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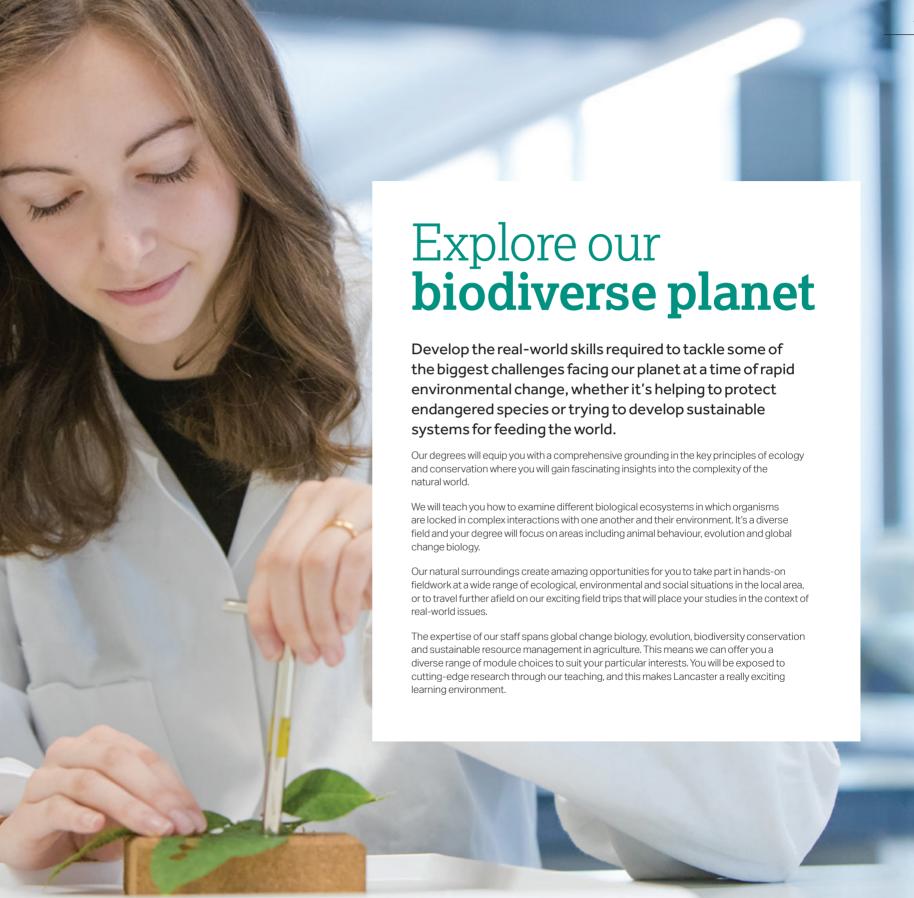
Come and meet us

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Connect with us

- f @LancasterEnvironmentCentre
- alancaster_environment
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Made for learning

There has never been a better time to study ecology and conservation. At Lancaster, you will become part of an internationally recognised environment centre where you will be taught by leading experts in ecology and conservation biology. **Our multidisciplinary** team will provide you with a fundamental understanding and hands-on experience of these research areas giving you the key skills required for a career in ecological research or industry.

Flexible and interdisciplinary

We believe that you will excel in your degree when given the opportunity to explore in depth the areas of ecology and conservation that interest you the most. Your first year of study will give you the foundation, knowledge and skills you need before specialising in your second and third years.

What's more, studying in a multidisciplinary department gives you the unique opportunity to expand the breadth of your degree by taking complementary modules in environmental science or geography.

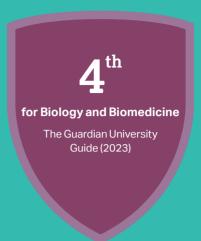
Practical study

You won't just learn in lecture theatres at Lancaster! We believe that ecology and conservation are best appreciated through hands-on practical experience, whether that is in the field or in our new teaching labs. Practical learning enables you to put theory into practice, providing a deeper understanding of the subject, whilst also developing skills which will be of use throughout your degree and future career.

Industrial links

We give you the opportunity to enhance your CV throughout your degree, which is crucial for standing out in the graduate jobs market.

Our in-house Enterprise and Business Partnerships team engages with hundreds of different businesses and organisations, giving you fantastic opportunities to work alongside these partners through internships or even during your dissertation project.



and
for Biomedical Sciences
Complete University
Guide (2024)

for Biosciences
The Times Good
University Guide
(2023)

Lancaster Environment Centre is the University's largest department, with newly enhanced facilities, teaching rooms, laboratories and social spaces.



