your placement year, but we also make sure our staff have been immersed in the industries we serve; we invite professionals from across our extensive network in to support and guide you, and we take every opportunity to either bring the latest developments into the classroom or take you out to experience them first hand.

These pages show just a few of the many examples of how we make sure you are learning in and with the real world.



When he's not carrying out visiting lecturer duties teaching eBusiness, Digital Business and Information Systems to undergraduate students, Archie Homer's main vocation is as a digital projects manager for Lighthouse, a digital solutions company specialising in web design and digital marketing. Archie project manages all

aspects of delivering a digital business solution, including client management and technical implementation, and brings this wide variety of experience to the classroom, giving students practical examples of how the theory is applied in the "real world" and what success (or not) looks like.



Research centres

All of our teaching is informed by the latest research. The last UK Research Excellence Framework concluded that all research conducted by Harper Adams University is of international quality and that more than 50 per cent is either world leading or internationally excellent. The work is organised into a series of research centres to align our specialist subjects:

- The Crop And Environment Research Centre
- National Centre For Precision Farming
- Centre For Integrated Pest Management
- Soil And Water Management Centre
- Centre For Evidence-Base Agriculture
- Rural Security Research Group
- Global Institute For Agri-Tech Economics
- Fresh Produce Research Centre
- Urban Farming Group
- Drought Mitigation Group
- Agricultural Centre For Sustainable Energy Systems
- Animal Production Science Centre
- Veterinary Sciences And Animal Well-Being Centre
- Centre For Land And Rural Business

harper.ac.uk/researchcentres

Testing your skills against competition

International and national competitions are a great way to test your skills and knowledge. From the International Field Robot competition - which Harper Adams has hosted as well as travelled overseas to compete in - to the European "Ecotrophelia" food production development contest, to the Farm Planner annual competition and the Cereals Challenge, we like to find ways to let our students put what they know into practice in front of a broader audience.



A global perspective

Eva Schröer-Merker, Senior Lecturer in Farm Business Management, has worked in and with agriculture all her life. "Growing up on a farm, it was always clear to me that I wanted to work in the sector. I think agriculture, agri-business, and their related fields are great to work in as there is a wide range of job opportunities. I worked on farms in five different countries during and before my own agri-business studies, including mixed farms in Germany, Switzerland and Iceland, as well as Merino

farms in Australia and a dairy farm in New Zealand. "I love teaching farm business management, since most of the assignments are based on case studies where students get to look at the whole picture to plan and assess the impact of changes."



Crown and country

Andrew Black squeezed a lifetime of experience into the ten years after he graduated from the Harper Adams REALM degree. He managed large estates and corporate portfolios for clients including the Crown Estate, Ministry of Defence, Church Commissioners,

Bournville Village Trust and the National Children's Home, all before becoming an Associate Partner and qualifying as a Registered Valuer in 2010. He now brings all of that experience, and extensive industry connections to his current role as a senior lecturer.





Guest speakers

As awesome as our teaching staff are, variety is key to your learning, so we bring in guest lecturers for your modules and organise lunch time and evening sessions for staff and students to gain knowledge from others working at the forefront of their sectors. These have included:

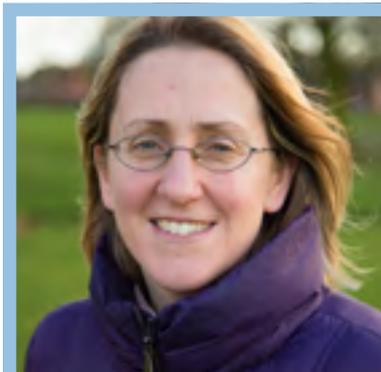
- Mark Hemming, Regional Director, Customer Fulfillment at Amazon UK, talking about their mission to become 'the earth's most customer-centric company'.
- UK Chief Veterinary Officer, Professor Christine Middlemiss, one-time guest speaker and now an official Visiting Professor.
- The former New Zealand High Commissioner - who discussed
- "Farming, International Trade and Brexit", sharing his country's experiences of opening up free trade.
- National Farmers' Union presidents - past and present
- Her Royal Highness, The Princess Royal - Our Chancellor who has shared her views on food security
- Nicolas Saphir, Chair of AHDB – discussing the role and strategy of the AHDB
- James Russell, President of the BVA – discussing the role of the BVA and the future of the veterinary profession
- John Shropshire, Chairman of G's Fresh – talking about tackling business challenges in the post-Covid/post-EU World

and many more!

Enabling the evolution of ideas

Senior Lecturer Dr Helen Pittson specialises in human nutrition, public health, wellbeing and healthy lifestyles for older people. Over 10 years in public health, Helen worked on a vast range of public health interventions including adult weight management; sport and exercise; walking for health; healthy lifestyles for families; community food projects; workplace health; childhood obesity; weight management in pregnancy; and wellbeing and healthy lifestyles for older people. "Linking food, nutrition and wellbeing is vital to ensure

populations are able to live happy and healthy lives. Working with students to explore these evolving areas is exciting and leads to new innovative food products and ways of communicating with the public."



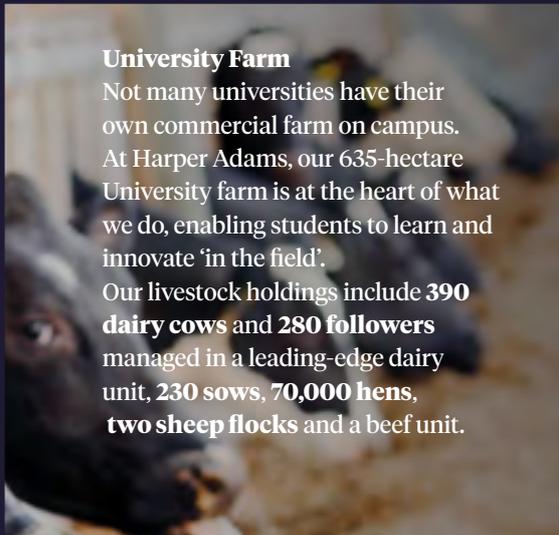
Supporting understanding



Senior Lecturer Suzanne Edwards is a Registered Veterinary Nurse (RVN) who has worked in first opinion practice and taught at a number of education institutions. Suzanne's specialist interests lie in diagnostic

imaging, cardiology, professional practise and quality assurance and she aims to help students to understand the importance of these skills before they go out into practice.

At Harper Adams, you won't just learn in the classroom. Delivering applied scientific and business management education is key to our mission, which is why we have developed a wide range of specialist resources to support you as you seek to broaden your understanding of theory and put it into practice. From the commercial farm, to extensive engineering facilities and bespoke Food Academy to the Veterinary Education Centre and extensive laboratories. Read on to discover more about our key hubs of learning.



University Farm

Not many universities have their own commercial farm on campus. At Harper Adams, our 635-hectare University farm is at the heart of what we do, enabling students to learn and innovate 'in the field'.

Our livestock holdings include **390 dairy cows** and **280 followers** managed in a leading-edge dairy unit, **230 sows**, **70,000 hens**, **two sheep flocks** and a beef unit.

Jean Jackson Entomology Building

The Jean Jackson Entomology Building houses the University's entomology teaching and research portfolio. Lime-rendered straw bale construction forms the tutorial room and the whole building is aligned for the best solar gain. The roof structure can carry a green, living layer of plants to provide insulation and biodiversity in a joint initiative with the Harper Adams Crops Department who are researching the technical properties of different green roof substrates.

Engineering facilities

The more traditional workshops are complemented by the:

- **Agricultural Engineering Innovation Centre**, home to the National Centre for Precision Farming and featuring "clean" engineering labs, plus a lecture theatre into which heavy machinery can be driven
- The **Soil Hall**, the largest covered field demonstration area in the UK
- Multiple in-field test plots

- The **Agri-EPI Centre Midlands Innovation Hub** and smart dairy research facility

Other resources include:

- An off-road vehicle demonstration track
- A JCB design suite
- A Z Corporation 3D printer
- Machinery hall

Workshops dedicated to:

- Electronics and mechatronic
- Metal fabrication
- Vehicle and machine assembly
- Maintenance

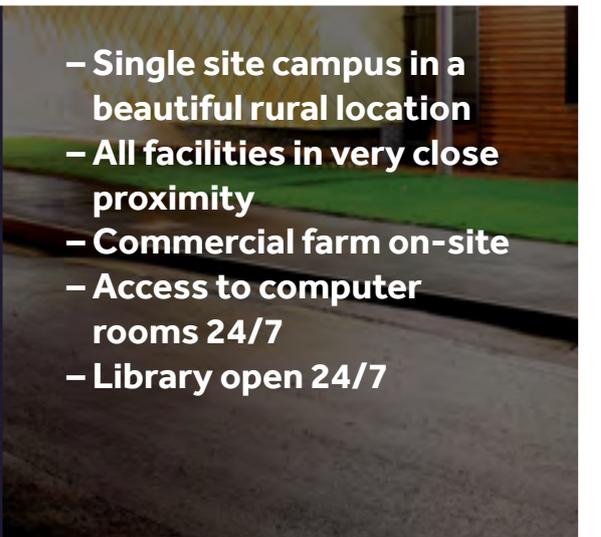
Campus

learning



Veterinary Education Centre

New in 2020 and providing bespoke facilities for clinical skills teaching, lectures, interdisciplinary professional development and breakout space, adjacent to the existing Veterinary Services Centre (with consulting rooms and hydrotherapy suite) and the Companion Animal House.

- Single site campus in a beautiful rural location
 - All facilities in very close proximity
 - Commercial farm on-site
 - Access to computer rooms 24/7
 - Library open 24/7
- 

Science facilities

Our extensive laboratory complex is a fantastic resource for our science-based courses. It features 16 well-equipped laboratories and a team of highly qualified technicians on hand to help with teaching and research. Other science-related facilities include a large experimental glasshouse, animal production buildings, a metabolism room, aquaculture research facilities, an automatic weather station and a laboratory for anaerobic fermentation.

The Food Academy

A dedicated space at the heart of the campus housing the development kitchen, sensory evaluation suite, instrumental analysis room, cheese room, micro-brewery, food grade lecture theatre, exhibition space, teaching rooms and more.



Harper & Keele

VETERINARY SCHOOL



Combining the extensive resources of Harper Adams University and Keele University, the Veterinary School is uniquely structured and will help you graduate with the required skills to be immediately effective first-opinion practitioners in the rapidly changing modern veterinary and animal welfare industries.

You will study a five-year programme leading to a Bachelor of Veterinary Medicine and Surgery degree.

During your studies, you will be able to benefit from Harper's long-standing reputation in animal sciences and access to Harper's farm and companion animal facilities, alongside Keele's experience of running a leading UK medical school and significant recent investment in facilities such as state-of-the-art teaching laboratories.

For more information visit harperkeele.vetschool.ac.uk.

The BVetMS degree has been developed to the standards expected for accreditation by the Royal College of Veterinary Surgeons. Formal accreditation approval will be sought after the first cohort completes their studies, in line with the arrangements for any new veterinary degree programme in the UK.

Six reasons to choose the Harper & Keele Veterinary School

1.

A vet school for the times

Vets today need broad skill sets. In each year, 90 of the credits in the new course focus on the core clinical skills, but the remaining 30 credits focus on broadening competencies in veterinary public health, professional skills, communication, ethics, well-being and business practice. The curriculum at the Harper & Keele Veterinary School has been designed to enhance the confidence, capability and resilience of the veterinary graduate.

2.

A diverse profession for a diverse world

The Harper & Keele Veterinary School is committed to encouraging a more diverse cohort of young people to take up veterinary degrees and is developing pathways to support this.

3.

Combined resources

The Harper & Keele Veterinary School is unique in that it provides students with access to resources from two universities.

4.

Combined excellence

Between them, Harper Adams and Keele have 186 years of experience in delivering education in animal and human health and well-being.

5.

Located in the heart of England

A major advantage of the Harper & Keele Veterinary School's twin location is easy access to the wide variety of veterinary practices in the region.

6.

Live at one university but enjoy the social life of two

Both universities have thriving sports clubs and societies and there are extensive opportunities to get involved with other social activities. Students with well-being and learning needs will be supported by specialist teams at both sites and by dedicated personal tutors. Both universities are highly regarded for the quality of support services on offer to students.



Visual illustrative representation



New resources

In addition to the existing Veterinary Services Centre, veterinary nursing training facilities, companion animal house and commercial farm with all mainstream livestock enterprises, Harper Adams has created a new veterinary education centre to support the Vet School. It serves students across the veterinary professions: medicine, nursing and physiotherapy.

Recognising

Our pledge to help you to access higher education. Harper Adams University is committed to bringing fresh talent into the industries we serve, regardless of background. As a result, we have developed a range of measures and initiatives to give everyone the best chance to access our undergraduate degree programmes.

What if....?

I live in an area from which very few people go to university?

Don't let that put you off! We have access to a range of data to show us where you are from and what you might have faced. If you live in a low-participation neighbourhood (the official term for it) you could well be eligible for a reduced tariff offer.

I have been in care/am about to leave care when I start university?

We understand some of the challenges you might face, or anxieties you might have. Harper Adams is signed up to the Care Leaver Covenant and had made a range of commitments to support you. In addition to consideration for a contextualised offer, you will receive details of a named contact person to help with your transition to university.

My studies have been disrupted through no fault of my own or I feel I have been held back by other personal circumstances?

The most important thing is that you speak to us to see what support we can provide or allowances (such as contextualised offers) we can make. We want to ensure that everyone who has the potential to succeed in higher education doesn't face any unnecessary barriers.

I am a "mature" student/not coming straight from school or sixth form?

Whether or not you feel "mature", that's what you are classed as if you are aged over 21 and are applying to university after some time out of education. Whether you are 23 or 53, we can support you to embark upon degree study to help you pursue your passion, advance your learning or change

potential

What is a contextualised offer?

Put simply, if you meet criteria to show that you have been disadvantaged in your life and/or education so far, but we believe you could succeed with the right support, we will reduce our usual entry requirements, usually by one grade, to give you a better chance of securing your place to study at Harper Adams. Find out more and check the criteria at harper.ac.uk/access.



career entirely. You might be eligible for a place without the usual academic grades. You might wish to consider an extended foundation programme to get you back into the swing of things and up to speed (page 104) or you might be exempt from completing the placement year, or you already have sufficient, relevant work experience, and therefore be able to achieve an honours degree in three years rather than two.

I can't afford to come to travel for an interview – will I be at a disadvantage compared to other candidates?

No. We are able to provide financial support towards the costs of attending an interview if you are a UK resident who is in receipt of free school meals or is care experienced, where you have applied for one of our courses that require an interview. Furthermore, the engineering team, and others, are

making more telephone advice and interview sessions available, as an alternative to in-person sessions.

I want to work in agriculture, but have no access to farm work experience?

The Access to Agriculture Programme could be the answer – it will help you to get work experience during your first year of study. See page 17.

What happens when I get my results?

All applicants with a strong application will receive additional consideration at confirmation if they do not exactly meet the conditions of their offer (subject to places being available).

Eligibility

Your application will routinely be checked to see if you qualify for a contextualised offer and you will be

advised if this is the case in our offer communications. Eligibility for some of our accessibility measures can be checked on our website at harper.ac.uk/access. You can also ask about your eligibility by calling admissions on:

T: 01952 815000

E: admissions@harper-adams.ac.uk

Our admissions team is happy to discuss your situation in confidence.

For more information about support with interview costs, or any of our further initiatives please contact:

Admissions

T: 01952 81 5000

E: admissions@harper-adams.ac.uk





Your wellbeing

**While you're
expanding your
mind, we're here to
look after it.**

Starting university is a big step. But we're here to support you, whatever you need. Whether you need support with disabilities or learning difficulties, have money worries or are experiencing homesickness, just let us know and we'll do everything we can to help.

We have a dedicated Student Advisor, based in the Faccenda Advice Zone, who is able to offer first line advice or refer you to one of our specialist support teams, all in the same building.

We also have a dedicated Student Wellbeing Officer, who works closely with other staff, including Learner Support colleagues, Course Tutors and the wider Student Services team to ensure a holistic approach to student support and success.

Details of all of the available help and support is available in the student handbook.

Arriving at Harper

New students arriving in September are eased gently into university life to get their university experience off to the best start. The University and the Students' Union work together to programme Welcome Week and Freshers Festival: a range of experiences and inductions throughout your first two weeks.

Emotional and mental health

Our wellbeing team can help if you are feeling anxious or depressed, or just need a friendly ear. The Student Wellbeing Officer is your first port of call if you are experiencing personal or emotional problems that are affecting your student experience. You may be referred to our BACP registered counsellor or the student mental health and wellbeing advisor (RGN).

Student wardens

As well as out-of-hours Residence Officers, each hall has one or two live-in wardens. These final year students are trained in first aid, fire safety, drugs awareness and student support. There's a rota system so help will be available around the clock.

Accommodation

The Student Services team can give you advice on which accommodation will best suit your needs, getting used to living independently and settling into your home-away-from-home. Learn more about accommodation on pages 40-41.

Chaplaincy

Our team of chaplains are here to listen to students and staff of all faiths or none, whatever worries or issues you may have. Students and staff can reflect or pray in the multi-faith quiet room and there are places of worship for most faiths and religions in the local area.

Healthcare

A GP offers appointments, Monday – Friday, in our campus clinic. Out of hours care can be sourced through the ShropDoc advisory service or NHS 111.

Financial support

If you find yourself struggling financially, talk to us. You may be entitled to help from the Access to Learning Fund (ALF), which can help both undergraduate and postgraduate students in financial hardship with

living and course-related costs such as travel, accommodation, books and childcare. Most awards don't have to be paid back. Occasionally we may instead offer a short term interest free loan.

Once you have applied for ALF through Student Services the University will look at your needs and decide how much you are entitled to. The money can be paid in a lump sum or in instalments and will be on top of your other student finance. You must have already taken out the full student loan available to you.

Students can also receive financial help through scholarships. The University's Development Trust is a charity that works with industry and alumni to offer exclusive scholarships to current Harper Adams students. More than **£500,000 of scholarships*** are offered each year; most include financial help, some also offer paid placement opportunities.

International students

Overseas students have an induction before the start of the academic year to introduce them to life in the UK and at the University. We can help you arrange visas, get study or personal support, find part-time work or further study opportunities, careers advice and any other issues you might have. The Planet Harper international society organises days out and social events on campus.

**Community charter.
Harper Adams University
is committed to
protecting its students'
rights to live and learn in
a safe environment.**

Our charter, detailed in the student handbook, explains the expectations we have of all members of the University community. Principals include mutual respect, supporting development, maintaining a safe community, embracing inclusivity, diversity and equality, encouraging and supporting wellbeing, fairness and transparency. For our Students' Union support services see pages 44-47.

*In 2020, more than £500,000 was shared between 143 students

Study skills

Develop skills such as note taking, report writing, referencing, revision and exam techniques in a drop-in lunchtime workshop, online through the library website, or make an appointment with the Academic Guidance team. Our maths tutor can help all students with basic numeracy and gives more targeted support to engineering students in need of advanced maths skills.

Learner and disability support

The Learner Support Service is available to all students who feel they need support, whatever your learning needs or disability, to ensure you get the most from university life. For instance, we provide help to apply for Disabled Students' Allowance,

to find the right accommodation on or off campus; and provide dyslexia screening, assessments, study resources and advice.

Maths support

Mathematics support is available for students on an individual and small group basis with the support tutor. The support is particularly aimed at helping first year students who are taking mathematical modules as part of their Harper courses; these include statistics modules and the engineering students' mathematics and mechanics modules. Help is also available for general numeracy, arithmetic and general accounting. Statistics advice is also given for students in later years of their courses, including dissertation support.

English language

We provide free English language classes, study advice and individual support for students whose first language is not English.

Careers service

The service provides both undergraduate and postgraduate students with advice and information to help them to identify and achieve their personal goals. You are welcome to use the services at any stage of your studies. First year students are encouraged to make contact early. The Careers Resource Area contains a vacancy board and useful handouts. The careers service has a dedicated online vacancy page including summer, Easter and part-time vacancies as well as graduate openings.

Get support when it's needed

Placement support

Placement Officers work alongside dedicated Placement Managers to support students in their preparations for placement employment. They are also a point of contact, in addition to each student's assigned Placement Visiting Tutor whilst on placement. Read more about the placement year on page 10.

