

Equestrian Sports Science (with Foundation Year)

BSc (Hons)

Equestrian sport has two athletes - the horse and rider, so is a particularly unique sport. If you're interested in improving horse and rider performance and want to learn more about the way these two athletes interact, then this is the ideal course for you.

The foundation year entry provides an alternative route into degree-level study. It's ideal for those who need to gain subject-specific knowledge and skills in order to progress with the full BSc qualification.

[Apply now via UCAS](#) [Book an open day](#)

Key Information

Course Duration: 4 or 5 years full-time; part-time available

UC UCAS Code: DF46

Part or Full Time: Full Time / Part Time

Level of Study: Foundation Year Degrees

Placement Year: Optional

Typical Offer: 32-48 UCAS tariff points or equivalent

Course information

[Download a PDF](#)

Overview Entry requirements Employability How you'll study

On this course, you'll be studying both human sports science and equestrian performance, to better understand how the horse and rider can be improved to enhance performance. You'll learn how to assess both horse and rider performance, monitor and track progress, and implement interventions to aid and enhance successful competitive performance, backed up by scientific evidence and knowledge.

You'll apply what you learn to real-world scenarios using our on-site commercial facilities, including a dedicated rider performance centre, Equine Therapy Centre and human performance laboratory. Alongside this, you could also gain experience at our international equine events, which attract competitors, sponsors, and spectators from around the globe.

You don't need to be able to ride to undertake this degree programme, you simply need the passion and drive to want to improve performance in equestrian sport, and an interest in the rider as an athlete.

The course is ideal for those with a keen interest in the scientific principles of sport performance, and those seeking a career at all levels, from grassroots to professional-level equestrian sport.

- **UCAS** | A typical offer for this course is 32-48 UCAS tariff points or equivalent.
- **GCSE** | A minimum of five GCSEs at grade 9 to 4, (or A* to C grades if relevant) or equivalent, to include English Language and Mathematics.
- **A-level** | Typical offer is EE-DD or equivalent. This must include a minimum of two A-levels.
- **Vocational Award** | Typical offer is a PPP in an Extended Diploma in a relevant subject.
- **Access** | Typical offer is 32-48 UCAS tariff points in an Access to Higher Education Diploma.
- **IB** | Typical offer is 32-48 UCAS tariff points in an IB Diploma, to include a minimum of one Highers at H3 or above.
This must also include Maths and English Language at a minimum of Standard Level S3 if equivalent GCSEs have not been obtained.
- **Scottish Highers** | Typical offer is 32-48 UCAS tariff points in Scottish Highers. This must include a minimum of one Advanced Higher.
- **Irish Leaving Certificate** | Typical offer is 32-48 UCAS tariff points in the Irish Leaving Certificate. This must include a minimum of one Highers.
This must also include Maths and English Language at a minimum of Ordinary Level.
- **OCR Cambridge Technical** | Typical offer is a PPP in a Cambridge Technical Extended Diploma in a relevant subject.
- **T Level** | Typical offer is Pass in your T Level overall grade in a relevant subject.

We welcome students with equivalent qualifications. Please contact us to discuss.

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

Previous learning towards a university-level qualification or relevant work experience may count as credit for this course.

Please contact us for further information.

[Email us](#)

Your career

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

Work placements and experience

You can undertake an integrated placement year as part of this course to gain skills, experience life in the industry and advance your CV and networks. We'll support you to secure a placement with a UK-based or international employer, to match your interests and career goals. Placements can be paid or unpaid, depending on the position.

On-campus opportunities

Commercial businesses on campus also offer opportunities for you to gain industry experience ready for your career. We'll encourage you to find voluntary or part-time roles such as working for local sports teams, volunteering, working at racehorse or sports horse training yards, our own Equine Therapy Centre, or within gym settings.

Field trips and guest lecturers

Field trips and industry professionals in lectures form an important part of your learning, enabling you to experience different businesses, careers and best practices.

Previous trips on this programme have included visits to the Injured Jockeys Fund – Oaksey House, Your Horse Live, and the Kurtsystem at Kingwood Stud. Extra fees may be required for some trips – please see the fees tab.

Recent guest lecturers have included specialists in equine biomechanics, sports nutritionists, coaches, expert researchers in horse and rider performance, and the Chef d'Equipe for GB Endurance.

Graduate destinations

As an Equestrian Sports Science graduate, you may go on to work in performance analysis, rider fitness or athlete development. You'll have the transferable skills you need for other graduate careers too. Our careers team can support you to find and prepare for your perfect role.