Field and laboratory facilities

We provide you with access to our study sites and cutting-edge field and laboratory equipment. We even have our own field station just a kilometre away at Hazelrigg, where high quality weather measurements have been made daily since 1966.

State-of-the-art laboratories

Spread over two floors, our teaching laboratories can house over 200 students and are the location for many practical classes. These will provide you with hands-on experience that puts theory into practice. You can also use this facility as part of your dissertation project, for example undertaking controlled experiments or processing field samples.

Equipped for achievement



Making connections

You can take advantage of our shared facilities (laboratories and offices) with the Environment Agency and 26 businesses in our purpose-built Gordon Manley Building, a facility to encourage commercial sector partnerships. We are also home to the UK Centre for Ecology & Hydrology (UKCEH), an independent not-for-profit research institute, and the partnership feeds into teaching and research, providing additional expertise and facilities.

Environmental community

The atrium at the heart of Lancaster Environment Centre forms a home for our community of high-achieving students, world-class environmental researchers, government scientists and enterprises working together to address today's biggest environmental challenges. The eco-friendly design of this space extends from the 100% recycled flooring, to the glazed roof, designed to reduce the need for lighting within this communal space.



Aplace for Eve



Eve McSpadden, BSc Hons Ecology and Conservation



When did you know that Lancaster was the university for you?

I knew when I came to an applicant open day here. The staff and students were so warm and welcoming, and the department felt like an amazing place to be straight away! I knew the course at Lancaster was perfectly suited to me, and Lancaster Environment Centre and the campus in general really felt like a place I could call home, and I was right! I couldn't imagine being anywhere else.

Lancaster University has all the facilities I could have needed such as shops, bars, a sports centre, food outlets and lovely modern accommodation. The college system helped me to fit in and make friends straight away too, with college events being run throughout each term. The city itself is also the perfect size, not too big and not too small, with lots of events and places to see.

What stood out about your course?

The Ecology and Conservation course at Lancaster really is like no other. There is a broad range of modules available to cover lots of exciting and interesting topics throughout all three years, and lots of flexibility in which modules you can choose. You also get the opportunity to choose a minor subject in your first year as well as your major, whether that be one in LEC, or even from outside the department. At Lancaster, you learn about the important and innovative research going on here and now, and even get to conduct your own.

My particular area of interest is biodiversity and conservation, and my course has allowed me to delve deeper into this topic with modules such as 'Issues in Biodiversity and Conservation' and 'Principles of Biodiversity Conservation'. These modules have driven my curiosity to learn more and pursue a career in this area after university.

Do you get opportunities to put your skills into practice?

I went on field trips to places like Windermere aquarium and Arnside Knott before the pandemic hit during my first year. On these trips I got to fully immerse myself in what I had been learning about in my lectures, allowing me to contextualise my studies and learn more about the subjects covered in my modules.

Lancaster Environment Centre also put on an optional field course module during my third year to make up for the lack of field trips my year had been on due to COVID-19, including trips to see re-wilding efforts in Cumbria and a bat walk along the Lancaster canal. There was also a field biology module at the end of my second year where I spent a week on and around campus learning field skills, sampling techniques and plant and insect identification. These modules allowed me to gain knowledge and skills in various aspects of biological fieldwork and enhance my employability for after university. They were also extremely enjoyable modules which further increased my passion for ecology!

Learning on location



We take full advantage of our natural surroundings to create amazing fieldwork experiences in addition to providing opportunities to travel the world with residential overseas field trips.

When it comes to understanding ecology and conservation, there is no substitute for fieldwork. You will gain hands-on experience of a wide range of ecological, environmental and social situations in the local area and overseas.

Local field excursions

Nestled between the Lake District World Heritage site, Yorkshire Dales National Park and several Areas of Outstanding Natural Beauty, Lancaster is perfectly placed for studying ecological processes and conservation in action.

Scotland

The island of Mull is a unique place to experience some amazing landscapes, from mountains to coasts, and to learn about the ecology of key animal and plant species. Each day you will visit a variety of habitats with the aim of understanding the landscape, key species within it, and the conservation and management issues they face. You will also get to know the spectacular flora and fauna of the region, with a great chance of encountering red deer, otters, golden and white-tailed eagles and a variety of seabirds.



Local nature reserves

Develop your understanding of how conservation theory is put into practice with visits to the Forest of Bowland, Leighton Moss RSPB and Warton Crag.