Information services

The information services team develops and delivers digital information and learning opportunities for students and staff across the campus. This involves the continual improvement of University systems

to make them pertinent to each and every individual's requirement. All students are offered training in the use of the University computer systems starting with the use of the virtualised desktop. The initial training covers the basic use of the system and e-mail and bespoke training is provided on request to student groups. The University is registered as a Microsoft Academy and offers training and examinations to gain recognised qualifications.

Land-based skills programme

We offer a range of subsidised land-based skills courses to students. These include:

- Tractor driving

- Forklift truck/telehandler operation
- Animal transport
- Chainsaw operation
- Safe use of pesticides
- First Aid at Work
- ATV operation
- Coppice restoration
- Trailer handling
- Fencing
- Brushcutter operation
- Charcoal making
- Milk recording software
- Stockmanship

But what if...

I am older?

Not coming to university straight from school or college? That's okay. You won't be alone. Whether you have taken a couple or 20 years out, you are as welcome as anyone else to apply to study a Harper Adams degree and embark upon a career with real impact. Depending on how long ago you undertook prior studies, your qualifications might not seem to match up to those we ask for in our entry requirements. Or you might have experience that helps us to make a different entry offer. Just chat to our admissions team and they will help you to find and join the right path, whether on an extended, ordinary, honours or postgraduate degree. We understand some mature students feel nervous about starting or returning to higher education, but most find that once they have started it they fit in fine and connect with fellow students due to their shared interests and goals.

I already have experience in my field?

Great – you'll bring new perspectives to the classroom. Learning is all the better for a wider range of experiences. What's more, if your experience checks all the right boxes, we won't need you to complete a placement year, meaning you can obtain your qualification a year sooner than those without sufficient work experience.

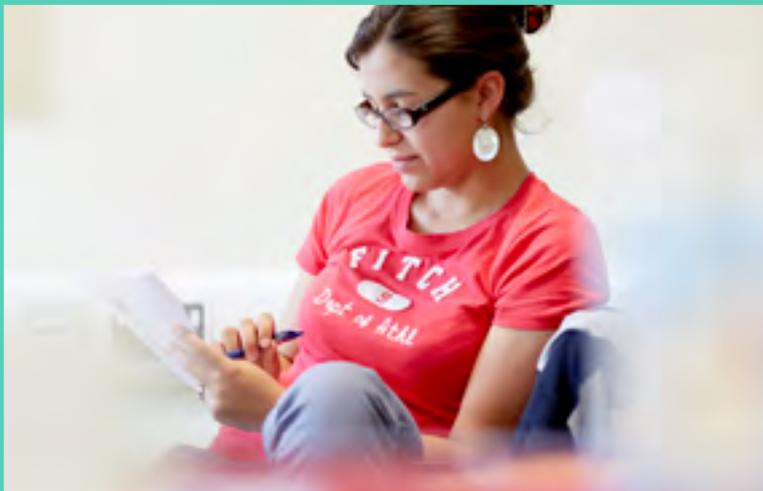
I don't want to move onto the campus?

You don't have to. While we aim to allocate every new student a room on campus if they want one, it's not compulsory to live-in. You can move to a nearby town or village or even commute from home. Commuting students have a base in the Faccenda, where they can make drinks and snacks, study, enjoy some down time with games or puzzles or simply socialise with fellow commuters and others. You can also book study spaces on campus to make the most of time

between classes. Our Student Advisor is based next to the Faccenda chill-out zone, so make sure you take advantage of the chance to gather a few pointers.

I am coming from overseas

We welcome applications from international students and will guide you as you seek to meet the requirements for coming to study with us – including passing English language tests and securing a visa, as well as meeting the entry requirements for your chosen course. For undergraduate courses, you will apply via UCAS, so please explore their website for more information. Once you have accepted a place at Harper Adams, we can offer support to organise your accommodation, to book on to pre-session programmes, advise on travel and more. Our dedicated international student support officer will continue to provide support, alongside others, throughout your time at Harper Adams.



Before you apply, or even make your choice of degree, you're going to need to know about the practical side of things: the cost, the process and the funding options available to you.

You've come to the right place. At Harper Adams, we are well aware that finding the answers can seem daunting, and we are always on hand to help. There is masses of information available on our website – go to harper.ac.uk/howtoapply – and you can telephone or email our friendly, experienced support teams at any point for advice about any aspect of university life.

E: admissions@harper-adams.ac.uk
T: 01952 815 000



Finance and funding

Studying at any university incurs a cost. The most significant of these costs is the University Fee (sometimes called the Tuition Fee), which covers many things including your classes, access to tutors and other staff, library resources and use of facilities and infrastructure.

Full details about the Harper Adams University Fee and what it covers can be found in the Fees and Charges Brochure on our Key Information Page at: harper.ac.uk/keyinfo.

In addition to the University Fee, you will also need to consider your accommodation rent and other expenses such as books, kit and field trips, the details of which can also be found in the Fees and Charges Brochure.

When you are offered a place, you can expect to receive a copy of the Fees and Charges Brochure, so that you have the opportunity to familiarise yourself with the costs associated with accepting that offer. It also includes information on how and when to make payments.

Student Finance England
gov.uk/studentfinance
0300 100 06 07

Student Finance Scotland
saas.gov.uk
0300 555 05 05

Student Finance Wales
studentfinancewales.co.uk
0300 200 40 50

Student Finance Northern Ireland
studentfinanceneni.co.uk
0300 100 00 77

Student Finance ROI
studentfinance.ie
0141 243 35 70



What kind of financial support might I be able to access?

SLC Loans: A Tuition Fee Loan to cover the yearly University Fee

Firstly, you do not have to borrow anything. However, if you are eligible you will be able to secure a loan to cover the full University Fee for each year of your course. This is known as a Tuition Fee Loan and is awarded regardless of family circumstances and will be paid by the Student Loans Company directly to the university over the course of each academic year. If you wish to cover the University Fee with a Tuition Fee Loan, you will need to apply for it before each year of study.

A Maintenance Loan to go towards living costs

In addition to the Tuition Fee loan, you might also wish to take out a Maintenance Loan to help with living expenses: going towards rent, food or travel, for example. This is separate from the Tuition Fee Loan. It is means-tested, which means the less money coming into your family household, the greater the loan entitlement. It is expected that any difference between the maximum possible loan, and that which you are eligible for, will be made up by parental contributions, part-time work or through grants, scholarships or savings (or a combination of these). When awarded, the Maintenance Loan is typically paid directly into your bank account at the start of each of the three terms.

Maintenance Grant (Scotland, Wales, Northern Ireland and the Republic of Ireland only)

In addition to a Maintenance Loan, eligible students in Scotland, Wales, Northern Ireland and the Republic of Ireland are also able to apply for a grant, which does NOT need to be repaid. Again, the level of award is based on family circumstances and this is a sum of money paid directly to you. At the time of publication, students in England are unable to apply for grant funding although can take out a repayable loan.

Harper Adams Development Trust Scholarships

There are a number of scholarships available to apply for, once you become a Harper Adams student. These are awarded on a competitive, merit

basis. All eligible students are actively contacted once a scholarship launches and we have a team of dedicated staff in place to help students access and apply for appropriate awards. In 2019/2020, scholarships worth a total of £525,000 were shared between more than 140 students. These awards cannot be applied for before your studies commence. [harper.ac.uk/scholarships](https://www.harper.ac.uk/scholarships).

Disabled Students' Allowance

You might also be able to apply for the Disabled Students' Allowance (DSA) if you have a disability, including a long-term health condition, mental health condition or specific learning difficulty, such as dyslexia. The DSA is given in the form of a grant and does NOT have to be repaid.

[gov.uk/disabled-studentsallowances-dsas/how-to-claim](https://www.gov.uk/disabled-studentsallowances-dsas/how-to-claim).

Adult Dependants' Grants

If an adult depends upon you financially, you are also able to apply for an Adult Dependants' Grant. This is given in the form of a grant and does NOT have to be repaid. More information on Adult Dependants' Grants can be found at: [gov.uk/adult-dependants-grant](https://www.gov.uk/adult-dependants-grant).

Childcare Grant

You may be eligible for help with childcare costs if you are a student with children under the age of 15 (or 17 if they have special educational needs). This is given in the form of a grant and does NOT have to be repaid. [gov.uk/childcare-grant](https://www.gov.uk/childcare-grant).

Financial support

Students who find themselves struggling financially once they are here might be entitled to help from the Access to Learning Fund (ALF), via Student Services. The ALF can help both undergraduate and postgraduate students in financial hardship with living and course-related costs such as travel, accommodation, books and childcare. Most awards don't have to be paid back. Occasionally we might instead offer a short-term interest-free loan.

Part-time work

Many students find work in the local area but we also have opportunities on site: on the farm, in the catering team, Student Union bar staff and student ambassadors.

Costs

Costs shown are illustrative based on fees for 2021 entry. Costs for each course are documented in the Fees and Charges Brochure, available from the 'Key Information' page on the website: harper.ac.uk/keyinfo. This includes other course-related costs e.g. kit list and anticipated costs of trips. The Fees and Charges Brochure also includes information on how and when to make payments.

UNDERGRADUATE FEES AND OTHER COSTS AT HARPER ADAMS UNIVERSITY

University fee (for tuition, facilities and services)	£9,250 per year
Placement year university fee (tuition and services)	£1,850
Accommodation	£6,742 per year (2021/22)
Refundable room deposit	£300
Student Union fee (optional)	Up to £175 per year

Applying

Applications to undergraduate degrees are via UCAS.

Your school or college should be able to give you guidance on the application process. If you have left school/college or are a mature entrant, you should visit UCAS.com for information on applying.

The UCAS application facility opens in September and all 'on-time' applications must be submitted by mid January. Any applications submitted after the published deadline date will be classed as 'late' and institutions are not obliged to consider them. However, where we still have places available, we guarantee to review late applications.

Entry requirements

Entry requirements are specific to each course, for more information on entry requirements please visit the specific website for the course you wish to study.

Minimum age requirements

To study on a degree or foundation degree course at Harper Adams you must normally be 17 by the start date of the course in the year of your entry and must turn 18 no later than the 1st May during the first year of study. Students must abide by regulations set out by the University for students under 18 years of age, which includes a requirement for under 18 year old students to reside in on-campus accommodation for their first year.





Responding to your application

We aim to give you a decision on your application as soon as we can. Please bear in mind that around UCAS deadlines (October for Vet School applications and January for other courses) we will be handling a high number of applications so response times will be slower than at other times. Sometimes we can't make a decision straight away – perhaps because we need to check the information you have provided, because information is missing, or because you need to have an interview with a course tutor.

Interviews

Some of our course areas require applicants to attend an interview before an offer can be made. Interviews take place at regular intervals during our applicant afternoons.

If you are invited, please ensure that you inform the Admissions Office if you are able to attend or not by answering the specific questions on your invitation email. Please also make sure that you complete and return the vocational log if you were asked to.

The interview will also give you opportunities to explore the course further and ask questions of the teaching and professional services staff.

Offer holder day

If you are not being interviewed, once we offer you a place (whether conditional or unconditional) we will invite you to an offer holder day at which you can explore the course further, meet potential future course mates and ask any questions you might have of the teaching and professional services staff. These events are important to help you make your decision.

International Students

If you are a non-EU student planning to study a full time undergraduate degree you will:

- Apply through UCAS – we do not accept direct applications, all International applications are checked in the same way as those for home students
- Need a Tier 4 student visa. Those who need a Tier 4 visa will be subject to additional entry requirements as determined by UK Visa and Immigration (UKVI).

The latest Tier 4 guidance is available at: [gov.uk/tier-4-general-visa](https://www.gov.uk/tier-4-general-visa).

To comply with UKVI regulations, those candidates who are potentially suitable will be required to have an interview via an online web-based system such as Skype

A home from home

Finding the right place to live is an important part of settling into university life. Our safe, rural location is a community where students are surrounded by friendly faces and helping hands. Lots of students live on campus, within walking distance of all our facilities.

All rooms in halls are equipped with a bed, mattress, desk, chair, shelving, wardrobe (with shelves), bedside table and a bin. International residents are usually self-catered and enjoy the benefit of a communal kitchen (equipped with refrigerator, cooker, microwave, kettle and toaster) as well as a dining/social area.

Eligibility:

Firm offer (conditional or unconditional) Harper Adams as 1st choice

Accepted offer on UCAS

Unable to apply if Harper Adams is an insurance choice

Applying for accommodation:

Shortly after you accept your course offer on UCAS we will send you an invite (via email) to apply for your accommodation online.

Deferred students need to reapply for accommodation the year they are planning to join us, even if they have applied before.

Room type and pricing:

Annual charge includes catering, cleaning and laundry (as appropriate) as well as heating, lighting, internet and Endsleigh standard room contents insurance. Residents benefit from out of hours support, 24h security and on-campus parking.

Limited number of shorter (36 weeks) letting period might be available on request for self-catered accommodation only – students expected to vacate in full during Easter vacation period and the university will be unable to provide storage.

Charges shown are as set for 2021/22 and are subject to change.

ROOM TYPE	HALL	CATERED MONDAY-FRIDAY (TERM TIME ONLY)	ANNUAL CHARGE (UG 40 WEEKS)
Catered en-suite (single room and laundry)	Harris, Gloucester	Yes 3 meals per day	£6,742
Catered standard (single room, wash basin, shared facilities and laundry)	Boughey Bradford Ward	Yes 3 meals per day	£5,907
Catered single – uni houses (single room, shared facilities and laundry)	Flatt Road Newtown Poultry Dive	Yes 3 meals per day	£5,490
Catered shared – uni houses (shared room, shared facilities and laundry)	Flatt Road Newtown Poultry Dive	Yes 3 meals per day	£4,370
Self-catered en-suite (single room with self-service laundry)	All Self-Catered Halls (Pitchside and Courtside)	No	£5,080

Accommodation in second year and beyond:

Students live off campus in Newport or adjacent villages of Edmond, Adeney and Tibberton. Rent average £60-£80 exc. bills or £80-£95 inc. bills.

Plenty of accommodation is available. The majority is in houses of four and five in residential areas. There are also lodgings and some small flats available.

First year students are not encouraged to sign up for accommodation off campus until at least after Christmas, after we have done our housing forum and details of properties available are published.

Year 0 students (Extended Foundation degree) do not automatically qualify for accommodation on campus in the following year, but requests will be considered subject to availability.

Prefer to live off campus?

We are able to assist with finding suitable accommodation off-campus. The earlier you tell us, the better.

In the summer months, rooms and student houses may be available, which can be circulated to those who express

interest as well as details for students wanting to rent with other students.

There is no shortage of student rooms/houses available off campus all year round, although lodgings and smaller flats are more limited.



Campus



Faccenda Student Centre

Our student hub houses several essential services under one roof, including the Students' Union, Careers Service, Student Service, and Learner and Disability Support. It also boasts a fitness suite, dance studio, the Graze Café, Feed Store shop and a great deal of social space including the ground floor chill out zone where students can relax between lectures.



Main Bar

The Main Bar is where many of the large Students' Union events take place, including Big Wednesday party nights (often fancy dress themed), and some of the themed balls which take place throughout the year.



The Welly Inn

The Welly Inn provides a great hideaway for students, be it a quick pint after studying, a pub quiz or comedy evening organised by the Students' Union. The Welly has a pool table and a full wall projector screen – great for sports and movie nights. The couches and corner booths provide a great alternative to the Main Bar, whilst allowing you to be part of the buzz. There is also a cash machine located at the entrance of The Welly.



Kaldi Café

Located adjacent to the Bamford Library and ideal to use as a break from studying. Hot and cold drinks, sandwiches, paninis and toasties. Open 9:30am-4pm Monday-Friday term time only.

Harper Gym

A well-equipped fitness suite that is being continually improved year on year. Membership available from the Students' Union.

Health Care

When you arrive, you will be asked to register with the local doctors' surgery. This is to ensure you have access to prompt treatment should you require it. Surgeries are held on campus every weekday lunchtime. During university holidays you can be seen by your home doctor as a temporary resident.

Wi-Fi

Free Wi-Fi available to all students. Use your student log-in to access Eduroam across campus.

Parking

Parking is free throughout campus.

IT services

Helpdesk is located on the first floor of the library.

Laundry

Students in Boughey, Bradford, Flatt Road, Gloucester, Harris or Pitchside self-catering (Darwin A&B, Darby, Jebb and Silcock) are provided with a laundry service as part of the package. If you live in Princess Royal, Jerman or Leverhulme there is no laundry service provided. However there is a self-service launderette, located beneath the clock face between Jerman and Leverhulme halls. This service is available to use by all students.

The Feed Store

On-site shop located in Faccenda with a range of groceries, drinks and snacks. Open 7 days.

Costa Coffee

Located in the Agri-Tech Innovation Hub on the south side of campus. Open 8:30am-3:30pm Monday-Friday.

Graze Café

Hot and cold food, made to order baguettes, homemade meals using produce from the Harper Farm. Open 8am-3pm Monday-Friday and 8am-2pm weekends.

Dining Hall

Located inside QMH, this light and airy dining room serves three meals per day to catered students. There is always a choice of three main courses along with healthy options and salad bars. Monday-Friday Breakfast 7:30am-9am, Lunch 12pm-1:30pm and Dinner 6pm-7:30pm (Wednesday 5pm-6:30pm).



living



Downtime

Students' Union

The Harper Adams Students' Union (SU) is run by students for students. The SU sabbatical team are annually elected full-time officers who are supported by permanent staff in the running of the organisation. The SU is one of the main foundations of the University, enabling the student voice to be heard and creating a united student body. Fortnightly meetings take place between the SU and the University's senior management team in order to voice student opinions and raise concerns.

The union offers a wide range of activities and events throughout the year including multiple balls, SU Wednesdays in the bar, a variety of sports clubs and societies and legendary trips.



If sport is your thing, you'll be happy at Harper. We compete against other universities in the following sports:

- Equestrian
- Football
- Hockey
- Rugby
- Netball
- Clay shooting
- Rowing
- Polo



Sports facilities include:

- Football, rugby, hockey and cricket pitches
- Floodlit all-weather Astroturf pitch
- Multi-use games areas for basketball, tennis and five-a-side
- Heated outdoor swimming pool
- Shooting ground
- Gym and fitness studio
- Sports hall
- Bowling green
- Off-road track





There are also clubs for:

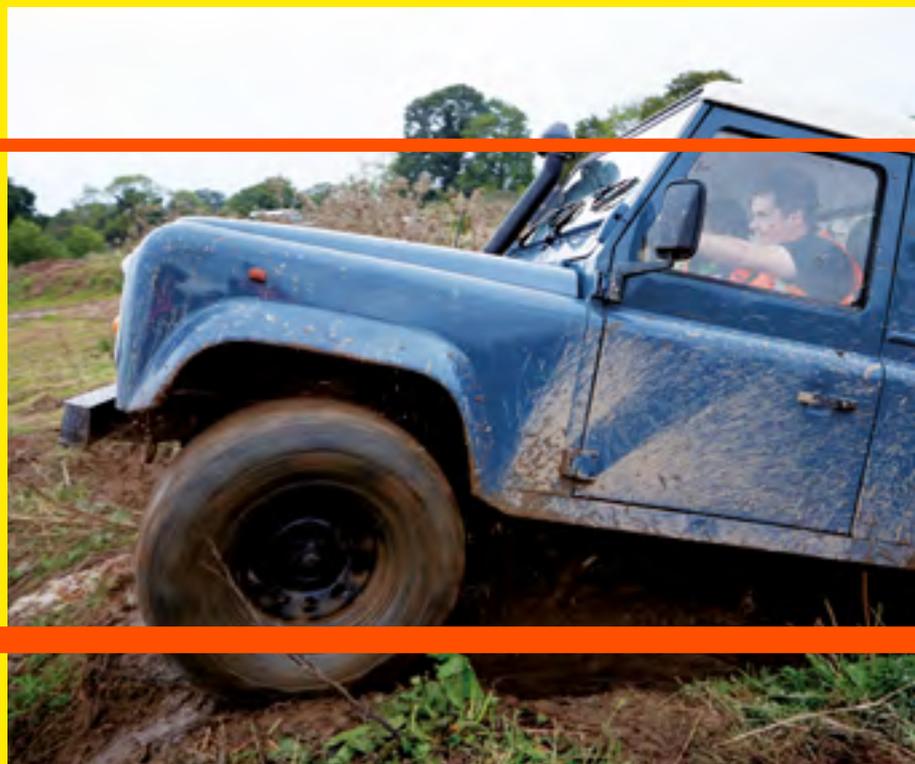
- Motorsport
- Off-roading
- Tug of war
- And many more

Non-sporting activities include the following societies:

- Harper Forum
- Harper Cymru
- Harper Ireland
- Planet Harper
- Christian Union
- LGBTQ+ Society

Further societies include:

- Conservation Society
- Gaming Society
- Music Society
- Biological Society
- Veterinary Society
- Veggie and Vegan Society



If there isn't already a club or society for your own hobby and you have enough people interested, the SU will support you to set one up.