Recent graduate destinations have included:

- Founder & Lead Performance Analyst - Equestrian Performance Analysis
- Equine Performance Manager, Equinara
- Sports Nutritionist, University BUCS teams
- Founder of Dynamic Sports Performance Hub
- Education and Pathways Officer, Equestrian Victoria
- Racing Curriculum Assistant, Hong Kong Jockey Club
- Postgraduate Study (Equine Science, Sport and Exercise Psychology, Strength and Conditioning, Performance Analysis)

Success Stories

Your support network

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

Academic support

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

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

Your learning experiences

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

Your career

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

Modules

Overview Level three foundation year (year one) Level four (year two) Level five (year three) Integrated placement year (optional)/Level six (final year)

What you'll study

This course covers the fundamental sports science and performance topics, from biomechanics and physiology to performance analysis and psychology, all applied to the horse and rider. The aim is for you to understand the science that underpins successful horse and rider partnerships, for both the human and equine athlete.

The course is made up of both compulsory and optional modules, which means you can specialise your learning to suit your interests and career goals. Optional modules change each year in line with student, industry and research demands - you'll find recent topics studied below. You can attend introductory sessions for optional modules before deciding which ones to study.

Module credits

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

Your foundation year will focus on lectures in equine, study skills, science and/or management depending upon your previous academic background. Across the year, you'll be supported to enhance your skills and knowledge to ensure you are fully prepared to succeed in year one.

Compulsory Modules

Foundation Skills Development

Understand scientific method and enquiry, team working, research skills and effective time management.

Academic Skills in Practice (Internship)

Develop reflective, practical and transferable skills in preparation for level four study based on an internship role at Hartpury linked to your programme of study.

Reviewing Literature

Develop your understanding and knowledge of literature reviews, including constructing a rationale, summarising and presenting relevant information to suit a purpose, subject and audience.

Foundation Equine Studies

An introduction to central anatomy, physiology, welfare and health that underpin best husbandry and management practices, along with key legislation and health and safety requirements in the equine industry.

Foundation Biological Principles

Study fundamental biological aspects to understand how organisms come about and how they function and operate for survival and performance.

During this year you'll study how the bodies of both the horse and rider function, developing your expertise in human and equine anatomy and biomechanics. You'll also explore the equestrian sports industry and rider psychology. This year is about building the fundamentals which will underpin your course, equipping you with the knowledge to study at higher levels.

Compulsory Modules

Equine Functional Anatomy

Learn about the biological systems of the horse and how they interact.

Introduction to Functional Anatomy and Sports Biomechanics

Acquire an understanding of human anatomy and the study of human movement within different sports.

Introduction to Sport and Exercise Psychology

Learn the key theories in sport and exercise psychology to understand behaviours.

Introduction to Equestrian Performance

An introduction to the equine industry and performance in various equestrian sports.

Introduction to Exercise Physiology

Understand the basic physiology of the muscular, cardiovascular, respiratory systems and more.

Optional Modules

Equitation

You'll need to be riding at BHS Stage 2 or equivalent to enrol on this module. Develop your riding knowledge and refine your ability to assess the horse in terms of improving performance. Please be aware that Hartpury Equine operates a weight limit of 15 stone (or 95kg) for flatwork and 14 stone (or 89kg) for jumping.

Equitation (Theory)

Students will develop their knowledge of equitation and their ability to assess the horse's way of going.

During this year, you'll cover a range of concepts that focus on the demands of performance on both horse and rider, considering how to improve performance within different equestrian disciplines. Your compulsory modules will focus on equine performance, and horse and rider interaction, whilst your optional modules will allow you to specialize in particular human sports science topics, such as performance analysis or physiology.

Compulsory Modules

Equine Exercise Physiology

Equine Exercise Physiology explores the range of short-term physiological responses and the long-term physiological adaptations that equine body systems undergo during various intensities of exercise and training. The module considers how this might be used to optimise training for improved performance, delayed fatigue, and a reduced risk of injury.

Horse and Rider Performance

The module examines equine and rider performance in various equestrian disciplines.

Research Methods for Equine Science

This module introduces students to research methods and analysis in equine sciences, helping to prepare them for reading research literature and conducting research projects in the future.

Introduction to Equine Biomechanics

Introduction to Equine Biomechanics aims to create a solid foundation of understanding of the key biomechanics concepts applied to equine and equestrian examples.

Optional Modules

Applied Biomechanics in Sport

Students problem-solve issues within sport & exercise, referring to biomechanical principles.

Applied Performance Analysis

Students actively collect, analyse and feedback performance analysis data.

Exercise Physiology

This module covers how the body adapts - acutely and chronically - to exercise.

Sport Psychology

Learn and apply psychological skills to improve athlete performance.

Integrated placement year (optional)

An optional integrated placement year before your final year gives you the opportunity to put your knowledge and skills into practice and gain valuable industry experience. Many students gain their graduate roles with the organisation with which they undertook their work placement.

Level six (final year)

This final year allows you to really focus on areas of particular interest to you, in line with your future career. One module is your dissertation, a substantial research project that enables you to plan, implement and report on a specialist topic. Alongside this, you'll consider the science underpinning athlete development in equestrian sport, and develop your ability to recommend successful interventions to improve performance. In addition, you'll gain an insight into where current research is heading within equestrian sports science and performance.

Compulsory Modules

Undergraduate Dissertation

You'll partake in independent research and analysis in a related area with one-to-one support from an academic.