Silverdale

We're just a stone's throw away from the Arnside & Silverdale Area of Outstanding Natural Beauty, where you will learn about rare local species and habitats and how to protect them.

Kingsdale

Learn how the climate and environmental conditions have changed over the past 500 million years, whilst developing your field and observational skills, during a trip to Kingsdale in the Yorkshire Dales.



Spain

Home to over 1500 species of plants, 400 species of birds and 50 terrestrial mammals, Doñana National Park is one of the most important biodiversity hotspots in Europe. You will explore the diversity of the species and habitats in the area, and gain an understanding of the role of the National Park in conservation. You will also gain practical experience of identification, critical observation and the accurate recording of plants, invertebrates and birds.

Switzerland

This is an intensive week-long residential field trip to south west Switzerland. You will select from one of six interconnected study themes to explore in depth, spanning: alpine climate and hydrology; glacial processes; alpine rivers; streams; soils; and ecosystems. Through the collection of significant amounts of field data on your chosen theme you will gain an in depth understanding of a particular thematic focus of alpine environments.

Eden Project

This is a new week-long residential field trip to explore the flora, fauna and soil ecology of Cornwall, and the conservation efforts underway to restore the natural habitats of this unique region. Guided by staff from Lancaster and the Eden Project, you will experience various activities focused on biodiversity and conservation, including a tour of the Eden Project and plant and nesting bird surveys, as well as studying examples of conservation in practice, such as 'A history of mining,' 'Lizard Peninsula coastline vs heathlands' and 'Roseland Peninsula marine habitats'.



– Eden Project; photo taken by Jürgen Matern (CC-BY-S.

The place for the researcher

Renowned experts, at the forefront of their fields, are shaping our understanding of the world. Their work feeds into our degree programmes, ensuring that your education is informed by cutting-edge thinking. During your degree you'll conduct your own independent research project where you'll benefit from the research experience of our internationally renowned staff and be exposed to the latest technology used in a cutting-edge research laboratory.



Time is running out in the tropics

A study led by Professor Jos Barlow contributed to the first high-level report on the state of the world's most diverse tropical ecosystems such as tropical forests, savannahs, lakes and rivers, and coral reefs.

The tropics, which cover 40% of the planet, are home to more than three-quarters of all species, including almost all shallow-water corals and more than 90% of the world's bird species. Most of these species aren't found anywhere else and millions more are yet unknown to science.

However, our research has shown that a global biodiversity collapse is imminent unless we take urgent, concerted action to reverse species loss in the tropics.

We are already familiar with the impact of climate change on the Polar regions, and it is now vital that we are aware of the consequences of this across the tropics, as it also threatens the well-being of millions of people across the planet.

Our research has outlined the actions needed to revive the health of our ecosystems to help avoid the loss of tropical diversity, as many species face a double jeopardy of being harmed by local human pressures, such as overfishing or selective logging, and droughts or heatwaves linked to climate change.

Professor Jos Barlow's work, alongside our researchers, concluded that the best way forward to revive the health of ecosystems is to call for a step-change solution to support sustainable development, conserving and restoring tropical habitats.

Trees for bees

A study led by Dr Philip Donkersley identified that planting more hedgerows and trees holds the key to boosting the UK's bee population with the help of artificial intelligence.

Our research suggests that artificial intelligence could be used as a tool to design landscapes so that trees, hedgerows and wildflowers are planted in the right location and the right numbers to ensure bees and other important insects have enough food to play their vital role in pollinating plants and crops.

These insects face a long-term decline across Europe, believed to be accelerated by modern farming practices destroying any suitable habitats for the pollinators.

Dr Philip Donkersley proposes the creation of new artificial intelligent algorithms to help redesign the landscape, which informs farmers and other landowners where to most efficiently, and costeffectively, plant trees and hedgerows, along with wildflowers, to provide plentiful food and landmarks for the pollinators to thrive.

Trees are preferred by bees and other pollinators due to their greater food density; there are more flowers within a small area on a blooming tree in comparison to a flower meadow. They also act as a physical landmark, which pollinators use to navigate their way across the landscape from their hive to foraging grounds.





Rats and coral reefs

Professor Nick Graham and our researchers are working to protect threatened environments from invasive predators, such as rats. They are having a damaging impact on the coral reefs that encircle and protect many remote tropical islands.

The research has shown that the rats, by feeding on bird eggs, chicks and even adult birds, have decimated seabird populations in 90% of the world's temperate and tropical island groups, but these seabirds are important to these kinds of islands due to the nutrients in their droppings.