Harper Adams Students' Union is the heart of Harper life, whether sports clubs and societies are your thing or you're looking to try something new at university, the Union will always be there to support you.



Thomas Oatey,
SU president 2020/21



Our place in the world



Newport

The nearest town to Harper Adams, Newport, is a thriving market town dating back to the 12th century. Its distinctively wide main street is home to independent and high street shops, picturesque cobbled streets, award-winning floral displays, a wide range of cafes, and restaurants, supermarkets and utilities.



Telford

Telford is one of the UK's fastest growing and most successful new towns, yet its roots stretch back for hundreds of years. Here you will find plenty of local history in its thriving market towns.

At its heart, in the modern town centre, is the ultramodern Southwater development featuring a state-of-the-art library, IMAX cinema, ice rink, ten pin bowling, bingo and Telford Town Park with its 162 hectares of green space, numerous play areas and its aerial ropes and mini golf adventure course. Its many restaurants, café and bars offer a selection of cuisines from around the world including rustic and traditional English, Indian, Thai, Japanese, Italian, Portuguese and Mexican. The Place theatre, in Oakengates, has a packed programme of shows and events.

Shrewsbury

Shrewsbury's castle, abbey and cobbled streets are a vivid reminder of the county town's history – it is one of England's finest medieval towns, and birthplace of Charles Darwin.

Today, with its magnificent floral displays, independent shops and boutiques sitting alongside high street stores, cafés, bars, restaurants and the delightful Quarry Park, it is the perfect place to while away a relaxed day.

A half-hour drive from Shrewsbury you can explore the historic market town of Church Stretton, at the heart of the South Shropshire hills on the English/Welsh border known as The Marches. It is the first town in Shropshire to be awarded 'Walkers are Welcome' status (places which have something special to offer for walkers other than simply being a fantastic place to come and enjoy the great outdoors) and holds its own annual Walking Festival in June. Church Stretton is also an official Fairtrade town.



Distance from

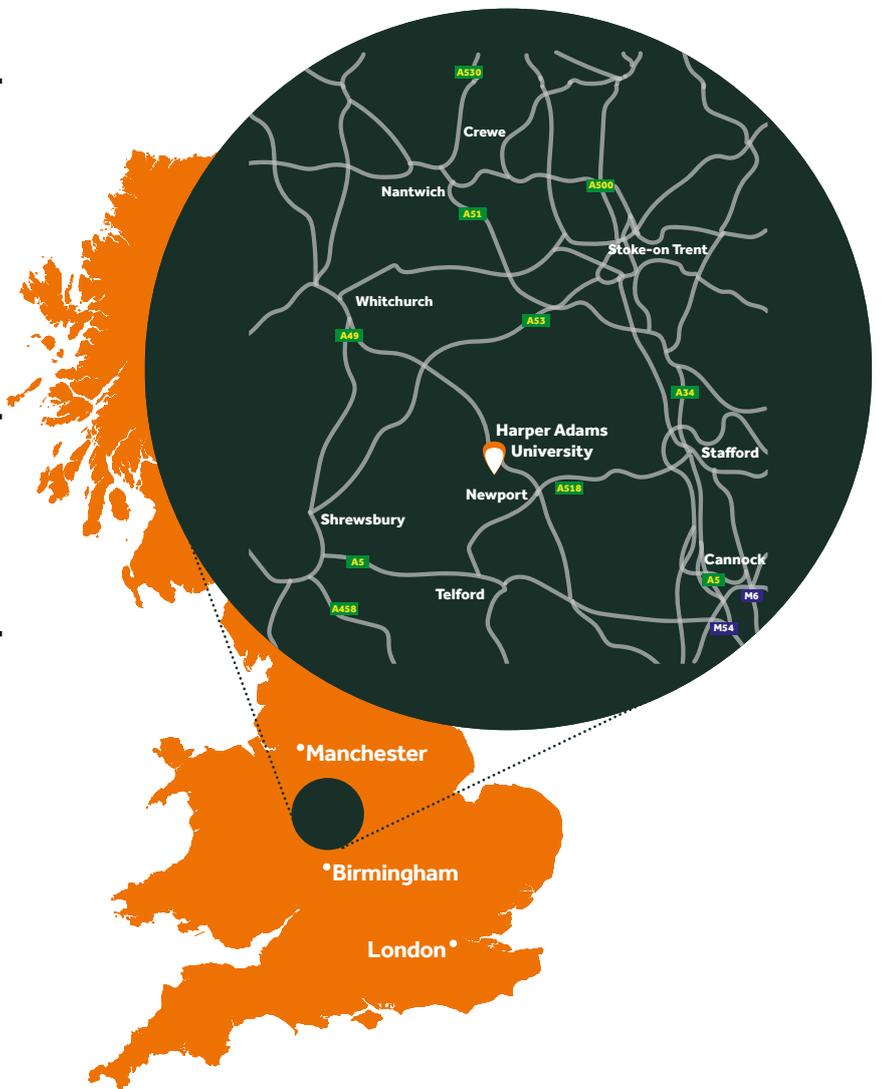
- Manchester**
Approx 1 hr by car
- Liverpool**
Approx 1 hr by car
- Birmingham**
1hr by car
- London**
1.5hrs from
Stafford (fast train)

Nearest railway stations

- Stafford**
15 miles
- Telford**
10 miles
- Shrewsbury**
16 miles

Bus stops

519 Shrewsbury – Newport bus stops at the campus gates Newport Bus interchange is 2.8 miles from campus.



Ironbridge Gorge

Don't miss the opportunity to visit the incomparable Ironbridge Gorge. Along with such monuments as the Acropolis, the Taj Mahal and the Great Wall of China, the beautiful and historic Gorge has been classified as a World Heritage Site since 1986.

The area made a unique contribution to the birth of the Industrial Revolution in the 18th century, which had a worldwide impact, and its fascinating history can be explored through the ten award-winning museums spread along the valley beside the River Severn, spanned by the world's first iron bridge, erected in 1779. Walking, cycling, canoeing, bus – there are so many ways to enjoy Ironbridge's stunning scenery and history. A short drive from Ironbridge you will find the picturesque market town of Much Wenlock, and the sixteen-mile escarpment of Wenlock Edge, probably Britain's best fossil-rich, natural feature.

Stafford

The county town of Staffordshire, Stafford is well served by rail and road.

Its shopping centre features a variety of high street and independent shops, an art gallery, museum in the Ancient High House, cafes, bars, restaurants, cinema, theatre and an attractive park. Within a short drive of the town you can explore its castle, marina, Trentham Estate's gardens and Monkey Forest, Uttoxeter racecourse, Shugborough stately home and the bike trails and woodland walks of Cannock Chase.



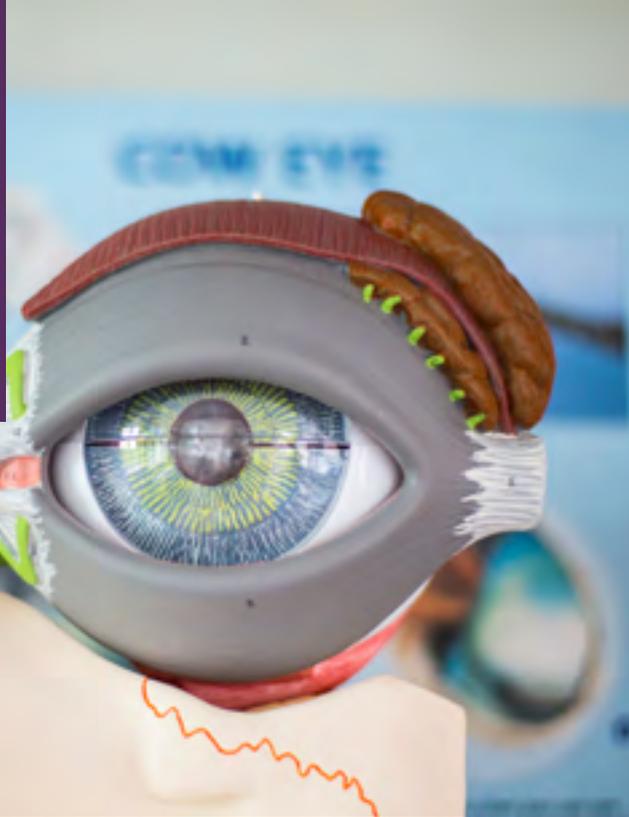
||

At first glance Shropshire is full of contradictions – birthplace of the Industrial Revolution yet it's an unspoilt rural idyll. Two of the most beautiful medieval towns in England, yet one gave birth to every skyscraper in the world (not forgetting one of the greatest thinkers of all time, Charles Darwin). The other set the pace for the country's Slow Food movement – if that in itself isn't a contradiction. And a small market town became the very inspiration for the modern Olympics.

||

Shropshire Tourism

Still want to see and hear more? Visit us! Find out when our next open event is and book your place.
harper.ac.uk/open



Hungry

Now that you have read about life at Harper Adams, keep turning the pages to delve into the detail of each of our courses. Or visit harper.ac.uk to find information relevant to your situation and interest.

Think you could imagine yourself living, learning and loving life here? Visit harper.ac.uk/applying to explore the next steps.

For a full run-down of accommodation options, pricing, application process and local area information, visit harper.ac.uk/accommodation.

Jobs matter. The one you get after your degree, the ones you do during placement and the ones that help you fund your way through university. We've collected everything job related into one place at harper.ac.uk/careers.

Don't just read the prospectus or the website, hear from real students by chatting to them at harper.ac.uk/speakstudent.

Your Students' Union is here for you. Learn more about how it works, what it offers and how you can get involved – from setting up a new club to standing to represent fellow students, visit harper.ac.uk/studentunion.

Read all of the course information and still want to know more? Our online listings include contact time, full module details, methods of assessments, examples of placements, key stats and more, visit harper.ac.uk/courses.

Considering coming to Harper Adams outside of the UK? Hear from current and former international students, learn about language and visa requirements and download information in a selection of other languages from harper.ac.uk/international.

Or see what our students have been up to, whether at work or at play. Our blogs show all the latest activity on and off campus and can be filtered by course area or other topics of interest, just visit harper.ac.uk/blog.



for more?

More ways to keep up with us:

- Read the latest news from Harper Adams harper.ac.uk/news
- Keep up-to-date with the latest stories through our social media:

 [@HarperAdamsUni](https://twitter.com/HarperAdamsUni)

 [@harperadamsuni](https://www.instagram.com/harperadamsuni)

 [@HarperAdams](https://www.facebook.com/HarperAdams)

Careers

Prepare and protect the land

To pursue a career in:

- Conservation of species & habitats
- Countryside management
- Ecological and planning consultancy
- Environmental management
- Environmental murveying
- Estate management
- Land agency
- Rural surveying

On and for the farm

To pursue a career in:

- Agronomy (crop health)
- Farm management
- Farm contracting
- Agricultural vehicles
- Agricultural machinery
- Disease and pest control
- Precision farming
- Agricultural Law
- Policy/regulatory development

Working with Livestock

To pursue a career in:

- Animal nutrition
- Animal pharmaceuticals
- Animal sciences & research
- Veterinary Nursing
- Veterinary Physiotherapy
- Farm veterinary medicine

Explore:

Land and property, or environmental management

see pages 96-100

Wildlife management

see pages 79

Explore:

Engineering

see pages 86-91

Agriculture

see pages 62-67

Explore:

Agriculture

see pages 62-67

Animal Sciences and Veterinary Professions

see pages 68-81

These courses can also lead into:

- Land & environmental consultancy
- Environmental education
- Forestry
- Nature reserve management
- Property management
- Renewable energy
- Wildlife advisory services

Our Engineering courses can also lead to careers in:

- Construction equipment
- Defence vehicles
- Engineering managerial and leadership roles
- Engineering product testing
- SUVs
- Motorsport

Our animal courses can also take you to careers in:

- Equine sports therapy
- Companional animal nursing or surgery
- Animal rehabilitation
- Animal care/husbandry
- Animal behaviour
- Animal conservation
- Animal biologist

from field to fork

Beyond the farm & diversification

To pursue a career in:

- Ancillary and technical farm services
- Auctioneering
- Commodity trading
- Farm business consultancy
- Sales and Marketing
- Events Management

Explore:

Agriculture
see pages 62-67

Business Management
see pages 82-85

Land and property, or environmental management
see pages 96-100

Food Innovation & Technology
see pages 92-95

Along the supply chain

To pursue a career in:

- Food distribution, trade or retail
- Food processing and manufacturing
- Food product development
- Food quality management
- Food technical management
- Human Nutrition
- Animal Nutrition

Explore:

Business Management
see pages 82-85

Food Innovation & Technology
see pages 92-95

Choose Business Management With Marketing for non-sector specific education and training.

Degrees that matter

AGRICULTURE

Agriculture **63**
 BSc (Hons)
 FdSc
 Extended Foundation Degree
 Top-Up

Agriculture with Crop Management **64**
 BSc (Hons)
 Top-Up

Agriculture with Animal Science **65**
 BSc (Hons)
 Top-Up

Agriculture with Farm Business Management **66**
 BSc (Hons)
 Top-Up

Agriculture with Mechanisation **67**
 BSc (Hons)
 FdSc
 Extended Foundation Degree
 Top-Up

ANIMAL SCIENCES AND VETERINARY PROFESSIONS

Animal Behaviour and Welfare **70**
 BSc (Hons) – Clinical
 BSc (Hons)/BSc – Non-Clinical
 Extended Degree
 Top-Up

Animal Health and Welfare **71**
 BSc (Hons)
 Top-Up

Animal Production Science **72**
 BSc (Hons)

Veterinary Medicine and Surgery **73**
 BVetMS

Veterinary Nursing **74**
 BSc (Hons)/BSc
 BSc (Hons)/BSc – Companion Animal Behaviour
 BSc (Hons)/BSc – Small Animal Rehabilitation
 Top-Up

Veterinary Bioscience **76**
 BSc (Hons)/BSc
 Extended Degree
 Extended Degree (with access to Veterinary Medicine)

Veterinary Physiotherapy **78**
 BSc (Hons)

Wildlife Conservation and Environmental Management **79**
 BSc (Hons)
 BSc
 Extended Degree

Zoology **80**
 BSc (Hons)/BSc – Applied Zoology
 BSc (Hons) – Zoology with Entomology
 BSc (Hons) – Zoology with Environmental Management
 Extended Degree

BUSINESS MANAGEMENT

Business Management with Marketing	83
BSc (Hons) BSc Extended Degree	
Agri-Business	84
BSc (Hons) BSc Top-Up	
Agri-Food Marketing with Business	85
BSc (Hons) BSc Top-Up	

FOOD TECHNOLOGY AND INNOVATION

Food and Consumer Studies	93
BSc (Hons) BSc Extended Degree	
Food Technology and Product Development	94
BSc (Hons) Extended Degree	
Food Technology with Nutrition	95
BSc (Hons)	

ENGINEERING

Agricultural Engineering	88
BEng (Hons) MEng	
Automotive Engineering (Off-Highway)	90
BEng (Hons) MEng	
Mechanical Engineering	91
BEng (Hons) MEng	

LAND, PROPERTY AND ENVIRONMENT

Rural Enterprise and Land Management (REALM)	97
BSc (Hons)	
Rural Property Management	98
BSc (Hons)	
Real Estate	99
BSc (Hons)	
Environmental Land Management	100
BSc (Hons)	

Agriculture



The modern farm manager must manage an increasingly diversified business and embrace a range of responsibilities for enhancing the environment, integrating production within the food chain and maintaining rural communities. As a Harper Adams agriculture student, you will gain a thorough understanding of modern agricultural production systems and the underlying scientific and technological principles, graduating equipped to manage a sustainable agricultural business in the complex and dynamic rural economy.

All agriculture students share a common first year, studying the same modules, before continuing with agriculture or focusing on a specialism; this allows students to change course during the first year. You will learn from lectures, tutorials, laboratory sessions, practical classes on the University farm designed to demonstrate principles in practice, external visits, guest speakers, self-study and a placement year in industry.

Several commercial scholarship opportunities, linked to placement, are available to apply for, with sponsoring companies paying a significant amount towards the tuition fees of successful applicants.

BSc (Hons) UCAS code D400

96 – 112 UCAS points

Year 1

- Skills for the Agricultural Professional
- Animal Production Systems
- Crop Production Systems
- Bioscience for Agriculture
- Environmental Science for Agriculture
- Assessment of the Farm Business
- Agri-Food Marketing
- Agricultural Mechanisation and Buildings

Year 2

- Grass and Forage Production and Utilisation
- Wastes, Manures and Renewables
- Farm Business Management and Economics
- Research Methods
- Farm Animal Nutrition
- Farm Animal Production Science
- Soil Management and Crop Nutrition
- Crop Protection and Technology

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- People Management Skills
- Sustainable Animal Production Systems
- Sustainable Crop Production Systems
- Agricultural Business Development
- Farm Animal Health
- Applied Crop Protection

Modules are 15 credits unless otherwise stated.

Applicants to agriculture programmes need 10 weeks' practical experience on a commercial farm. If this would prove difficult for you, you might be eligible for the Access to Agriculture Programme (see page 17).

*For more information on Extended Foundation Degrees please refer to page 104.

harper.ac.uk/agriculture

FdSc UCAS code D405

72 – 88 UCAS points

Year 1

- Skills for the Agricultural Professional
- Animal Production Systems
- Crop Production Systems
- Agricultural Science
- Rural Skills
- Assessment of the Farm Business
- Agri-food Marketing
- Agricultural Mechanisation and Buildings

Year 2

Placement year

Year 3

- Professional Project
- Sustainable Livestock Production Systems
- Integrated Crop Management Systems
- Farm Animal Science
- Crop Production Science
- Farm Business Management
- Managing People

Options

- Farm Animal Nutrition
- Crop Protection and Technology
- Professional Services in Farm Business Management
- Farm Machinery Technology and Management

Similar in approach to the BSc (Hons) degree but over three years, with placement in year 2 and you will complete a Professional Project rather than an Honours Research Project in your final year. Following the completion of the FdSc Agriculture programme, subject to performance, you can top-up to a Pass Degree or a full Honours Degree in Agriculture or one of the specialist routes.

Extended Foundation Degree*

UCAS code D407

harper.ac.uk/agefdp

One-year top up degree available

UCAS code D404

harper.ac.uk/agtopup

Careers

Employability of agriculture graduates is excellent, and there are many diverse career opportunities in all sectors of the food chain. The applied nature of our courses, teaching methods and close links with industry give you the academic, technical and employment skills which are highly sought after by employers.

As an agriculture graduate you may go on to manage farms either at home or elsewhere, for example:

- Velcourt
- Sentry Farming
- Beeswax Farming
- G's Fresh

Alternatively, you may opt for a career in the support industries:

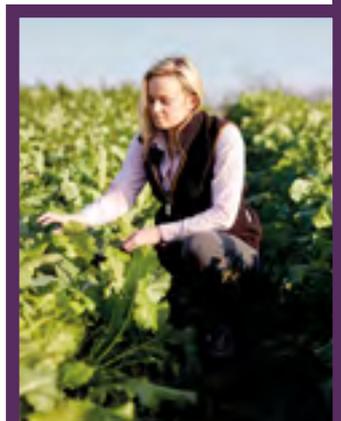
- Frontier Agriculture
- NFU
- Savills

FACTS training

Subject to academic performance in specific modules and undertaking an appropriate placement, students passing the BSc (Hons) Agriculture programme will be eligible to undertake the Harper Adams FACTS training course free of charge following successful completion of their degree.

Students studying general Agriculture study a broad range of livestock, crop production and science, and business management modules, together with some marketing and mechanisation. In the first part of the course the focus is on practice i.e. what goes on on the farm, and basic biological and environmental science. Areas of study include animal and crop production systems, bioscience and environmental science for agriculture, an introduction to farm business management and marketing and agricultural mechanisation.