Developing and Managing Human Athletes in Equestrian Sport

This module critically evaluates the development routes for equestrian athlete, including the efficacy of athlete intervention strategies.

Optional Modules

Applied Equine Biomechanics

The Applied Equine Biomechanics module utilises the University's Rider Performance Centre and biomechanical analysis resources to support students in applying and implementing biomechanical principles and theoretical concepts to practical research and industry scenarios.

Applied Sport and Exercise Physiology

Carry out physiological assessments on the field and in our laboratories, and interpret athletes' exercise data.

Biomechanics in Sport Practice

Application and justification of the use of advanced biomechanical analysis within sport and exercise.

Performance Analysis in Practice

Students apply and evaluate the impact of performance analysis techniques within the coaching cycle.

Sport Psychology in Action

The purpose of this module is to give students a real picture of sport psychology in action by providing the framework from which psychological techniques can be applied to facilitate psychological and performance outcomes.

Teaching modes

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

The foundation year includes an internship using Hartpury's on-site facilities and industry links.

The programme is taught in English.

Year	Contact learning	Placement learning	Independent learning
Level three (year one)	30%	0%	70%
Level four (year two)	25%	0%	75%
Level five (year three)	24%	0%	76%
Placement year (optional)	1%	80%	19%
Level six (final year)	18%	0%	82%

Assessment and Feedback

You'll be assessed through a mixture of written exams, practical exams and written assignments. Many of the modules will be marked based on a mixture of assessment types, whilst others will be based solely on one type of assessment. Feedback will be given in accordance with the assessment cycle and will include key feedback against the marking criteria, suggestions, and signposting to additional resources that will support you in future work.

Year	Written exam	Practical exam	Coursework
Level three (year one)	28%	44%	28%
Level four (year two)	41%	41%	18%
Level five (year three)	22%	38%	40%
Placement year (optional)	0%	0%	100%
Level six (final year)	0%	40%	60%

Timetables

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

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

[View term dates](#)

Fees and funding

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

Below, you'll find extra costs associated with studying this course.

Clothing and footwear

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

Hartpury University branded clothing is also available through our online shop, for those who wish to purchase it, however, this is not essential.

Accommodation and living costs

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

Optional trips and activities

Throughout the programme, optional courses, trips and activities are offered to students, sometimes at an additional cost. These are offered with a sufficient notice period to allow you to save or apply for financial support as outlined on our finance page above.

Livery

We have stabling for 230 horses on campus. If you're interested in having your horse at Hartpury on DIY livery while you study, please [visit our livery page for details and costs](#).

Equine Academy

If you have the talent and drive to develop your skills as an equestrian athlete alongside your studies, you may be eligible to join our Equine Academy. For further details including costs, please [visit our Equine Academy page](#).

[Fees & Finance](#)

Further course details

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

[Resource library](#)

Academies

If you're playing sport competitively, or you have the talent and drive to do so, you may want to join one of our Sports Academies. Over 200 international athletes have developed their talents with us over the past 10 years. You could be our next success story. We're a semi-professional sports environment offering world-class facilities and professional coaching and support services.

Accommodation

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

Finance

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

TEF Gold

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

Teaching quality

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

Graduate employability

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

Academic support

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

Become a game changer

World-class equine facilities

Benefit from multi-million-pound equine facilities, used by world-class riders and horses from across the globe.

From research opportunities in our rider performance and hydrotherapy centres, to client-facing positions in our commercial therapy centre, you'll develop professional skills for the future.

[Equine facilities](#)

Success stories

Daniel's story

[Success Stories](#)

[Daniel's story](#)

“Being at Hartpury gives me a lot of flexibility to combine my riding and get the support I need with my degree. The Achievement and Success Centre, in particular, has given me a lot of help. It's meant I've done well academically. Getting a degree has been really rewarding.”

Daniel Olley

BSc (Hons) Equine Business Management

"Completing my work placement at Hartpury's summer equine events was a great experience. I learnt how to run events, secure sponsorship deals, organise volunteers, and ensure arenas and stables are ready for competitors. I even got to compete in an event myself. I built contacts and connections with a range of people, including the Hartpury Equine management team, which lead to my role as Yard Technician today."

Clarissa Burnell-Price

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Clarissa Burnell-Price

High-performance equine environment

We have an international reputation for equine education. Our students are challenged to reach new heights in their fields.

If you're passionate, hard-working and motivated to make a difference, we'll give you the skills and connections to channel this energy into an exciting equine career. Whatever your career aspirations, you'll find plenty of opportunities to gain experience on and off campus.

[Watch via YouTube](#)

Important information

Every effort has been made to ensure the accuracy of our published course information, however our programmes are reviewed and developed regularly. Changes or cancellation of courses may be necessary to ensure alignment with emerging employment areas, to comply with accrediting body requirements, revisions to subject benchmark statements or as a result of student feedback. We reserve the right to make necessary changes and will notify all offer-holders of changes as and when they occur.