Our researchers were able to study the effects that rats have on the ecosystem of the Chagos islands in the central Indian Ocean. This was a perfect 'laboratory' setting due to some of the islands being rat-free, while black rats infest the others. This unusual sitation enabled the researchers to show that the rats were harming not only the ecology of the islands, but the surrounding sea and adjacent coral reefs as well.

Not only did the rats have a detrimental effect on the fish life and algae, but also the way that the islands' vulnerable ecosystems function. The results of the study showed that rat eradication should be a high priority on oceanic islands and could tip the balance for the future survival of coral reefs and their ecosystems.

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Your **study**

Our academics are leaders in their fields of research and deliver enthusiastic and engaging teaching through a range of methods.

Lectures

Lectures provide an introduction to the key issues and findings in each topic and are delivered by an expert in that particular field. They usually last an hour, and should be complemented by further independent study by reading relevant literature on the topic. We provide online reading lists, suggesting suitable books and journals that are available either digitally or in print from our library.

Tutorials

Tutorials are usually one-hour sessions where you will be encouraged to discuss your learning with a small group of fellow students, under the guidance of a tutor. During these in depth study sessions, you will become used to speaking out, listening to others and learning to increasingly present yourself with confidence. You'll become experienced in being part of a team and explore the topics under study together.





Practical classes

These are designed to help you discover the key principles underpinning the topic of study, whilst also developing your skills which you will be able to put to use throughout your degree and future career. Practical classes could range from computer-modelling sessions, through fieldwork, to the opportunity to conduct experiments in our laboratories.

Assessment

The assessment process varies across modules, but includes laboratory reports, essays, independent project reports, group presentations, multiple-choice tests and exams. Assessment is an on going process, rather than being left solely until the end of the degree. This means we are able to offer feedback to you throughout your degree and, equally as important, it relieves pressure on you when modules are examined at the end of each year.

Academic support

We foster a highly supportive learning environment, making sure that you are fully supported to achieve your full academic potential. This includes access to our Student Learning Developers, who offer workshops and advice on improving your academic skills, and also assigning you an Academic Tutor who you will meet with regularly throughout your degree to discuss your progress.

For more information, please visit www.lancaster.ac.uk/ecology

Placement year

Taking our Placement variant provides the opportunity to spend your third year working in a professional role as a full-time employee in the type of organisation that you might aspire to join when you graduate. Being able to demonstrate professional experience of working on a range of important and interesting projects, where you get to apply the theory you've learned in your first and second year, is invaluable when competing in the job market. It's also a great way to work out what you do, or don't, want to do once you complete your studies!

Finding and securing a placement opportunity is down to you, just as it would be when applying for a graduate vacancy. However we will provide you with plenty of support and guidance in preparing you for interviews, writing your CV, applying for positions and even taking part in assessment centres.

We also have well established and long-standing links with industry which means that we'll have a number of placement opportunities just for Lancaster students.

Professional experience

Our MSci Ecology and Conservation (Professional Experience) degree allows you to undertake a seven-week placement with a graduate employer gaining valuable real-world experience. This advanced qualification may also give you a competitive edge in the graduate jobs market by equipping you with the extra experience, knowledge and skills that come with studying Masters-level modules and carrying out a second dissertation.



Environmental volunteering

Our Green Lancaster scheme provides you with plenty of opportunities to become more sustainable and promote positive environmental choices, and the many nearby nature reserves offer volunteering opportunities.

Eco-innovation

Eco-innovation is the development of new products, processes or services that support business growth with a positive environmental impact. This second year module will not only provide you with a knowledge of eco-innovation and how the concept relates to business opportunities, but you'll also acquire the knowledge and skillset required to understand how organisations apply eco-innovation into their business planning. As a part of the module, you will learn how to create proposals for eco-innovation and prepare presentations for a panel of experts.





Enhance your studies, boost your self-confidence and immerse yourself in the culture of another country as part of our exciting opportunities to study overseas.

Study abroad

Broaden your academic horizons by spending third year studying in either North America or Australasia. You'll study similar modules to those available at Lancaster whilst gaining an understanding of a different culture and society.

Other opportunities abroad

There are other options for students who are not on the Study Abroad programme, e.g. shorter travel options during the summer holidays. For more information, please visit https://www.lancaster.ac.uk/study/global-experiences/

We also hope to maintain and have a number of new opportunities for short study placements across Europe and beyond. These opportunities, which you would be able to sign up for, will be announced as they become available.