The later parts of the course focus on the applied scientific and business principles that underpin farm practice, and the application of practice and principles to case studies to solve real problems. Areas of study include farm animal production science and nutrition, farm animal health and welfare, soil management and crop nutrition, crop protection, farm business management and economics, business development, people management, and sustainable animal and crop production systems. All students undertake an Honours Research Project in their final year in a subject area of interest to them.



Agriculture with Crop Management

Efficient crop production remains key to sustained and effective use of rural resources. However, over recent years crop management systems have undergone considerable change. The emphasis has shifted away from purely commercial objectives, and modern crop managers must increasingly justify inputs and assess the impact of their activities on the environment. These new demands are complex and require highly skilled and knowledgeable individuals to manage them successfully. Harper Adams has extensive academic and industry experience and is actively involved in applied crop research and consultancy, including the delivery of professional training to industry. This ensures that courses are vocationally relevant and up-to-date.

After the common first year, in your second year you will start to specialise in crop science and agronomy, studying areas such as soil management and crop nutrition, crop protection, crop physiology and fresh produce production, whilst continuing to study more general aspects of agriculture, such as grass and forage production, waste management and farm business management and economics. In the final part of the course, your specialisation becomes complete and the focus is on crop management, studying areas such as sustainable crop production, advances in agronomy, crop breeding, post-harvest technology and a research project focused on crop management.

Modules are 15 credits unless otherwise stated.

Applicants to agriculture programmes need 10 weeks' practical experience on a commercial farm. If this would prove difficult for you, you might be eligible for the Access to Agriculture Programme (see page 17).

harper.ac.uk/agriculture

BSc (Hons) UCAS code D410

96 – 112 UCAS points

Year 1

- Skills for the Agricultural Professional
- Animal Production Systems
- Crop Production Systems
- Bioscience for Agriculture
- Environmental Science for Agriculture
- Assessment of the Farm Business
- Agri-Food Marketing
- Agricultural Mechanisation and Buildings

Year 2

- Grass and Forage Production and Utilisation
- Wastes, Manures and Renewables
- Farm Business Management and Economics
- Research Methods
- Soil Management and Crop Nutrition
- Crop Protection and Technology
- Crop Growth and Management
- Fresh Produce

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- People Management Skills
- Sustainable Crop Production Systems
- Applied Crop Protection
- Advanced Agronomy
- Plant Breeding
- Post Harvest Technology

One-year top up degree available

UCAS code D499

harper.ac.uk/agriculture

FACTS and BASIS training

Subject to academic performance in specific modules and undertaking an appropriate placement, students passing the BSc (Hons) Agriculture with Crop Management programme will be eligible to undertake the Harper Adams FACTS and BASIS training courses free of charge following successful completion of their degree.

Careers

The applied nature of the course and practical experience gained during the placement period will give you skills the industry needs. You could choose from a variety of careers, working for a multi-national company or small rural business as an agronomist, technical representative or trainee arable farm manager, amongst others.



I was inspired to study Agriculture through watching the disconnect between many of my school peers and where there food comes from. I hoped that if I studied Agriculture I could gain more knowledge myself to help educate and tackle the misconception of UK farming practice. Agriculture at Harper Adams is a hands on learning experience where you get to apply your knowledge to real life situations.



Grace Welling,
BSc (Hons)
Agriculture with Crop
Management,
Syngenta Scholar

BSc (Hons) UCAS code D4D3

96 – 112 UCAS points

Year 1

- Skills for the Agricultural Professional
- Animal Production Systems
- Crop Production Systems
- Bioscience for Agriculture
- Environmental Science for Agriculture
- Assessment of the Farm Business
- Agri-Food Marketing
- Agricultural Mechanisation and Buildings

Year 2

- Grass and Forage Production and Utilisation
- Wastes, Manures and Renewables
- Farm Business Management and Economics
- Research Methods
- Farm Animal Nutrition
- Farm Animal Health
- Farm Animal Production Science
- Animal Biotechnology and Genetics

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- People Management Skills
- Sustainable Animal Production Systems (30 credits)
- Advances in Animal Production Science
- Animal Improvement and Bioethics
- Food Animal Processing and Manufacture

One-year top up degree available

UCAS code DD4H

harper.ac.uk/agriculture

Careers

The applied nature of this course helps you to develop skills that are in demand within the livestock sector and ancillary industries. Career opportunities are excellent, with students finding employment both on farms as livestock enterprise and farm managers and in the ancillary sector in commercial and technical positions, or you could go on to postgraduate study.



I wish to work towards maximising the overall efficiency of livestock whilst maintaining high welfare standards and educating farmers on appropriate management practices.

Nancy-May Thorne,
BSc (Hons) Agriculture with Animal Science,
Aviagen Scholar 2019



The temperate climate of the UK is ideally suited to pastoral farming and animal production is essential to the rural economy, around 54 per cent of UK agricultural output derived from the livestock sector (DEFRA 2020). In addition to the science and technology associated with modern animal production, livestock specialists need to understand the animal welfare, food quality and environmental issues facing the industry. They must also be able to evaluate and apply advances in biotechnology to ensure a sustainable future for livestock farmers and a competitive market for animal products. Harper Adams has a long history in applied livestock research, close links with industry, and highly qualified and experienced staff.

After the common first year, in your second year you will start to specialise in the area of animal science, studying areas such as farm animal production science, farm animal nutrition, farm animal health and welfare and biotechnology, whilst continuing to study more general aspects of agriculture, such as grass and forage production, waste management and farm business management and economics. In the final part of the course, your specialisation becomes complete and the focus is on animal science, studying areas such as sustainable animal production systems, advances in animal science, animal breeding and bioethics, animal product processing and a research project-focused on animal science.

54%
OF UK AGRICULTURAL OUTPUT DERIVED FROM LIVESTOCK SECTOR DEFRA 2020

Agriculture with Farm Business Management

Agriculture with Farm Business Management
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 support mechanisms under the Agriculture Act, will affect farm incomes, the countryside, rural communities and the public purse. Increasingly farmers will need to maximise business efficiency and look 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.

After the common first year, in your second year you will 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.

BSc (Hons) UCAS code D498

96 – 112 UCAS points

Year 1

- Skills for the Agricultural Professional
- Animal Production Systems
- Crop Production Systems
- Bioscience for Agriculture
- Environmental Science for Agriculture
- Assessment of the Farm Business
- Agri-Food Marketing
- Agricultural Mechanisation and Buildings

Year 2

- Grass and Forage Production and Utilisation
- Wastes, Manures and Renewables
- Farm Business Management and Economics
- Research Methods
- Animal and Crop Production Science
- Farm Business Operation and Planning
- Marketing and Brand Management for the Agri-Sector
- Professional Services in Farm Business Management

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- People Management Skills
- Sustainable Agricultural Production Systems
- Applied Farm Business Management Case Study
- Farm Business Strategy
- Implementation, Operation and Control of Business Plans
- Business Diversification

One-year top up degree available

UCAS code D441

harper.ac.uk/agriculture

Modules are 15 credits unless otherwise stated.

Applicants to agriculture programmes need 10 weeks' practical experience on a commercial farm. If this would prove difficult for you, you might be eligible for the Access to Agriculture Programme (see page 17).

*For more information on Extended Foundation Degrees please refer to page 104.

harper.ac.uk/agriculture

Careers

Career opportunities exist managing large integrated farm business or in farm business consultancy and accountancy.



Choosing the Agriculture with Farm Business Management route give me a really well rounded course, which covered all bases from practical farming to business management, rural law, people management and more. These are all vital skills which have set me up well for life after university.

Harry Dunford,
Food and Farming Graduate, Savills Winchester.

BSc (Hons) UCAS code D492

96 – 112 UCAS points

Year 1

- Skills for the Agricultural Professional
- Animal Production Systems
- Crop Production Systems
- Bioscience for Agriculture
- Environmental Science for Agriculture
- Assessment of the Farm Business
- Agri-Food Marketing
- Agricultural Mechanisation and Buildings

Year 2

- Grass and Forage Production and Utilisation
- Wastes, Manures and Renewables
- Farm Business Management and Economics
- Research Methods
- Crop Production Science
- Farm Machinery Technology and Management
- Hydraulic and Electrical Power for Agriculture
- Soil Use and Farm Infrastructure

Year 2

Placement year

Year 4

- Honours Research Project (30 credits)
- People Management Skills
- Sustainable Crop Production Systems
- Science Technology and Information Systems for Agriculture
- Team Enterprise Project
- Measurement and Control
- Crop Protection and Technology

FdSc UCAS code D493

72 – 88 UCAS points

Year 1

- Skills for the Agricultural Professional
- Animal Production Systems
- Crop Production Systems
- Agricultural Science
- Rural Skills
- Assessment of the Farm Business
- Agri-Food Marketing
- Agricultural Mechanisation and Buildings

Year 2

Placement year

Year 3

- Professional Project
- Crop Production Science
- Integrated Crop Management Systems
- Farm Business Management
- Managing People
- Farm Machinery Technology and Management
- Hydraulic and Electrical Power for Agriculture
- Soil Use and Farm Infrastructure

Similar in approach to the BSc (Hons) degree but over three years, with placement in year 2 and you will complete a Professional Project rather than an Honours Research Project in your final year. Following completion of the FdSc Agriculture with Mechanisation programme, subject to performance, you can top up to a Pass Degree or a full Honours Degree in Agriculture with Mechanisation.

Extended Foundation Degree*

UCAS code D407

harper.ac.uk/agriculture

One-year top up degree available

UCAS code D495

harper.ac.uk/agriculture

Careers

The skills you will develop will be useful throughout the industry, whether managing large, highly mechanised farms, running a successful contracting business or working in the agricultural machinery sector. Harper Adams graduates have a long history of successfully finding employment within all of these areas of work.

I chose to come to Harper to study FdSc Agriculture with Mechanisation because of the amazing facilities on offer and the high quality of teaching I had heard about from previous students of the university. The course is a mixture of general agriculture with a greater focus on mechanisation and how technology will shape the future of agriculture. I have especially enjoyed the practical aspect of being able to learn on the farm and within the engineering facilities. I am hoping to top up to the BSc degree next year and go into the hydroponic industry following that.

Oliver Dudgeon,
FdSc Agriculture
with Mechanisation

The first part 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 part of the course you start to specialise in the area of mechanisation studying areas such as farm machinery technology, hydraulics and electrics, and mechanisation aspects of soils and farm infrastructure. The mechanisation aspects are studied alongside more general aspects of agriculture such as waste management, crop production and science and farm business management. In the final year the specialisation is developed further, studying areas such as machinery technology and information systems, measurement and control systems, applied mechanisation projects in association with industry, and a research project with a mechanisation focus. In the final year students study mechanisation modules alongside crop production and crop protection modules. The principles of mechanisation are developed in an applied way without the use of complex mathematics.



Animal Sciences and Veterinary Professions



I really enjoyed how varied the Bioveterinary Science course was. Ranging from companion animals to farm animals, and from nutrition to genetics, no two modules were the same. The course is fun, interesting and challenging - all in equal measure!
Having the ability to choose between optional modules in second and final year allows you to tailor some of your study to your own personal interests but whilst still helping you to develop a broad range of skills to open up opportunities in many areas of the animal industry.

Melanie Stokes,
Animal Sciences
graduate



Animal Sciences and Veterinary Professions

Our degrees can take students to every imaginable animal-related career including:

- Carer
- Keeper
- Behaviourist
- Nutritionist
- Veterinary physiotherapist
- Scientist
- Veterinary nurse
- Biologist
- Conservationist
- Veterinary surgeon
- Educator

and many more

From protecting cherished household pets, to ensuring the highest standards of farm animal welfare, to preventing the spread of disease between wildlife and people, the study of animal and veterinary sciences is vital to human health and wellbeing.

At Harper Adams, or as a student of the Harper & Keele Veterinary School, you'll be taught by a large team of experts from across the above fields, all ably supported by laboratory and farm technicians. The department also works closely with the University's agriculture and livestock experts. Class sizes are small, and staff have an open-door policy, so you'll receive personalised guidance and advice.

Animal Behaviour and Welfare (Clinical and Non-Clinical routes)

Do you long to find out why animals behave the way they do and what this can tell us about their welfare? Do you care passionately about the welfare of animals but realise that applying scientific principles is likely to achieve better results than responding in a purely emotional way? Then this subject is for you.

These degrees enable those interested in the behaviour and welfare of companion and farm animals to study at degree level without covering the broader animal health sciences in detail. You will examine animal biology as it relates to the behaviour and welfare of animals and have the opportunity to study ecology in relation to animal habitats.



Modules are 15 credits unless otherwise stated.

*For more information on Extended Degrees please refer to page 104.

harper.ac.uk/animals

BSc (Hons) Animal Behaviour and Welfare (Clinical)
UCAS code D390

88 – 104 UCAS points

Year 1

- Academic Skills Development
- Fundamentals of Physiology
- Companion Animal Management
- Large Animal Management
- Introduction to Animal Health
- Introduction to Animal Welfare, Behaviour and Ethics
- Adaptive Biology
- Introduction to Ecology

Year 2

- Behavioural Methodology
- Companion Animal Studies
- Farm Animal Science
- Principles of Animal Behaviour and Welfare
- Law and Professional Practice for Clinical Animal Behaviour
- Animal Ethics
- Philosophy of Zoos
- Research Methods (Animals)

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Diagnosis and Treatment of Behavioural Problems (30 credits)
- Applied Clinical Animal Behaviour
- Integrated Health Management
- Applied Companion Animal Health, Welfare and Behaviour
- Advances in Farm Animal Health, Welfare and Behaviour

BSc (Hons)/BSc Animal Behaviour and Welfare (Non-Clinical)
UCAS code D391

88 – 104 UCAS points

Year 1

- Academic Skills Development
- Fundamentals of Physiology
- Companion Animal Management
- Large Animal Management
- Introduction to Animal Health
- Introduction to Animal Welfare, Behaviour and Ethics
- Adaptive Biology
- Introduction to Ecology

Year 2

- Behavioural Methodology
- Companion Animal Studies
- Farm Animal Science
- Principles of Animal Behaviour and Welfare
- Animal Ethics
- Philosophy of Zoos
- Research Methods (Animals)

Options

- Introduction to Small Business Management
- Wildlife Identification and Conservation
- Equine Science

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Integrated Health Management
- Applied Clinical Animal Behaviour
- Applied Companion Animal Health, Welfare and Behaviour
- Advances in Farm Animal Health, Welfare and Behaviour

Options

- International Perspectives on Animal Conservation
- Animal Improvement and Bioethics
- Advances in Equine Science

Extended Degree*
UCAS code XD04
harper.ac.uk/animals

One-year top up degree available
UCAS code D328
harper.ac.uk/animals

Careers

This course prepares graduates for careers involving animal behaviour and also in animal welfare and management. Welfare organisations are expanding, and nutrition and pharmaceutical companies have careers suitable for graduates with a sound welfare education. Many graduates move into higher education as lecturers or researchers and others choose further postgraduate study.

Accreditation

The clinical route has been validated by the **Association for the Study of Animal Behaviour (ASAB)** accreditation committee as delivering the academic elements necessary for an individual to achieve ASAB certification as a clinical animal behaviourist (CCAB).

The non-clinical route (see route map in the left column) does not lead to the CCAB qualification but does include a choice of optional modules.



93%
STUDENT SATISFACTION
NSS 2019

BSc (Hons) Animal Health and Welfare UCAS code D730

88 – 104 UCAS points

Year 1

- Academic Skills Development
- Fundamentals of Physiology
- Applied Anatomy and Physiology
- Companion Animal Management
- Large Animal Management
- Principles of Animal Health
- Laboratory Techniques
- Introduction to Animal Welfare, Behaviour and Ethics

Year 2

- Animal Disease Science
- Companion Animal Studies
- Farm Animal Health
- Farm Animal Nutrition
- Equine Science
- Research Methods (Animals)
- Principles of Animal Behaviour and Welfare

Options

- Introduction to Small Business Management
- Philosophy of Zoos
- Animal Ethics

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Integrated Health Management (30 credits)
- Applied Companion Animal Health, Welfare and Behaviour
- Advances in Farm Animal Health, Welfare and Behaviour

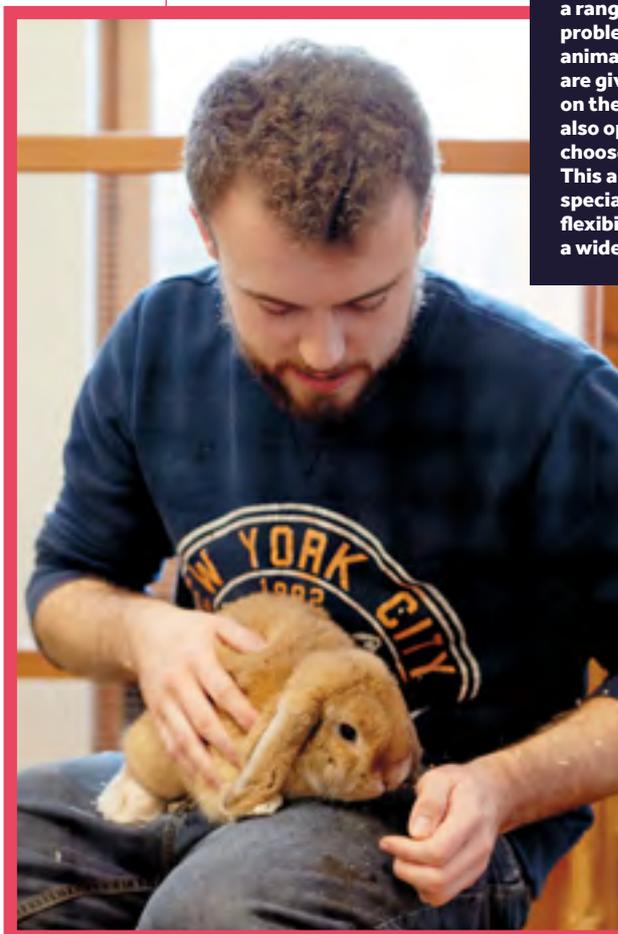
Options

- Advances in Animal Production Science
- Animal Improvement and Bioethics
- Advances in Equine Science

One-year top up degree available
UCAS code D740
harper.ac.uk/animals

Careers

There are opportunities in animal health with companies associated with the development and marketing of animal health products or nutritional products and special diet formulations. Knowledge of both animal health and nutrition equips graduates for careers in this area. There are further opportunities in quality assurance, or you might consider a career in animal welfare and the management of collection animals or in the pet care industry.



Studying the biology of animals and disease is crucial because in order to manage animals in the interests of their welfare, you need to have a good understanding of the underpinning sciences, such as how their bodies work, what is needed to maintain health and what happens in the case of disease. This is a multi-disciplinary course incorporating a variety of applied science and animal management modules. It looks at normal body structure and functioning, mechanisms to enhance health and welfare and develops students' abilities to synthesise solutions to a range of animal-related problems. Companion (pet) animals and farm livestock are given equal weighting on the course. There are also opportunities to choose optional modules. This allows you to specialise or gives you the flexibility to study over a wide area.

This four-year course aims to provide students with an understanding of recent developments in animal science, the underlying scientific principles, and how these can be applied to animal production systems. This is a strongly science-based course, combining the study of pure and applied sciences as they relate to farm animals. It is ideal for those who enjoy studying science and how scientific principles can be used to prevent disease and improve the health and welfare of farm animals, and who want to learn more about the biology of farm animals and how food animals are produced on farms. The course also includes some study of how modern technologies can be used to maintain and improve health.

BSc (Hons)
UCAS code D301

104–120 UCAS points

Year 1

- Academic Skills Development
- Fundamentals of Physiology
- Applied Anatomy and Physiology
- Animal Production Systems
- Introduction to Animal Welfare, Behaviour and Ethics
- Principles of Animal Health
- Laboratory Techniques
- Biological Molecules and Genetics

Year 2

- Animal Disease Science
- Farm Animal Health
- Principles of Animal Behaviour and Welfare
- Farm Animal Nutrition
- Applied Biotechnology
- Farm Animal Production Science
- Research Methods (Animals)

Options

- Introduction to Small Business Management
- Animal Product Processing
- Companion Animal Studies

Year 3

Placement year

Year 4

- Honours Research Project **(30 credits)**
- Sustainable Animal Production Systems **(30 credits)**
- Animal Improvement and Bioethics
- Advances in Animal Production Science
- Advances in Farm Animal Health, Welfare and Behaviour

Options

- Farm Assurance and Quality
- Applied Companion Animal Health, Welfare and Behaviour
- Advances in Equine Science

Careers

There are a wide range of career opportunities available to animal production science graduates in animal nutrition, animal health, advisory roles and technical sales. Your in-depth knowledge of farm animal health and production systems will qualify you for careers such as animal health and welfare inspector or you may choose to work in the animal feed industry.



Modules are 15 credits unless otherwise stated.

harper.ac.uk/animals

91%
STUDENT SATISFACTION
NSS 2019

90%
GRADUATE EMPLOYMENT
DLHE 2018

BVetMS **UCAS code D100**

For students sitting A-levels the requirements are AAB, with a Grade A in Biology or Chemistry. For the full entry requirements see harperkeelelevetschool.ac.uk.

Year 1

- Animal Management for Health and Production (45 credits)
- Veterinary Anatomy and Physiology (45 credits)
- Animal Behaviour and Welfare
- Professional Skills and Academic Practice

Year 2

- Comparative Anatomy and Physiology (45 credits)
- Animal Health Sciences (45 credits)
- Veterinary Epidemiology and Population Medicine
- Communication and Professional Skills

Year 3

- Veterinary Pathology (45 credits)
- Preparation for Clinical Practice (45 credits)
- Veterinary Public Health and State Veterinary Medicine (20 credits)
- Law, Ethics and Professional Practice (10 credits)

Year 4

- Clinical Medicine and Surgery (90 credits)
- Business and Professional Skills
- Inter-professional Collaboration or Research A

Year 5

- Clinical rotations with support tutorials at both sites (105 credits)
- Elective or Research Project B

Work experience

The primary aim of gaining work experience prior to your vet school application is to ensure that candidates understand the varied and sometimes challenging nature of veterinary work and the commitment required to be a successful student and have a long and fulfilling career. This is best achieved by spending time with vets in practice and alongside others working with animals in a variety of settings.

Suggested experience to aim for (suggested but not required – see harperkeelelevetschool.ac.uk for more information):

- Two weeks in one or more veterinary practices, ideally covering both large and small animal work
- Up to four weeks in a mixture of non-clinical placements which could include any of: farms (cattle, sheep, pigs, poultry, dairy and lambing experiences are very useful), stables, kennels, catteries etc. veterinary or medical laboratories and pathology services
- A day at an abattoir

Harper & Keele
VETERINARY SCHOOL



A five-year programme leading to a Bachelor of Veterinary Medicine and Surgery degree, offered by the Harper & Keele Veterinary School harperkeelelevetschool.ac.uk.

Students will benefit from Harper's long-standing reputation in animal sciences and access to the Harper Adams farm and companion animal facilities, alongside Keele's experience of establishing a leading UK medical school and significant recent investment in facilities such as state-of-the-art teaching laboratories.

This new undergraduate degree in Veterinary Medicine and Surgery (BVetMS) provides the opportunity for a new and exciting curriculum, the core requirements of which are prescribed by the RCVS. The clinical training will follow a distributed model of delivery and a range of approved third-party veterinary practices have agreed to provide clinical placements.

As is the norm with veterinary schools, the teaching week is intensive for the students, who can expect around 28 hours per week of contact time. Students also need to complete extra mural studies gaining hands-on practical experience, and so the total study year ranges from 35-45 weeks a year across the five-year programme.

Extensive use is made of the farm and companion animals on site at Harper Adams as well as state-of-the-art laboratory facilities and clinical skills rooms at both Harper and Keele.

Small group teaching facilitates the development of confidence in practical skills. The curriculum will incorporate case studies from early in the first year. In the final two clinical years of the programme, vets from referral centres provide keynote lectures, tutorials and practical classes, based on their current and ongoing experience in practice providing our students with real world experience and knowledge for their future careers. Clinical teaching takes place not only in a hospital setting with the unusual or difficult cases, but also in practices where management of the everyday case is the primary focus.

Due to the vocational nature and focus of the students, all modules have been created for the programme and are exclusive to it.

Registered Veterinary Nurses (RVNs) work alongside veterinary surgeons in order to provide a high standard of care for animals. Veterinary Nurses normally work within a veterinary surgery or veterinary hospital and are involved in a wide range of care and treatment. They provide skilled supportive care for sick animals as well as undertaking minor surgery, monitoring during anaesthesia, medical treatments and diagnostic tests under veterinary supervision. RVNs also play an important role in the education of owners on good standards of animal care.

All of our veterinary nursing degree courses are designed to equip students with the day one skills and competences required by the RCVS in order to practise as a Registered Veterinary Nurse (RVN). Subjects will include veterinary physiology, professional skills of the veterinary nurse, companion animal management, anaesthesia and surgery, medical nursing, diagnostic imaging and disease diagnosis.

Students on these courses share a common curriculum for the first two years, studying the same modules, before spending their third year on placement. In the final year all courses will share a number of common subjects such as anaesthesia, critical care and surgical techniques. The specific Honours pathways will then allow students to focus on their chosen field of study.



100%
**GRADUATE
EMPLOYMENT**
DLHE 2018

BSc/BSc (Hons) Veterinary Nursing UCAS code D314

96 – 112 UCAS points

Year 1

- Companion Animal Management
- Fundamentals of Physiology
- Infection Control in the Veterinary Practice
- Introduction to Animal Health
- Principles of Veterinary Nursing
- Professional Skills of the Veterinary Nurse
- Veterinary Physiology
- Working as a Veterinary Professional

Year 2

- Anaesthesia and Surgery
- Animal Medicines
- Clinical Research Methods
- Principles and Application of Diagnostic Imaging
- Medical Nursing
- Nursing Support for Disease Diagnosis
- Professional Practise
- Philosophy of Zoos

Year 3

Placement year

Year 4

- Anaesthesia, Critical Care and Surgical Techniques
- Career Progression
- Companion Animal Life Care
- Exotic Animal Nursing and Health
- Honours Research Project **(30 credits)**

Options

- Complementary Therapies
- Equine Nursing and Health
- Large Animal Nursing and Health

BSc/BSc (Hons) Veterinary Nursing with Companion Animal Behaviour UCAS code D313

96 – 112 UCAS points

Year 1

- Companion Animal Management
- Fundamentals of Physiology
- Infection Control in the Veterinary Practice
- Introduction to Animal Health
- Principles of Veterinary Nursing
- Professional Skills of the Veterinary Nurse
- Veterinary Physiology
- Working as a Veterinary Professional

Year 2

- Anaesthesia and Surgery
- Animal Medicines
- Clinical Research Methods
- Principles and Application of Diagnostic Imaging
- Medical Nursing
- Nursing Support for Disease Diagnosis
- Principles of Animal Behaviour and Welfare
- Professional Practise

Year 3

Placement year

Year 4

- Anaesthesia, Critical Care and Surgical Techniques
- Career Progression
- Diagnosis and Treatment of Behavioural Problems **(30 credits)**
- Honours Research Project **(30 credits)**

Options

- Companion Animal Life Care
- Complementary Therapies
- Equine Nursing and Health
- Exotic Animal Nursing and Health

BSc/BSc (Hons) Veterinary Nursing with Small Animal Rehabilitation UCAS code D310

96 – 112 UCAS points

Year 1

- Companion Animal Management
- Fundamentals of Physiology
- Infection Control in the Veterinary Practice
- Introduction to Animal Health
- Principles of Veterinary Nursing
- Professional Skills of the Veterinary Nurse
- Veterinary Physiology
- Working as a Veterinary Professional

Year 2

- Anaesthesia and Surgery
- Animal Medicines
- Clinical Research Methods
- Principles and Application of Diagnostic Imaging
- Medical Nursing
- Musculoskeletal Dysfunction
- Nursing Support for Disease Diagnosis
- Professional Practise

Year 3

Placement year

Year 4

- Anaesthesia, Critical Care and Surgical Techniques
- Career Progression
- Rehabilitation of the Veterinary Inpatient **(30 credits)**
- Honours Research Project **(30 credits)**

Options

- Companion Animal Life Care
- Complementary Therapies
- Equine Nursing and Health
- Exotic Animal Nursing and Health

BSc/BSc (Hons)
one-year top up
UCAS code DN32
harper.ac.uk/vetnurse

Careers

Veterinary nursing is a career with lots of job satisfaction and there is a strong demand for registered veterinary nurses. Although the majority of RVNs work in general practice there are increasing opportunities for specialisation into different areas, such as patient rehabilitation and companion animal behaviour.

Block release

To obtain the nursing qualification a minimum of 1800 hours is spent working in a registered veterinary nurse training practice, both as short block release and during the sandwich year. This hands-on experience complements the academic study at Harper Adams.

Accreditation

Royal College of Veterinary Surgeons (RCVS)



Our Veterinary Nursing graduates achieve 100% employability and have an excellent reputation in the sector.

Susan Howarth,
Veterinary Nursing
Programme Manager



Modules are 15 credits unless otherwise stated.

The extended degree gateway for this subject is Veterinary Bioscience.
See harper.ac.uk/extvetbio
For more information about extended degrees see page 108.

harper.ac.uk/vetnurse

100%
STUDENT
SATISFACTION
NSS 2019



If you enjoy studying science and would like to learn how scientific principles can be used to prevent disease and improve the health of animals, Veterinary Bioscience is the course for you. You will learn about the biology of a range of animals, including farm and companion species, in order to know what is best for their overall health.

The honours degree is a highly vocational, four-year programme covering the useful and relevant sciences underpinning animal health. Time spent in the laboratory will be balanced with the study of live animals. Basic health sciences such as anatomy, physiology, immunology, nutrition and molecular biology are learned alongside sciences specific to animal disease – epidemiology, microbiology, parasitology and pharmacology.

The Extended Degree Veterinary Bioscience can serve as an entry route to BSc (Hons) Veterinary Bioscience, BSc (Hons) Veterinary Nursing or BSc (Hons) Veterinary Physiotherapy. The Extended Degree Veterinary Bioscience (with access to Veterinary Medicine) can serve as an entry route to the Bachelor of Veterinary Medicine and Surgery degree at the Harper & Keele Vet School.

BSc (Hons)/BSc UCAS code D300

104 – 120 UCAS points

Year 1

- Academic Skills Development
- Fundamentals of Physiology
- Applied Anatomy and Physiology
- Companion Animal Management
- Large Animal Management
- Principles of Animal Health
- Laboratory Techniques
- Biological Molecules and Genetics

Year 2

- Animal Disease Science
- Companion Animal Studies
- Farm Animal Health
- Farm Animal Nutrition
- Applied Biotechnology
- Animal Medicines
- Research Methods (Animals)

Options

- Introduction to Small Business Management
- Equine Science
- Animal Product Processing

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Integrated Health Management (30 credits)
- Advances in Animal Production Science
- Animal Improvement and Bioethics

Options

- Advances in Farm Animal Health, Welfare and Behaviour
- Applied Companion Animal Health, Welfare and Behaviour
- Advances in Equine Science

Modules are 15 credits unless otherwise stated.

harper.ac.uk/animals

Extended degree programmes

Veterinary Bioscience UCAS code XD03

This route provides a preparatory year for students hoping to progress to Veterinary Bioscience, Veterinary Nursing or Veterinary Physiotherapy degrees.

For more information, see page 104 or visit harper.ac.uk/extvetbio

Veterinary Bioscience (with access to Veterinary Medicine) UCAS code XD01

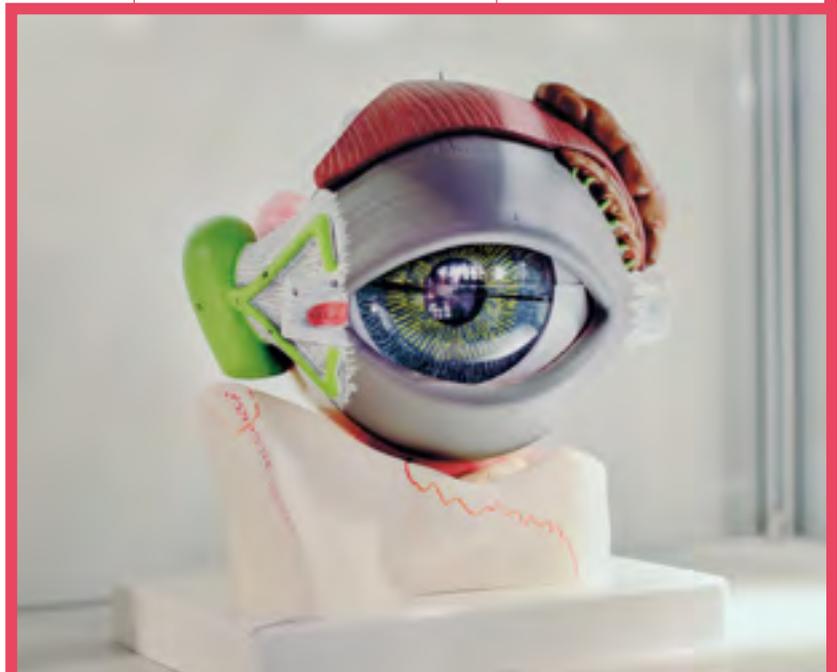
The extended degree provides a preparatory year for students hoping to transfer to the Bachelor of Veterinary Medicine and Surgery (BVetMS) degree. For more information, see page 104 or visit harper.ac.uk/medvetbio



I chose to study this degree due to having a significant interest in the animal sector, the pharmaceutical industry and in order to progress my research skills in this area.

Studying modules regarding both small and large animals at Harper Adams has enabled a broad scope of knowledge with both the on-site farm and companion animal house to provide practical skills and experience.

Lauren Hall,
graduate



This programme will provide the knowledge and skills for you to become a veterinary service professional and work closely with veterinary surgeons. Physiotherapy following veterinary referral can help animals recover from a variety of conditions such as back pain, sprains, strains, fractures and sporting injuries. It can also be used following orthopaedic, neurological or general surgery, as well as improving biomechanics and athletic ability. As such its use within the veterinary field is increasing. Animals can undergo a wide range of treatments including manual techniques, electrotherapies and exercise therapy.

In the first year you will study modules that provide the underpinning knowledge you need to work with animals. You will also study some physiotherapy techniques including massage and hydrotherapy. In the second year you will be studying the underpinning science required to work as a veterinary physiotherapist, including anatomy, biomechanics and locomotion and musculoskeletal injuries. You will also learn physiotherapy skills including the electrotherapeutic modalities and exercise prescription. Your final year will include clinics plus the honours research project.

Your placement year, working either in vet practices alongside veterinary physiotherapists, vet hydrotherapy centres or equine yards, for example, is augmented by further clinical placement during your fourth year, when you will work alongside an experienced veterinary physiotherapist, to hone your competences in preparation for your chosen career.

BSc (Hons) UCAS code D31A

BBB at A-level. See website for full entry requirements

Year 1

- Skills for the Veterinary Physiotherapy Professional
- Introduction to Veterinary Physiotherapy
- Fundamentals of Physiology
- Applied Anatomy and Physiology
- Principles of Animal Health
- Companion Animal Management
- Large Animal Management
- Introduction to Animal Welfare, Behaviour and Ethics

Year 2

- Clinical Research Methods
- Evidence Based Rehabilitation
- Musculoskeletal Dysfunction
- Anatomy for Veterinary Physiotherapy
- Locomotion and Biomechanics
- Equine Science
- Introduction to Small Business Management
- Principles of Animal Behaviour and Welfare

Year 3

Placement year

Year 4

- Honours Research Project **(30 credits)**
- Canine Clinical Practice **(20 credits)**
- Equine Clinical Practice **(20 credits)**
- Clinical Practice **(20 credits)**
- Veterinary Physiotherapy Professional Practice

Options

- Advances in Equine Science
- Farm Animal Health
- Applied Companion Animal Health, Welfare and Behaviour

Modules are 15 credits unless otherwise stated.

*The extended degree gateway for this subject is Veterinary Bioscience. See harper.ac.uk/extvetbio For more information about extended degrees see page 104.

harper.ac.uk/vetphyscources

Careers

Veterinary physiotherapists work alongside veterinary surgeons and veterinary nurses within vet practices and hospitals in the treatment of animals. A number of veterinary physiotherapists work closely with the equine sports industry within racing or other sporting disciplines. Others work independently, setting up their own businesses working with horse and dog owners.

Accreditation

- Animal Health Professions' Register
- Recognised by the National Association of Veterinary Physiotherapists for membership



I grew so much as a person during my placement. It really helped me with my personal and professional skills. Learning how to work independently and with a team as well as putting skills that I'd learnt at university into practice was great. I came away with a much more professional mind-set and I felt really motivated and positive about the future.



Sarah Marlor,
Veterinary Physiotherapy graduate and owner of Stretch and Collect in Lincolnshire



100%
**GRADUATE
EMPLOYMENT
DLHE 2018**

BSc (Hons) UCAS code CD14

88-104 UCAS points

Year 1

- Skills for the Environmental Scientist
- Introduction to Ecology
- The Natural Environment and Climate Change
- Introduction to Wildlife Conservation in the UK
- Environmental Survey Technologies and Field Skills
- Introduction to Animal Welfare, Behaviour and Ethics
- Adaptive Biology
- Contemporary Countryside and Environmental Issues

Year 2

- Research Methods for Environmental Scientists
- Environmental Quality and Protection
- Planning and Development
- Wildlife Identification and Conservation
- Pollution, Ecology and Brownfield Reclamation
- Philosophy of Zoos
- Principles of Animal Behaviour and Welfare

Options (study 1 from 2)

- Conservation Biology
- Introduction to Entomology

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Environment and Geography Field Course
- Environmental Assessment and Management
- Applied Ecology for Management
- International Perspectives on Animal Conservation

Options

- Geographical Information Systems and Land Use
- Ecosystems and Environmental Resource Management
- Developing and Managing Environmental Projects

BSc UCAS code OD05

64 – 72 UCAS points

Year 1

- Skills for the Environmental Scientist
- Introduction to Ecology
- The Natural Environment and Climate Change
- Introduction to Wildlife Conservation in the UK
- Environmental Survey Technologies and Field Skills
- Introduction to Animal Welfare, Behaviour and Ethics
- Adaptive Biology
- Contemporary Countryside and Environmental Issues

Year 2

- Environmental Quality and Protection
- Planning and Development Wildlife Identification and Conservation
- Pollution Ecology and Brownfield Reclamation
- Philosophy of Zoos
- Principles of Animal Behaviour and Welfare
- Conservation Biology

Year 3

Placement year

Year 4

- Degree Review Project
- Applied Ecology for Management
- International Perspectives on the Management of Animal Populations
- Environmental Assessment and Management
- Environment and Geography Field Course

Options

- Geographical Information Systems and Land Use
- Ecosystems and Environmental Resource Management

Extended Degree*
UCAS code XD07
harper.ac.uk/wildlifecourses

92%
STUDENT SATISFACTION
NSS 2019

Careers

The breadth and flexibility of this industry-accredited course mean our students go on to careers in a wide range of areas associated with wildlife conservation and the sustainable management of the environment.

Graduates can expect to find employment in a diversity of sectors revolving around:

- Ecological and planning consultancies
- Wildlife advisory roles
- Safari parks and nature reserve rangers
- Wardens for zoos and animal sanctuaries
- NGOs such as wildlife trusts who employ staff with expertise in the surveying of, management and assessment of wildlife populations

Accreditation

BSc (Hons): **Chartered Institute of Ecology and Environmental Management (CIEEM)**.



95%
GRADUATE EMPLOYMENT
DLHE 2018

This course provides comprehensive training in modern wildlife management techniques. You will develop a coherent understanding of the scientific methodology behind effective management techniques for our wild flora and fauna, and gain hands-on experience in the techniques of collecting, analysing and interpreting data for the conservation of wildlife and natural resources. Key features include residential field trips to underpin and contextualise what you learn; a range of other field trips and visits to relevant local and national organisations to provide real life experience and to meet professionals in their field of work; strong focus on animal behaviour and the relationship between species and the environment; and focus on the practical application of theory to give you the skills to succeed in your chosen career.

If the environmental aspects of this course are of interest, please also see Environmental Land Management on page 98.

harper.ac.uk/wildmanag



Zoologists are scientists who study animals, from the largest mammals to the smallest insects. Understanding them and their communities gives an insight into both human and animal life and how they can be sustained in the face of global challenges, from climate change to food security. Here at Harper Adams, you'll study whole organisms, not just species at the molecular level. You'll look at animals' physiology, behaviour, and how they interact with other species and their environments, in order to preserve important habitats and manage wildlife in light of climate change.

Zoologists help protect endangered species and wildlife from the dangers of habitat loss, disease, invasive species, and climate change, and to protect and learn more about human life in the process.

BSc (Hons)/BSc Applied Zoology UCAS code Z001/OD08

104 UCAS points (Modules for honours degree programme)

Year 1

- Academic Skills Development
- Introduction to Ecology
- The Natural Environment and Climate Change
- Environmental Survey Technologies and Field Skills
- Fundamentals of Physiology
- Adaptive Biology
- Introduction to Animal Welfare, Behaviour and Ethics
- Principles of Animal Health

Year 2

- Research Methods for Environmental Scientists
- Animal Biotechnology and Genetics
- Animal Ethics
- Aquatic Ecosystems
- Principles of Animal Behaviour and Welfare
- Wildlife Identification and Conservation
- Philosophy of Zoos
- Conservation Biology

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Geographical Information Systems and Land Use
- Environment and Geography Field Course
- Management of Captive Aquatic Systems
- Applied Companion Animal Health, Welfare and Behaviour
- Population and Community Ecology
- International Perspectives on the Management of Animal Populations

BSc (Hons) Zoology with Entomology UCAS code Z002

104 UCAS points

Year 1

- Academic Skills Development
- Introduction to Ecology
- The Natural Environment and Climate Change
- Environmental Survey Technologies and Field Skills
- Fundamentals of Physiology
- Adaptive Biology
- Introduction to Animal Welfare, Behaviour and Ethics
- Principles of Animal Health

Year 2

- Research Methods for Environmental Scientists
- Animal Biotechnology and Genetics
- Animal Ethics
- Aquatic Ecosystems
- Principles of Animal Behaviour and Welfare
- Wildlife Identification and Conservation
- Introduction to Entomology
- Insect Life History Strategies

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Geographical Information Systems and Land Use
- Environment and Geography Field Course
- Management of Captive Aquatic Systems
- Population and Community Ecology
- Invertebrate Pests and Beneficials
- Insect Conservation

This is the only undergraduate degree in the UK that allows you to specialise in entomology.

BSc (Hons) Zoology with Environmental Management UCAS code Z003

104 UCAS points

Year 1

- Academic Skills Development
- Introduction to Ecology
- The Natural Environment and Climate Change
- Environmental Survey Technologies and Field Skills
- Fundamentals of Physiology
- Adaptive Biology
- Introduction to Animal Welfare, Behaviour and Ethics
- Principles of Animal Health

Year 2

- Research Methods for Environmental Scientists
- Animal Biotechnology and Genetics
- Animal Ethics
- Aquatic Ecosystems
- Principles of Animal Behaviour and Welfare
- Pollution, Ecology and Brownfield Reclamation
- Wildlife Identification and Conservation
- Environmental Quality and Protection

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Geographical Information Systems and Land Use
- Applied Ecology for Management
- Environment and Geography Field Course
- Environmental Assessment and Management
- Applied Companion Animal Health, Welfare and Behaviour
- Management of Captive Aquatic Systems

Extended Degree*
UCAS code XD05
harper.ac.uk/zoology

Careers

With an applied zoology degree, you could become a zoologist or research scientist. You may find yourself improving agricultural crops and livestock, conserving endangered species and habitats, or developing and testing new drugs. Or you may work in disease and pest control, in field trials, animal welfare and education, or perhaps developing policies and regulations.



Lecturers are always ready to answer questions. If you question an idea, they have an answer, as they are actively researching the subject so you can get involved in the discussion too.

Keir Flowerdew, 
BSc (Hons)
Zoology with
Entomology



Modules are 15 credits, unless otherwise stated.

*For more information on Extended Degree Programmes please refer to page 104.

harper.ac.uk/zoology

Business Management



Harper Adams means business

The business skills you'll acquire at Harper will prove invaluable for every career path in every profession, industry and sector. Your tutors bring a wealth of personal industry experience to the classroom, combining the academic and practical elements of your course to give you a powerful foundation for your future.

You'll learn how to manage others, the skills for leadership, creative thinking, business analysis, financial management, strategy, marketing, enterprise and more. Your one-year placement in industry is integrated into our courses, a chance to put your learning into action, giving you a deeper insight into the business world.

Your knowledge and understanding will build in complexity with each year, and in the final year the research project gives you the opportunity to take an area that fascinates you and explore it in considerable depth, supported by a dedicated research supervisor.

You can choose our universal business management route or specialise in agri-business or agri-food, knowing that wherever your career takes you, whether local enterprise or global corporation, our business degrees give you the learning and confidence to take on the challenges.

98%

**GRADUATE
EMPLOYMENT
DLHE 2018**

BSc (Hons)
UCAS code N2NM

88 – 104 UCAS points

Year 1

- Professional Skills Development
- Creativity and Enterprise
- The Organisation in its Environment
- Business Communication Technology
- Marketing Principles
- Business Data Analysis
- Logistics and Distribution
- Introduction to Economics

Options

Language I (French, German or Spanish)

Year 2

- Group Market Research Project
- Financial Decision Making
- International Marketing
- Economic Policies
- E-Business
- Marketing Communications
- Project and Event Management
- Sales and Customer Service

Options

Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Consumer Behaviour
- New Product Development
- Supply Chain Management
- Strategic Management
- Leadership and People Management
- Management Consultancy

Modules are 15 credits unless otherwise stated.

* For more information on Extended Degrees please refer to page 104.

harper.ac.uk/business

BSc
UCAS code OD02

72 – 88 UCAS points

Year 1

- Professional Skills Development
- Creativity and Enterprise
- The Organisation in its Environment
- Business Communication Technology
- Marketing Principles
- Business Data Analysis
- Logistics and Distribution
- Introduction to Economics

Options

Language I (French, German or Spanish)

Year 2

- Group Market Research Project
- Financial Decision Making
- International Marketing
- Economic Policies
- E-Business
- Marketing Communications
- Project and Event Management
- Sales and Customer Service

Options

Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Degree Review Project
- New Product Development
- Supply Chain Management
- Strategic Management
- Leadership and People Management

Options

- Management Consultancy
- Consumer Behaviour

Extended Degree*
UCAS code N2NN
harper.ac.uk/business

Top-up Degree*
UCAS code XD08
harper.ac.uk/business



Careers

The skills and understanding that you'll gain through studying Business Management with Marketing are wholly transferrable and prepare you for a career in almost every organisation in every sector, giving you the flexibility to adapt and change your career path throughout your working life:

- Consultancy
- Sales
- Recruitment
- Publishing
- Purchasing
- Web design
- Accountancy
- Event management
- Financial services

They are also the core skills for successful entrepreneurship many Harper graduates have decided to be their own boss, launching their own business ventures and enterprises.

Accreditation

Our business degree routes are now accredited by the Institute for Leadership and Management and the Chartered Institute of Marketing, the UK's leading awarding bodies for professional management qualifications in their respective areas. By aligning core learning outcomes of our degrees with those of their qualifications we demonstrate our shared values and mutual commitment to vocational development. Visit the website to learn more.

This course prepares you for the challenges of graduate employment in all sectors and industries, and for entrepreneurship too.

The focus is on those core transferrable business skills that will last you a lifetime. Along with essential practical, technical skills you'll also be learning those invaluable soft skills that employers rate so highly, such as communication, creativity, motivation and leadership.

In the classroom you'll experience a blend of academic and practical learning, backed up with a fascinating range of supplementary events and activities that get you out into business and bring business speakers and experts in to see you too. You'll even have a chance to try your hand as a real-world business consultant.

As you progress through your degree so will your capabilities in commercial thinking, planning, and management, and in your final year you'll be working at a strategic level across all business areas. You'll develop a deep understanding of organisations and the roles within them, preparing you to confidently take on the management level responsibilities for sustainable, competitive business.

98%
SATISFACTION WITH THE LEARNING COMMUNITY OF STAFF AND STUDENTS
NSS 2019

This course combines some of our core business modules with specialist modules in farm management, farming economics, crop and animal production to give you a comprehensive preparation for management roles in the agriculture sector.

Harper is at the leading edge of innovation in agriculture, so as well as classroom sessions we make full use of our 500 hectare mixed farm as a teaching facility, ensuring that you have the most up-to-date skill-set with which to handle the challenging issues that characterise this sector.

The main focus of this course is to give a commercial business context to your agricultural learning. The business topics include sales and marketing, people management, strategic thinking and supply chain management and you'll learn how to integrate these different areas into successful business practices.

Whether your future is in farming itself or in one of the many related business areas, this course gives you the depth of understanding and breadth of skills for assured decision making and confident, capable management.



BSc (Hons)
UCAS code DN41

88 – 104 UCAS points

- Year 1**
- Professional Skills Development
 - Business Data Analysis
 - Marketing Principles
 - Animal Production Systems
 - Crop Production Systems
 - Agri-Food Marketing
 - Assessment of the Farm Business

- Options**
- Logistics and Distribution
 - Issues in Global Food Production
 - Language I (French, German or Spanish)

- Year 2**
- Group Market Research Project
 - Business Communication Technology
 - Farm Assurance and Quality
 - Farm Business Management and Economics
 - Professional Services in Farm Business Management
 - Sales and Customer Service

- Options**
- Marketing Communications
 - Fresh Produce
 - Integrated Crop Management Systems
 - Sustainable Livestock Production Systems
 - Language II (French, German or Spanish)

Year 3
Placement year

- Year 4**
- Honours Research Project
 - (30 credits)
 - Leadership and People Management
 - Supply Chain Management
 - International Agri-Business
 - Strategic Management

- Options**
- Economic Policies
 - Management Consultancy
 - Animal Product Processing
 - Farm Business Operation and Planning

One-year top up degree available
UCAS code DN4H
harper.ac.uk/business

BSc
UCAS code OD04

72 – 88 UCAS points

- Year 1**
- Professional Skills Development
 - Business Data Analysis
 - Marketing Principles
 - Animal Production Systems
 - Crop Production Systems
 - Agri-Food Marketing
 - Assessment of the Farm Business

- Options**
- Logistics and Distribution
 - Issues in Global Food Production
 - Language I (French, German or Spanish)

- Year 2**
- Group Market Research Project
 - Business Communication Technology
 - Farm Assurance and Quality
 - Farm Business Management and Economics
 - Professional Services in Farm Business Management
 - Sales and Customer Service

- Options**
- Marketing Communications
 - Fresh Produce
 - Integrated Crop Management Systems
 - Sustainable Livestock Production Systems
 - Language II (French, German or Spanish)

Year 3
Placement year

- Year 4**
- Degree Review Project
 - Leadership and People Management
 - Supply Chain Management
 - International Agri-Business
 - Strategic Management

- Options**
- Economic Policies
 - Management Consultancy
 - Animal Product Processing
 - Farm Business Operation and Planning

One-year top up degree available
UCAS code DN4N
harper.ac.uk/business

Careers

Agri-business encompasses a wide range of employments from those directly involved with farming to the many supporting and ancillary sectors that are part of the wider agricultural industry. Through this course you'll gain a mix of specialist and transferrable skills that can be applied to jobs in other sectors too.

- Graduates have gone on to working in a variety of jobs including:
- Farm business management
 - Commodity trading
 - Sales
 - Marketing
 - Research
 - Finance
 - Consultancy

Many agri-business students find that this qualification equips them to set up and successfully run their own enterprise within the sector, and the transferable skills allow them to find employment beyond the sector too.

Accreditation

Our business degree routes are now accredited by the Institute for Leadership and Management and the Chartered Institute of Marketing, the UK's leading awarding bodies for professional management qualifications in their respective areas. By aligning core learning outcomes of our degrees with those of their qualifications we demonstrate our shared values and mutual commitment to vocational development. Visit the website to learn more.



My placement has made me more confident for the future because it let me apply my skills to the real world as I progressed through university.

Courtney Mee, BSc (Hons) Agri-Business

Modules are 15 credits unless otherwise stated.

harper.ac.uk/business

BSc (Hons)
UCAS code DN4S

88 – 104 UCAS points

Year 1

- Professional Skills Development
- Business Data Analysis
- Marketing Principles
- Animal Production Systems
- Crop Production Systems
- Agri-Food Marketing
- Business Communication Technology

Options

- Logistics and Distribution
- Issues in Global Food Production
- Language I (French, German or Spanish)

Year 2

- Group Market Research Project
- Marketing Communications
- Food Marketing
- Farm Assurance and Quality
- Financial Decision Making
- Introduction to Economics
- International Marketing

Options

- Sales and Customer Service
- Fresh Produce
- Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Leadership and People Management
- Supply Chain Management
- Consumer Behaviour
- Strategic Management
- Retail Environment and Operations
- Development of Food Products and Sensory Evaluation
- Animal Product Processing
- International Agri-Business

BSc
UCAS code OD03

72 – 88 UCAS points

Year 1

- Professional Skills Development
- Business Data Analysis
- Marketing Principles
- Animal Production Systems
- Crop Production Systems
- Agri-Food Marketing
- Business Communication Technology

Options

- Logistics and Distribution
- Issues in Global Food Production
- Language I (French, German or Spanish)

Year 2

- Group Market Research Project
- Marketing Communications
- Food Marketing
- Farm Assurance and Quality
- Financial Decision Making
- Introduction to Economics
- International Marketing

Options

- Sales and Customer Service
- Fresh Produce
- Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Degree Review Project
- Leadership and People Management
- Supply Chain Management
- Consumer Behaviour
- Strategic Management

Options

- Retail Environment and Operations
- Development of Food Products and Sensory Evaluation
- Animal Product Processing
- International Agri-Business

Careers

The careers of agri-food business graduates span the whole food supply chain, from agricultural merchants and pharmaceuticals companies to food manufacturers, distributors, retailers and traders. A combination of business and marketing skills plus technical awareness, make graduates attractive to organisations in the agri-food sector.

The transferable nature of the commercial skills developed enables graduates to work in:

- Government
- Trade and overseas development organisations
- Banks
- Specialist market research agencies and consultancies

Many have also found that this qualification equips them to set up and successfully run their own food, farm or rurally-based enterprise.

Accreditation

Our business degree routes are now accredited by the Institute for Leadership and Management and the Chartered Institute of Marketing, the UK's leading awarding bodies for professional management qualifications in their respective areas. By aligning core learning outcomes of our degrees with those of their qualifications we demonstrate our shared values and mutual commitment to vocational development. Visit the website to learn more.

From field to fork. Through this course you'll cover the complex relationship between farming and the consumer, looking at it through the lens of competitive, commercial business.

It's a balanced programme of modules in business, agriculture, and food development, giving you a wide-ranging picture of the industry as a whole, and deep insight into the connections between the different elements.

For the agriculture content you'll be taught on our own state-of-the-art mixed farm as well as in the classroom, and Harper's exceptional industry connections give you the benefit of learning the very latest in food processing and food product development in this fast-moving sector.

The business topics prepare you to take on management roles in all areas of these dynamic interrelated sectors including making financial decisions, leading and managing your team, and developing competitive business strategies.



90%
STUDENT SATISFACTION
NSS 2019



The course looks at all of the elements of the food supply chain from field to fork, combining my passion for food with my interest in agriculture.

Max Randall,
M&S scholar



Engineering

||

The great thing about Harper is that you don't just spend loads of time learning about things in the lecture theatre, you learn how to apply knowledge to the real world.

||

Alex Skittery,
graduate,
JCB engineer and
member of the
"World's Fastest
Tractor" record
breaking team





Engineers are the ultimate problem solvers – but the UK does not have enough of them. Addressing the engineering skills gap is key to the Government's industrial strategy, in which it is recognised that the country will need an additional 186,000 skilled recruits each year until 2024 (UK Government, 2017).

At Harper Adams, we are developing our own solution to this national challenge. Our degrees train new practitioners with more than just engineering knowledge. We turn out graduates who have the skills, knowledge, resilience and self-confidence to start making a difference from day one on the job. We make sure employers have a stream of new, talented professionals with business skills and professional behaviours, by building these requirements into our curriculum from the outset.

Our course structure, which includes a compulsory year in industry and professional projects that tackle real, relevant issues, is proven to work. 98 per cent of our graduates are in work six months after graduating, with 85 per cent in 'graduate level' roles, with salaries to match, according to the most recent

Destination of Leavers from Higher Education survey (DLHE 2016/17). All engineering courses are accredited by the **Institution of Agricultural Engineers**, on behalf of the **Engineering Council**. They are challenging and rewarding and open the doors to a wide variety of careers.

All first-year students will start with the same teaching and learning and then progress to one of three specialist pathways, all offered at BEng (Hons) and MEng levels. The latter is one year longer, at five years in duration and adds a Master's research project plus additional specialist modules tailored to your chosen route. MEng graduates are eligible for initial registration for Chartered Engineering status.

Extended degrees

While we don't offer specific extended degree pathways for the engineering programmes, some students will be eligible for progression to year 1 of an engineering degree after completing one of the University's extended degree programmes. See page 108 for information and chat to us about this option during an open day.

98%
**GRADUATE
EMPLOYMENT**
DLHE 2018



100%
STUDENT
SATISFACTION
NSS 2019



BEng (Hons) UCAS code H330

96 – 120 UCAS points

You will also need to demonstrate your passion to engineer and provide evidence of prior success.

Year 1

- Communication for Engineers
- Mathematical Tools and Techniques for Engineers
- Problem Solving
- Fundamentals of Mechanical Science – Dynamics
- Fundamentals of Mechanical Science - Materials Under Load
- Materials and Materials Processing
- Fundamentals of Measurement
- Fundamentals of Actuation

Year 2

- Fundamentals of Agricultural Engineering
- Global Agricultural Production
- Engineering Design
- Applied Mechanical Science – Materials Under Load
- Applied Mechanical Science – Dynamics and Control
- Manufacturing and Operations Management
- Experimental Design and Analysis
- Electronic Control Systems

Year 3

Placement year

Year 4

- Honours Engineering Project
- Agricultural Machinery Design
- Advanced Stress Analysis (Industry-Based)
- Strategic Management
- Group Engineering Project

Options

- Power Systems
- Competitive Production Management
- Mechatronics Design and Control

Modules are 15 credits unless otherwise stated.

harper.ac.uk/engineering

MEng UCAS code H335

136 UCAS points

You will also need to demonstrate your passion to engineer and provide evidence of prior success.

Year 1

- Communication for Engineers
- Mathematical Tools and Techniques for Engineers
- Problem Solving
- Fundamentals of Mechanical Science – Dynamics
- Fundamentals of Mechanical Science – Materials Under Load
- Materials and Materials Processing
- Fundamentals of Measurement
- Fundamentals of Actuation

Year 2

- Fundamentals of Agricultural Engineering
- Global Agricultural Production
- Engineering Design
- Applied Mechanical Science – Materials Under Load
- Applied Mechanical Science – Dynamics and Control
- Manufacturing and Operations Management
- Experimental Design and Analysis
- Electronic Control Systems

Year 3

Placement year

Year 4

- Agricultural Machinery Design
- Mechatronics Design and Control
- Management of New Product Development
- Advanced Stress Analysis (Industry-Based)
- Strategic Management
- Group Engineering Project

Options

- Power Systems
- Competitive Production Management
- Advanced Materials

Year 5

- Masters Engineering Project (60 credits)
- Advanced Decision Making
- Emerging Technologies

Options

- Systems Simulation
- Noise Vibration and Harshness and Human Machine Interaction
- Advanced Power Systems

Careers

Our agricultural engineering graduates are employed as professional engineers in:

- Design and development
- New product testing
- Manufacturing and equipment production
- Managerial and leadership roles



I chose to study at Harper Adams University as the combination of its excellent partnerships with industry and their cutting-edge facilities, IT systems and software made it stand out. Mechanisation and electronics continue to be my preferred specialisms because the advances in these areas, such as precision farming and autonomous machinery, will be the future for agriculture.

Alan Mobbs,
MEng
Agricultural
Engineering



This subject has a mechanical engineering core with a specialism in the design and development of agricultural machinery and systems. It covers everything from the principles of the design of agricultural machines, soil/implement interaction and irrigation and drainage, through to advancing technologies in the fields of precision farming, agricultural robotics and renewable energy.

You will cover not just theory and technical skills but also put your knowledge into practice in real-world scenarios, develop research and business techniques and build your experience and confidence as a professional engineer. Industry figures have helped us to develop a comprehensive curriculum combining core engineering subjects with the latest industrial techniques. Much of our teaching is project-led and is designed to develop the professional skills that you will use as a graduate engineer.



Automotive Engineering (Off-Highway)

These courses have a mechanical engineering core with a specialism in the design and development of vehicles that operate off-road.

You will cover not just theory and technical skills but also put your knowledge into practice in real-world scenarios, develop research and business techniques and build your experience and confidence as professional engineers. Industry figures have helped us to develop a comprehensive curriculum combining core engineering subjects with the latest industrial techniques. Much of our teaching is project-led and is designed to develop the professional skills that you will use as a graduate engineer.



Modules are 15 credits unless otherwise stated.

harper.ac.uk/engineering

BEng (Hons) UCAS code H336

96 – 120 UCAS points

You will also need to demonstrate your passion to engineer and provide evidence of prior success.

Year 1

- Communication for Engineers
- Mathematical Tools and Techniques for Engineers
- Problem Solving
- Fundamentals of Mechanical Science – Dynamics
- Fundamentals of Mechanical Science – Materials Under Load
- Materials and Materials Processing
- Fundamentals of Measurement
- Fundamentals of Actuation

Year 2

- Off-Highway Vehicle Systems
- Off-Highway Vehicle Mobility
- Engineering Design
- Applied Mechanical Science – Materials Under Load
- Applied Mechanical Science – Dynamics and Control
- Manufacturing and Operations Management
- Experimental Design and Analysis
- Electronic Control Systems

Year 3

Placement year

Year 4

- Honours Engineering Project
- Vehicle Dynamics
- Advanced Stress Analysis (Industry-Based)
- Strategic Management
- Group Engineering Project

Options

- Power Systems
- Competitive Production Management
- Mechatronics Design and Control

MEng UCAS code H337

136 UCAS points

You will also need to demonstrate your passion to engineer and provide evidence of prior success.

Year 1

- Communication for Engineers
- Mathematical Tools and Techniques for Engineers
- Problem Solving
- Fundamentals of Mechanical Science – Dynamics
- Fundamentals of Mechanical Science – Materials Under Load
- Materials and Materials Processing
- Fundamentals of Measurement
- Fundamentals of Actuation

Year 2

- Off-Highway Vehicle Systems
- Off-Highway Vehicle Mobility
- Engineering Design
- Applied Mechanical Science – Materials Under Load
- Applied Mechanical Science – Dynamics and Control
- Manufacturing and Operations Management
- Experimental Design and Analysis
- Electronic Control Systems

Year 3

Placement year

Year 4

- Vehicle Dynamics
- Power Systems
- Management of New Product Development
- Advanced Stress Analysis (Industry-Based)
- Strategic Management
- Group Engineering Project

Options

- Mechatronics Design and Control
- Competitive Production Management
- Advanced Materials

Year 5

- Masters Engineering Project (60 credits)
- Advanced Decision Making Emerging Technologies

Options

- Systems Simulation
- Noise Vibration and Harshness and Human Machine Interaction
- Advanced Power Systems

Careers

Career opportunities in this field are outstanding. We have built excellent relationships with engineering companies in the off-highway industries. Our graduates are highly sought-after and are employed in the design and development of the next generation of:

- SUVs
- Defence vehicles
- Construction equipment
- Agricultural vehicles for global companies including:
 - Jaguar
 - Land Rover
 - CNH
 - Bentley
 - JCB
 - Vauxhall
 - Caterpillar
 - BAE systems

along with specialist organisations such as Supacat and Prodrive.



I spent my industrial year with Jaguar Land Rover Off Road Capabilities and worked on testing and researching our competitor vehicles. I extended my placement right up until the week I went back to university with hopes of returning as a graduate... I was offered my graduate role with Jaguar Land Rover and returned to Off Road Capabilities again this time with hopes of expanding my knowledge and seeing how far I could push myself.



Jess Alvarez,
BSc (Hons) Automotive Engineering (Off-Highway)

BEng (Hons) UCAS code H300

96 – 120 UCAS points

You will also need to demonstrate your passion to engineer and provide evidence of prior success.

Year 1

- Communication for Engineers
- Mathematical Tools and Techniques for Engineers
- Problem Solving
- Fundamentals of Mechanical Science – Dynamics
- Fundamentals of Mechanical Science – Materials Under Load
- Materials and Materials Processing
- Fundamentals of Measurement
- Fundamentals of Actuation

Year 2

- Engineering for Manufacture
- Thermodynamics and Heat Transfer
- Engineering Design
- Applied Mechanical Science – Materials Under Load
- Applied Mechanical Science – Dynamics and Control
- Manufacturing and Operations Management
- Experimental Design and Analysis
- Electronic Control Systems

Year 3

Placement year

Year 4

- Honours Engineering Project
- Competitive Production Management
- Advanced Stress Analysis (Industry-based)
- Strategic Management
- Group Engineering Project

Options

- Power Systems
- Advanced Materials
- Mechatronics Design and Control

MEng UCAS code H301

136 UCAS points

You will also need to demonstrate your passion to engineer and provide evidence of prior success.

Year 1

- Communication for Engineers
- Mathematical Tools and Techniques for Engineers
- Problem Solving
- Fundamentals of Mechanical Science – Dynamics
- Fundamentals of Mechanical Science – Materials Under Load
- Materials and Materials Processing
- Fundamentals of Measurement
- Fundamentals of Actuation

Year 2

- Engineering for Manufacture
- Thermodynamics and Heat Transfer
- Engineering Design
- Applied Mechanical Science – Materials Under Load
- Applied Mechanical Science – Dynamics and Control
- Manufacturing and Operations Management
- Experimental Design and Analysis
- Electronic Control Systems

Year 3

Placement year

Year 4

- Competitive Production Management
- Advanced Materials
- Management of New Product Development
- Advanced Stress Analysis (Industry Based)
- Strategic Management
- Group Engineering Project

Options

- Mechatronics Design and Control
- Power Systems
- Leadership and People Management

Year 5

- Masters Engineering Project (60 credits)
- Advanced Decision Making
- Emerging Technologies

Options

- Systems Simulation
- Noise Vibration and Harshness and Human Machine Interaction
- Advanced Power Systems

Careers

Harper Adams engineering graduates are highly sought-after within the industry. Mechanical Engineering is one of the broadest of the engineering disciplines and will offer you a wide choice of options. Our graduates are employed as professional engineers in:

- Design and development
- New product testing
- Manufacturing
- Managerial and leadership roles



I chose this course due to the broad range of opportunities available at Harper Adams; partnered with this, my determination will help me to achieve the status of chartered engineer.

Rebecca Websdale,
MEng Mechanical Engineering



This subject is focused on producing high-calibre engineering graduates who are experienced in the application of core mechanical engineering theory and practice to successfully deliver solutions to industry problems.

In addition to learning the principles of machine design and advanced simulation and modelling techniques, students will also gain knowledge of industrial manufacturing and process optimisation – skills highlighted by our industrial partners as highly sought-after.

You will cover not just theory and technical skills but also put your knowledge into practice in real-world scenarios, develop research and business techniques and build your experience and confidence as professional engineers. Industry figures have helped us to develop a comprehensive curriculum combining core engineering subjects with the latest industrial techniques. Much of our teaching is project-led and is designed to develop the professional skills that you will use as a graduate engineer.



Food Technology and Innovation



The multi-billion pound food industry is the second largest employment sector in the world. In the UK it is the largest manufacturing industry, employing over 3.2 million people in more than 100,000 locations. The food industry contains many multi-national companies and therefore offers opportunities for travel or work abroad. It offers valuable and diverse career opportunities with competitive reward packages. Graduates of this course can expect to find employment in areas such as product development, food manufacture, food marketing and buying. In particular, graduates will be provided with an appreciation of the various disciplines they will require within a multi-disciplinary workplace.

All food students share a common first year, studying the same modules. In your second and final years you will focus on your chosen specialism.



With food programmes at Harper having returned a 100 per cent graduate employment rating last summer and now a 100 per cent student satisfaction rating. It's pleasing to know that studying food science and technology subjects in an institution dedicated to advancing the agri-food chain is proving to be the right choice for our students and graduates.

Dr Annette Creedon,
Head of the Food
Technology and
Innovation Department



100%
**GRADUATE
EMPLOYMENT
DLHE 2018**

BSc (Hons)
UCAS code D641

88 – 104 UCAS points

Year 1

- Academic and Professional Skills for the Food Industry
- Introduction to Food Science
- Issues in Global Food Production
- Marketing Principles
- Logistics and Distribution
- Nature of Food
- Introduction to Food Service and Retail
- Wellbeing Through the Lifecycle

Electives (not compulsory)

Language I (French, German or Spanish)

Year 2

- Research Methods
- Farm Assurance and Quality
- Commodity Crop and Fresh Produce Processing
- Animal Product Processing
- Food Product Development and Sensory Evaluation in Supply Chains
- Marketing Communications
- Hygiene and Food Safety
- Food Biotechnology and Food Processing

Electives (not compulsory)

Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Food Policy and Ethics
- Supply Chain Management
- Food Quality Management
- Food Product Manufacture
- Consumer Behaviour
- Leadership and People Management

Accreditation

BSc (Hons) degree accredited
Institute of Food Science & Technology.



Extended Degree*
UCAS code XD09
harper.ac.uk/food

BSc
UCAS code OD01

64 – 72 UCAS points

Year 1

- Academic and Professional Skills for the Food Industry
- Introduction to Food Science
- Issues in Global Food Production
- Marketing Principles
- Logistics and Distribution
- Nature of Food
- Introduction to Food Service and Retail
- Wellbeing Through the Lifecycle

Electives (not compulsory)

Language I (French, German or Spanish)

Year 2

- Research Methods
- Hygiene and Food Safety
- Commodity Crop and Fresh Produce Processing
- Marketing Communications
- Food Product Development and Sensory Evaluation in Supply Chains

Options

- Farm Assurance and Quality
- Animal Product Processing
- Food Biotechnology and Food Processing

Electives (not compulsory)

Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Degree Review Project
- Consumer Behaviour
- Food Product Manufacture
- Supply Chain Management
- Food Quality Management

Options

- Leadership and People Management
- Food Policy and Ethics

Modules are 15 credits unless otherwise stated.

*For more information on Extended Degrees please refer to page 104.

harper.ac.uk/food

Careers

Graduates can expect to find job opportunities in the diverse food industry and associated fields.

You may wish to work in food processing and manufacture, food product development, technical management, quality management, food business management or food retail management. Other options include careers in buying food products, in sales and marketing, or setting up your own business. This course gives you the opportunity to become knowledgeable, skilled, adaptable, versatile and able to take command of your own life and career.



I was exposed to the industry and people who were passionate about it every day.

Amy Wickham,
Food graduate



In western societies consumers are dependent on the agricultural and food processing industries, and the food retail and food service sectors, for the foodstuffs that sustain their lives.

Food is produced by people with specialist know-how and the food industry has a constant need for appropriately qualified graduates.

On this course you will gain a detailed understanding of the food industry, its place in society and relationship to consumers. You will explore the nature of food and how ingredients behave when processed. You will learn how the food supply chain operates, food trends and consumer behaviour.

The course will equip you with the knowledge and skills needed to develop a career in the industry from food processing and manufacture through to food retailing.



100%
STUDENT SATISFACTION
NSS 2019

The variety of food and drink available to us is continually increasing in its quality, diversity, and interest. This course will help you develop the skills to be at the heart of the food development process adding value to a complex and exciting food industry. You will learn about the range of ingredients available to the food industry, how these ingredients are sourced and how they react together to form some of our most familiar foodstuffs.

You will learn to develop food that can be transported through a sophisticated supply chain whilst retaining its quality for today's discerning consumer, learn about commercialising products, being able to reconcile the conflict between adding value and the cost of a product, and the importance of a clear business strategy to support this. If you wish, you will be given the opportunity to enter new product development competitions.

BSc (Hons) UCAS code D633

88 – 104 UCAS points

Year 1

- Academic and Professional Skills for the Food Industry
- Introduction to Food Science
- Issues in Global Food Production
- Marketing Principles
- Wellbeing Through the Lifecycle
- Nature of Food
- Introduction to Food Service and Retail
- Logistics and Distribution

Electives (not compulsory)

Language I (French, German or Spanish)

Year 2

- Research Methods
- Food Creativity, Styling and Photography
- Principles and Practices of Food Sustainability
- Retail Environment and Operations
- Food Product Development and Sensory Evaluation in Supply Chains
- Food Biotechnology and Food Processing
- Hygiene and Food Safety
- Food Marketing

Electives (not compulsory)

Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- European Food Innovation and Trade
- Supply Chain Management
- Food Quality Management
- Food Product Manufacture
- Consumer Behaviour
- Food Security and Sustainability

Accreditation

BSc (Hons) degree accredited
Institute of Food Science & Technology.



Extended Degree*
UCAS code XD09
harper.ac.uk/food

BSc UCAS code OD10

64-72 UCAS points

Year 1

- Academic and Professional Skills for the Food Industry
- Introduction to Food Science
- Issues in Global Food Production
- Marketing Principles
- Wellbeing Through the Lifecycle
- Nature of Food
- Introduction to Food Service and Retail
- Logistics and Distribution

Optional modules

Language I (French, German or Spanish)

Year 2

- Research Methods (Food, Marketing and Business)
- Food Creativity, Styling and Photography
- Principles and Practices of Food Sustainability
- Food Product Development and Sensory Evaluation in Supply Chains
- Hygiene and Food Safety
- Food Marketing

Optional modules

- Retail Environment and Operations
- Food Biotechnology and Food Processing
- Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Degree Review Project
- Supply Chain Management
- Food Quality Management
- Food Product Manufacture
- Consumer Behaviour

Optional modules

- Food Security and Sustainability
- European Food Innovation and Trade

Careers

Students will have the opportunity to develop excellent food industry knowledge in a subject area recognised by the industry for employment in a wide range of food careers both in the UK and abroad. Opportunity for regular travel is significant as many ingredients are sourced from across the globe.

Our graduates have an excellent employability rate and record, many being offered graduate jobs whilst on placement. The high level of skill and specialist knowledge makes graduates from this course uniquely prepared for food technical, auditing and processing roles. Graduates can expect to be involved in the decisions necessary to manufacture, develop and improve food and drink products in a dynamic and fast paced environment. Food technologists are at the centre of product design, formulation, food safety and quality assurance in the food industry.



Working on this project was a real eye-opener, seeing all the work that goes on behind the scenes to deliver a product on the shelf; it was great understanding the process from concept to launch.

Morgan Metcalfe, who developed the summer bacon chop for Waitrose while on placement with Dalehead Foods

Modules are 15 credits unless otherwise stated.

*For more information on Extended Degrees please refer to page 104.

harper.ac.uk/food

BSc (Hons) UCAS code DB64

88 – 104 UCAS points

Year 1

- Academic and Professional Skills for the Food Industry
- Introduction to Food Science
- Issues in Global Food Production
- Marketing Principles
- Logistics and Distribution
- Nature of Food
- Introduction to Food Service and Retail
- Wellbeing Through the Lifecycle

Options

Language I (French, German or Spanish)

Year 2

- Research Methods (Food, Marketing and Business)
- Hygiene and Food Safety
- Food Product Development and Sensory Evaluation in Supply Chains
- Marketing Communications
- Farm Assurance and Quality
- Food Biotechnology and Food Processing
- Public Health Nutrition
- Psychology of Food Choice

Electives (not compulsory)

Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Food Policy and Ethics
- Advanced Aspects of Human Nutrition
- Food Quality Management
- Food Product Manufacture
- Food Security and Sustainability
- Supply Chain Management

Accreditation

BSc (Hons) degree accredited
Institute of Food Science & Technology.



BSc UCAS code OD11

64-72 UCAS points

Year 1

- Academic and Professional Skills for the Food Industry
- Introduction to Food Service and Retail
- Issues in Global Food Production
- Wellbeing Through the Lifecycle
- Nature of Food
- Introduction to Food Science
- Marketing Principles
- Logistics and Distribution

Optional modules

Language I (French, German or Spanish)

Year 2

- Research Methods (Food, Marketing and Business)
- Hygiene and Food Safety
- Food Product Development and Sensory Evaluation in Supply Chains
- Marketing Communications
- Public Health Nutrition
- Psychology of Food Choice

Optional modules

- Farm Assurance and Quality
- Food Biotechnology and Food Processing
- Language II (French, German or Spanish)

Year 3

Placement year

Year 4

- Degree Review Project
- Food Policy and Ethics
- Advanced Aspects of Human Nutrition
- Food Quality Management
- Food Security and Sustainability

Optional modules

- Supply Chain Management
- Food Product Manufacture

Extended Degree*
UCAS code XD09
harper.ac.uk/food

100%
STUDENT SATISFACTION
NSS 2019

Careers

This course will help develop graduates who understand how to produce safe and nutritious food as well as the legislation and policies governing production and manufacture.

Graduates can expect to gain employment in technical, quality and product development roles where they will produce healthy foods and foods for those with a specific need.

I have always been interested in food and how it impacts our bodies. The variety of modules on this course has enabled me to expand my knowledge on a wide range of topics about the food industry and human nutrition.

Kate Westall,
Food graduate

This course has been designed specifically in response to the increasing interest in human nutrition worldwide and especially by the food industry and public health bodies.

It will satisfy the growing need for graduates with an understanding of food production and manufacturing and, importantly, human nutrition.

You will gain an understanding of the relationships between food, nutrition and human health, developing the knowledge and skills to work in food product development, manufacture and retailing. You will become a food professional with the ability to respond to a marketplace which has an increasing interest in food and its impact on health.

You will be able to design and produce healthy foodstuffs as well as deliver healthy eating messages appropriately to consumers of food.



Land, Property and Environment



Do you want an exciting and rewarding career?

Careers in land and property management, surveying, heritage assets and environmental management are exciting, challenging and creative. If you'd love to work both independently and with a team and would enjoy a busy and varied role where you're sometimes outdoors as often as in the office, we have a course for you.

Our courses reflect the growing need from industry to respond to government initiatives such as the Agriculture Act, the 25 year Environment Plan and our international commitments to tackle climate change.

The University has an outstanding reputation in this field and you won't just learn in the classroom; the University estate, including a commercial farm, is a great way to see land management in action, not to mention visits to local farms, estates, factories and interesting properties and guest lecturers from industry.

BSc (Hons) Ucas code DNK2

104 UCAS points

Year 1

- Professional Practice Skills Development
- Introduction to Business for Rural Advisors
- Estate Management Law
- Valuation and Estate Management
- Sustainable Crop Production
- Animal Production (Land Management)
- Rural Geography and Economics
- Construction

Year 2

- Land Information and Research Skills
- Taxation
- Agency and Tenancy Law
- Valuation
- Farming Systems and Environment
- Planning and Development
- Compensation and Utilities

Options

- Forestry, Game and Land Management
- Forestry and Forest Products

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Strategic Estate Management
- Advanced Landlord and Tenant
- Advanced Valuation
- Farm Business Management for Land Managers
- Global Agricultural Trade Policies

Options

- Sustainable Energy
- International Rural Property Markets
- UK and Global Forest Systems

Modules are 15 credits unless otherwise stated.

harper.ac.uk/landandprop

Careers

Rural practice chartered surveyors are to be found working in professional firms providing a range of land management services to farmers and landowners; local government, managing country parks and country smallholding estates; the management of rural land and property for bodies as diverse as the RSPB, English Nature, national parks and water and mineral companies; traditional estates as resident land agents; or overseas for a firm of surveyors or advisers. Other careers graduates have chosen include; commodity trading, farm management, law, accountancy and the armed services.

Accreditation

This degree course is accredited by the **Royal Institution of Chartered Surveyors (RICS)** for the Rural Surveying Pathway.



REALM uses rural assets economically to achieve clear business objectives. It is an ideal course for aspiring rural practice chartered surveyors, particularly those with an interest in carrying out professional work for individual clients in areas such as valuation, strategic estate management, agricultural tenancy matters and diversification projects, including those relating to sustainability and renewable energy. The course will suit those with an interest in managing the countryside in a business context.

REALM graduates will be prepared to progress to Registered Valuer Status and are more likely to be employed in the provision of valuations, needed for a wide range of purposes ranging from sales and rent reviews, through to taxation and compulsory purchase. Increasingly, these skills will also be needed for the valuation of natural capital and ecosystems services. In some instances, graduates will also provide auctioneering services.

This course shares a common first and second year with the RPM course as both are aligned to the Rural Pathway of the RICS Assessment of Professional Competence. Students will specialise in the final year, post placement, with core modules covering agricultural, business and residential tenancies, advanced valuation, global agricultural trade policies and farm business management.

Optional modules will allow you to consider international rural property markets, sustainable forestry and forestry products, renewables and infrastructure.

Rural Property Management prepares students to manage rural estates and all their diverse assets. You will learn about maintaining and developing estate property and managing agricultural, residential and commercial tenancies, as well as development and marketing skills enabling you to diversify and enhance rural estates.

The course shares a common first and second year with the REALM course as both are aligned to the Rural Pathway of the RICS Assessment of Professional Competence. You will specialise in the final year with core modules covering strategic estate management, property development, events management and diversification. Optional modules will allow you to consider the conservation of historic estate assets, the provision of renewable energy or to study how rural property is managed internationally.

Modules are 15 credits unless otherwise stated.

harper.ac.uk/landandprop

BSc (Hons) UCAS code D440

104 UCAS points

Year 1

- Professional Practice Skills Development
- Estate Management Law
- Introduction to Business for Rural Advisors
- Valuation and Estate Management
- Rural Geography and Economics
- Construction
- Animal Production (Land Management)
- Sustainable Crop Production

Year 2

- Land Information and Research Skills
- Agency and Tenancy Law
- Taxation
- Valuation
- Planning and Development
- Compensation and Utilities
- Farming Systems and Environment

Options

- Forestry, Game and Land Management
- Forestry and Forest Products

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Advanced Landlord and Tenant
- Strategic Estate Management
- Conservation of the Historic Environment
- Property Development and Management
- Events Management and Diversification

Options

- Sustainable Energy
- International Rural Property Markets
- UK and Global Forest Systems

Careers

Rural Property Management graduates are likely to progress to positions in the management of rural property, estates and land, often within a firm of chartered surveyors specialising in this work or in some instances as a resident agent on a larger estate.

Our land and property graduates, from both the REALM and RPM courses, work with:

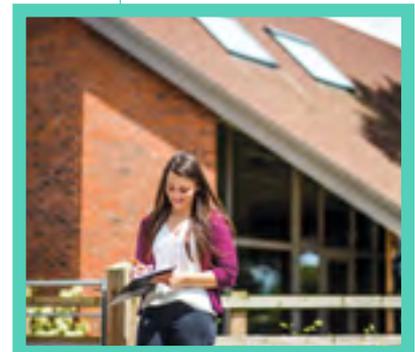
- Large national property firms
- Small professional practices
- Estates
- Auctioneers
- Utility companies
- Charities
- Local authorities

Examples of past employers include:

- Althorp Estate
- Balfours
- Bidwells
- Brown&Co
- Buccleuch Estates
- Carter Jonas
- Chatsworth
- Defence Estates
- Elveden
- Fisher German
- H & H Land
- Knight Frank
- Ministry of Defence
- National Grid
- NFU
- Rostons
- Savills
- Severn Partnership
- Strutt and Parker
- The National Trust
- United Utilities
- Yorkshire Water

Accreditation

This degree course is accredited by the **Royal Institution of Chartered Surveyors (RICS)** for the Rural Surveying Pathway.



BSc (Hons)
UCAS code N232

104 UCAS points

Year 1

- Professional Practice Skills Development
- Valuation and Estate Management
- Estate Management Law
- Construction
- Marketing Principles
- Introduction to Economics
- The Organisation in its Environment
- Business Data Analysis

Year 2

- Land Information and Research Skills
- Valuation
- Agency and Tenancy Law
- Compensation and Utilities
- Planning and Development
- Economic Policies
- Taxation
- Financial Decision Making

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Investment, Valuation and Appraisal
- Business, Residential Tenancies and Land Law
- Property Development and Management
- Leadership and People Management
- Strategic Management

Options

- Events Management and Diversification
- Sustainable Energy
- International Rural Property Markets

Careers

Careers in surveying and land agency are busy, varied and creative, suiting those who like to work both independently and in teams, and who enjoy talking and listening to other people, understanding their problems and coming up with solutions that fit their needs and budget. Graduates from this course may work in the commercial departments of large firms such as:

- Knight Frank
- Avison Young
- CBRE
- Colliers International
- Cushman & Wakefield
- JLL

Alternatively, they may work for organisations such as:

- The Valuation Office Agency
- Network Rail
- Smaller firms specialising in general practice and estate agency work

Accreditation

This degree course is accredited by the **Royal Institution of Chartered Surveyors (RICS)** for the Commercial Property Practice Pathway.



Interested in becoming a residential or commercial chartered surveyor? To build a rewarding career valuing, selling, managing and developing a range of different property types from houses to offices and light industrial units? Then this general property management course is for you.

It has been developed for students who wish to study a commercial surveying course at Harper Adams. There are more than 440,000 people employed in real estate activities in the UK, with a growing demand for more real estate professionals. Real Estate students graduate with specialist knowledge and experience of commercial, residential, leisure and industrial properties.



Modules are 15 credits unless otherwise stated.

harper.ac.uk/landandprop

Modern environmental land management is a challenging multi-disciplinary field, and this course will train you as an effective practitioner with good knowledge and understanding of the relevant scientific, policy and legislative frameworks as well as sound people and project management skills.

Strategies to protect our environment and to promote the sustainable use of natural resources at national and international levels are traditionally founded on the scientific principles of ecology and environmental management. Evidence-based decision-making is a critical skill, but land-based professionals must also balance social, economic and legal constraints when advising clients on land management, development and business opportunities. Promoting economically sustainable rural communities and productive farming systems, whilst addressing the threats posed by climate change, population growth and biodiversity loss are key challenges.

Our Environmental Land Management graduates will be equipped with the professional skills and scientific underpinning needed to give them a thorough understanding of the technical, economic and managerial principles of land management, alongside the cultural, ethical and policy contexts.

Key features include:

- Residential field trips in Year 1
- A range of field trips and visits to relevant local and national organisations to provide real-life experience and to meet professionals at work
- Emphasis on the integration of applied environmental science, legal and socio-economic perspectives to achieve sustainable land management solutions
- A focus on the practical application of theory to give you the skills to succeed

BSc (Hons) UCAS code D462

88 – 104 UCAS points

Year 1

- Skills for the Environmental Scientist
- Introduction to Ecology
- The Natural Environment and Climate Change
- Introduction to Sustainable Agriculture and the Environment
- Environmental Survey Technologies and Field Skills
- Contemporary Countryside and Environmental Issues
- Rural Geography and Economics
- Valuation and Estate Management

Year 2

- Research Methods for Environmental Scientists
- Planning and Development
- Wildlife Identification and Conservation
- Pollution, Ecology and Brownfield Reclamation
- Professional Services for the Environmental Land Manager
- Farming Systems and Environment
- Climate Change and Environmental Valuation

Options

- Forestry and Forest Products
- Forestry, Game and Land Management

Year 3

Placement year

Year 4

- Honours Research Project (30 credits)
- Geographical Information Systems and Land Use
- Environmental Assessment and Management
- Ecosystems and Environmental Resource Management
- Property Development and Management
- Developing and Managing Environmental Projects

Options

- UK and Global Forest Systems
- Sustainable Energy
- Events Management and Diversification
- BSc route also available

Modules are 15 credits unless otherwise stated.

If this course is of interest to you look at Wildlife Conservation and Environmental Management on page 75.

harper.ac.uk/environment

Careers

There are many career opportunities in the field of Environmental Land Management including:

- Environmental Surveyor and Auditor
- Environmental Manager
- Forestry Officer
- Land-based and Environmental Consultant
- Renewable Energy Officer
- Countryside Manager
- Environmental Education Officer

Employers in the sector include:

- Environment and land-based consultancies
- Land agents
- Statutory bodies like the Environment Agency and Natural England
- Local authorities
- National Trust
- Wildlife Trusts

Accreditation

This course is accredited by **Chartered Institute of Ecology and Environmental Management (CIEEM)** and **Royal Institution of Chartered Surveyors (RICS)** for the Environmental Surveying pathway.



Want to find out more?

To learn more about our courses, visit the below links on our website.



AGRICULTURE

Agriculture
[harper.ac.uk/agriculture](https://www.harper.ac.uk/agriculture)

Agriculture with Crop Management
[harper.ac.uk/agriculture](https://www.harper.ac.uk/agriculture)

Agriculture with Animal Science
[harper.ac.uk/agriculture](https://www.harper.ac.uk/agriculture)

Agriculture with Farm Business Management
[harper.ac.uk/agriculture](https://www.harper.ac.uk/agriculture)

Agriculture with Mechanisation
[harper.ac.uk/agriculture](https://www.harper.ac.uk/agriculture)

ANIMAL SCIENCES AND VETERINARY PROFESSIONS

Animal Behaviour and Welfare
[harper.ac.uk/animals](https://www.harper.ac.uk/animals)

Animal Health and Welfare
[harper.ac.uk/animals](https://www.harper.ac.uk/animals)

Animal Production Science
[harper.ac.uk/animals](https://www.harper.ac.uk/animals)

Veterinary Bioscience
[harper.ac.uk/animals](https://www.harper.ac.uk/animals)

Veterinary Nursing
[harper.ac.uk/vetnurse](https://www.harper.ac.uk/vetnurse)

Veterinary Physiotherapy
[harper.ac.uk/vetphyscources](https://www.harper.ac.uk/vetphyscources)

Veterinary Medicine and Surgery
[harper.ac.uk/harperkeelevetschool.ac.uk](https://www.harper.ac.uk/harperkeelevetschool.ac.uk)

Wildlife Conservation and Environmental Management
[harper.ac.uk/wildmanag](https://www.harper.ac.uk/wildmanag)

Zoology
[harper.ac.uk/zoology](https://www.harper.ac.uk/zoology)

BUSINESS MANAGEMENT

Business Management with Marketing
[harper.ac.uk/business](https://www.harper.ac.uk/business)

Agri-Business
[harper.ac.uk/business](https://www.harper.ac.uk/business)

Agri-Food Marketing with Business
[harper.ac.uk/business](https://www.harper.ac.uk/business)

ENGINEERING

Agricultural Engineering
[harper.ac.uk/engineering](https://www.harper.ac.uk/engineering)

Automotive Engineering (Off-Highway)
[harper.ac.uk/engineering](https://www.harper.ac.uk/engineering)

Mechanical Engineering
[harper.ac.uk/engineering](https://www.harper.ac.uk/engineering)

FOOD TECHNOLOGY AND INNOVATION

Food and Consumer Studies
[harper.ac.uk/food](https://www.harper.ac.uk/food)

Food Technology and Product Development
[harper.ac.uk/food](https://www.harper.ac.uk/food)

Food Technology with Nutrition
[harper.ac.uk/food](https://www.harper.ac.uk/food)

LAND, PROPERTY AND ENVIRONMENT

Rural Enterprise and Land Management
[harper.ac.uk/landandprop](https://www.harper.ac.uk/landandprop)

Rural Property Management
[harper.ac.uk/landandprop](https://www.harper.ac.uk/landandprop)

Real Estate
[harper.ac.uk/landandprop](https://www.harper.ac.uk/landandprop)

Environmental Land Management
[harper.ac.uk/environment](https://www.harper.ac.uk/environment)

Apprenticeships matter



All Harper Adams degrees prepare students for the world of employment, but a degree apprenticeship takes this to the next level.

A degree apprenticeship is a job first, with training, so you must be employed in an appropriate role to start your chosen apprenticeship. You'll avoid tuition fees and get paid for the work you do.

Harper Adams University offers a range of undergraduate and postgraduate Degree Apprenticeship programmes. Each has been developed

in conjunction with employers to deliver the best possible outcomes for both students and businesses. They focus on work-integrated learning, allowing you to gain vocational qualifications relevant to your career. Not surprisingly, there is strong competition for places. But if you miss out, you can follow the same subject by applying to an ordinary degree programme. So, you have nothing to lose and everything to gain through applying.

To find a degree apprenticeship you can work with our apprenticeship

team or go to the government's Find an Apprenticeship website. You cannot apply directly to Harper Adams, but we can direct you to vacancies. We continue to work with employers to develop new apprenticeship programmes which will be announced when they secure approval. Please keep checking back to our courses page for updates.

harper.ac.uk/apprenticeships

Food and Drink Advanced Engineer Degree Apprenticeship
Incorporating BEng (Hons) Food Engineering

5 years part-time

Careers

- Automation engineer
- Mechanical engineer
- Production engineer
- Production management
- Process development

Food Industry Technical Professional Degree Apprenticeship

Incorporating BSc (Hons) Food Science and Technology

5 years part-time

Careers

- Development technologist
- Hygiene manager
- Food technical manager
- Product innovation
- Quality manager
- Shift quality manager

Geospatial Mapping and Science Degree Apprenticeship

Incorporating BSc/BSc (Hons) Geospatial Sciences

5 years part-time

Careers

- Utilities
- Geospatial surveying

Chartered Surveyor (Rural) Degree Apprenticeship

Incorporating BSc (Hons) Rural Enterprise and Land Management

5 years part-time or 2 years part time at level 7

Careers

- Chartered Surveyor (rural pathway)
- Land and Estate manager



A solid foundation

Helping you to enter higher education.

For students who want to work towards a degree but don't meet the entry requirements, extended foundation degrees and extended degrees provide a pathway to degree study at Harper Adams University. All routes involve an additional preparatory year, success during which will determine

which courses you can progress to. All extended routes have minimum requirements at GCSE level.

To find out whether you might qualify, contact our admissions team on:
E: admissions@harper-adams.ac.uk
T: 01952 815 000

FdSc Agriculture (Extended) (D407)

To progress to one of:

- FdSc Agriculture
- FdSc Agriculture with Mechanisation

Achieve 40% overall in year 0 and 10 weeks' work experience before starting year 1

To progress to one of:

- BSc (Hons) Agriculture
- BSc (Hons) Agriculture with Mechanisation
- BSc (Hons) Agriculture with Animal Science
- BSc (Hons) Agriculture with Crop Management
- BSc (Hons) Agriculture with Farm Business Management

Achieve 60% overall in year 0 and 10 weeks' work experience before starting year 1

To progress to one of:

- BEng (Hons) Agricultural Engineering
- BEng (Hons) Automotive Engineering (Off-Highway)
- BEng (Hons) Mechanical Engineering Management

Achieve 60% overall and a satisfactory interview with a member of the Engineering course team

BSc Animal Behaviour and Welfare (Extended) (XD04)

To progress to:

- BSc Animal Behaviour and Welfare

Achieve 40% overall in year 0

To progress to one of:

- BSc (Hons) Animal Health and Welfare
- BSc (Hons) Animal Behaviour and Welfare (Clinical or non-Clinical)

Achieve 60% overall in year 0

To progress to:

- BSc (Hons) Animal Production Science

Achieve 65% overall in year 0

BSc Applied Zoology (Extended) (XD05)

To progress to:

- BSc Applied Zoology

Achieve 40% overall in year 0

To progress to one of:

- BSc (Hons) Applied Zoology
- BSc (Hons) Zoology with Entomology
- BSc (Hons) Zoology with Environmental Management

Achieve 40% overall in year 0

BSc Veterinary Bioscience (Extended) (XD03)

To progress to:

- BSc Veterinary Bioscience

Achieve 40% overall in year 0

To progress to:

- BSc (Hons) Veterinary Bioscience

Achieve 65% overall in year 0

To progress to:

- BSc (Hons) Veterinary Physiotherapy

Achieve 60% overall in year 0 and Biology A-level at grade C or equivalent and 4 weeks' work experience before starting year 1

To progress to one of:

- BSc (Hons) Veterinary Nursing
- BSc (Hons) Veterinary Nursing with Small Animal Rehabilitation
- BSc (Hons) Veterinary Nursing with Companion Animal Behaviour

Achieve 60% overall in year 0 and 4 weeks' work experience before starting year 1 and completion of fitness to practise documentation

BSc Veterinary Bioscience with access to Veterinary Medicine (Extended)(XD01)

To progress to:

- Bachelors in Veterinary Medicine and Surgery (BVetMS) at the Harper & Keele Veterinary School

Achieve a 70% pass during the preparatory year, pass a Multiple Mini Interview (MMI) assessment and complete fitness to practise assessment

Students who fail to meet the Veterinary Medicine route criteria will still have options to progress onto the BSc or BSc Honours Veterinary Bioscience degrees at Harper Adams providing they meet the respective pass thresholds of 40% and 65% respectively.

BSc Wildlife Conservation and Environmental Management (Extended) (XD07)

To progress to:

- BSc Wildlife Conservation and Environmental Management

Achieve 40% overall in year 0

To progress to one of:

- BSc (Hons) Wildlife Conservation and Environmental Management
- BSc (Hons) Environmental Land Management
- BSc (Hons) Rural Property Management
 - BSc (Hons) Rural Enterprise and Land Management

Achieve 60% overall in year 0

BSc Business Management with Marketing (Extended) (XD08)

To progress to:

- BSc Business Management with Marketing
- BSc Agri-Business
- BSc Agri-Food Marketing with Business Studies

Achieve 40% overall in year 0

To progress to:

- BSc (Hons) Business Management with Marketing
- BSc (Hons) Agri-Business
- BSc (Hons) Agri-Food Marketing with Business Studies

Achieve 60% overall in year 0

BSc Food and Consumer Studies (Extended) (XD09)

To progress to:

- BSc Food and Consumer Studies

Achieve 40% overall in year 0

To progress to:

- BSc (Hons) Food and Consumer Studies
- BSc (Hons) Food Technology and Product Development
- BSc (Hons) Food Technology with Nutrition

Achieve 60% overall in year 0

The following degrees accept candidates who have completed year zero of any of the above programmes, with a 60% pass. For engineering, candidates must also succeed in an interview with the engineering team.

- BEng (Hons) Agricultural Engineering
- BEng (Hons) Automotive Engineering (Off-Highway)
- BEng (Hons) Mechanical Engineering
- BSc (Hons) Rural Enterprise and Land Management
- BSc (Hons) Rural Property Management

Postgraduate study

Postgraduate study routes at Harper Adams University.

We offer a range of postgraduate courses to expand your knowledge of a chosen area, inspire you and to enhance your career prospects. You might be seeking to further develop or change your professional career path. Our specialist programmes offer

industry-leading research, innovative future thinking and expertise to enable you to grow your skills. While ambition is certainly visible among our postgraduate students, what is most evident – and often most impressive – is their passion for their subjects,

which makes the learning and teaching journey all the more rewarding. All of our postgraduate programmes are taught via block delivery, which offers flexibility making it possible to study whilst also working or upholding other commitments.

Advanced Veterinary Nursing

Agricultural Economics

Agricultural Law

Agricultural Sciences and Production Systems

Agroecology

Applied Mechatronic Engineering

Business Economics

Conservation and Forest Protection

Data Science for Global Agriculture, Food and Environment

Ecological Applications

Engineering Business Management

Entomology

Forestry Management

International Agri-Business and Food Chain Management

next steps



Integrated Pest Management

Master of Research

Plant Health and Biosecurity

Plant Pathology

Ruminant Nutrition

Rural Estate and Land Management

Rural Property Management

Veterinary Physiotherapy

Plus, a suite of programmes for veterinary surgeons to develop specialisms, delivered in association with Improve International.

harper.ac.uk/postgrad



Disclaimer

Whilst every opportunity has been taken to ensure the accuracy of the information in this prospectus Harper Adams University wishes to emphasise that the content is regularly reviewed and is subject to change from time-to-time as required. We do not accept responsibility for any errors, misdescription or subsequent alterations that may be necessary. Our courses and services undergo reviews to ensure they are flexible, relevant and as up-to-date as possible. It is the responsibility of potential students to check the accuracy of relevant facts with the appropriate department before entering any financial or other commitment based upon them. To note the information contained within the prospectus may have changed when it was published in January 2021. For the most up-to-date information about Harper Adams University please visit www.harper-adams.ac.uk and the Harper and Keele Vet School harperkeelelevetschool.ac.uk

© No part of this publication may be copied or reproduced in any way without the permission of the publishers.



**A degree
that
matters.**