Student support

Studying on the other side of the world can be a daunting prospect. In addition to having a dedicated advisor, who will help you decide where to go and what to study, you'll also have the opportunity to network with students who have studied abroad previously and can provide you with a wealth of practical tips. Additionally, our International Office is on hand to help you with application forms and the financial and legal aspects of studying abroad.

Fees and funding

Details about the costs of Study Abroad, which can be used as a quideline, can be found at:

https://www.lancaster.ac.uk/ study-abroad/

Hello Future

You can pursue a wide range of careers with the skills and experience you gain from any of our degree programmes. Our recent graduates have progressed into a diverse range of roles, from Ecological Consultant for international project management organisations to Research Scientist for the British Antarctic Survey.

An example of the types of career you may choose to pursue

- + Ecological Consultant
- + Ecological Researcher
- + Ecologist
- + Environmental Consultant
- + Environmental Planning Assistant
- + Reserve Manager

- + Resource Management Scientist
- + Science Teacher
- + Trainee Accountant
- + University Lecturer
- + University Professor

Whatever your career aspirations may be, or even if you're still not quite sure, we're here to support you to reach your goals.

You will undertake a module in employability skills, giving you excellent preparation for applying to graduate-level jobs and graduate scheme, and our dedicated Careers Service is here to assist you every step of the way. From helping you make a lasting impression with your CV to ensuring you are well prepared for interviews and assessment centres, they are able to offer you tailored and personalised support. What's more, they provide lifelong careers support to our graduates so, if you need us, we will always be here to help.

Career development

We offer you a wealth of opportunities to enhance your employability and help you develop the skills to succeed in the workplace.

Internships

Relevant work experience is crucial to achieving a good graduate job, and through our internship programme, you'll have the opportunity to apply your knowledge to real-world situations whilst developing transferable skills.

Dissertation with external partner

Our in-house enterprise team engages with hundreds of businesses and organisations, giving you the unique opportunity to research environmental solutions to real-world problems.*

Working in the community

Lancaster has a thriving volunteer culture and our Students' Union provides opportunities to work with schools, charities or other local organisations. This is a great way to enhance your CV whilst making a positive difference in the local community.

Further study

You may wish to study for a Master's or a PhD to enhance your career prospects. We have a range of programmes and research opportunities for when you graduate.



Carla Miller

I chose to come to Lancaster University because the course offered a great range of topics and lots of field courses. After attending an open day, I really liked the campus and particularly the LEC building. I find the course really interesting, and I enjoy that I'm constantly learning new skills, gaining experience and being taught by passionate staff members. I also like that Lancaster itself has plenty to do but also that more rural areas are nearby and easy to get to. It is easy to get out of Lancaster and explore natural areas in the Lake District and the Yorkshire Dales, but we also still have quick connections to Manchester, Liverpool and London, or even mainline trains up to Scotland.



Degree schemes and entry requirements

Degree	Entry Requirements	Required subject information
BSc Hons Ecology and Conservation C180 3 years	A levels ABB to include two science subjects	We offer you the flexibility to switch between these programmes subject to achieving the appropriate grades.
BSc Hons Ecology and Conservation (Placement Year) C181 4 years with Year 3 spent on placement	BTEC DDM¹ International Baccalaureate 32 points overall with 16 points from the best 3 Higher Level subjects including two science subjects at HL grade 6.	Required subjects + 2 science A levels from the following: Biology, Chemistry, Computing, Environmental Science, Geography, Geology, Human Biology, Mathematics, Physics or Psychology + GCSE Mathematics grade 5
BSc Hons Ecology and Conservation (Study Abroad) C183 4 years with Year 3 spent overseas at a partner university	A levels AAB to include two science subjects BTEC DDD1	+ GCSE English Language grade 4
MSci Hons Ecology and Conservation (Professional Experience) 0X48 4 years with 7-week placement in Year 4	International Baccalaureate 35 points overall with 16 points from the best 3 Higher Level subjects including two science subjects at HL grade 6.	

We welcome applications from students with combined or other internationally recognised qualifications. For more information, please contact the Admissions Office directly on **+44 (0)1524 592028 or ugadmissions@lancaster.ac.uk**

Degree overview

Explore how organisms interact with each other and their environment, and discover the impact of human activity, including through a series of exciting field-based and labtaught modules.

Our renowned researchers deliver an exceptional training programme that provides a thorough grounding in ecological theory and practice, combining lectures, practicals, fieldwork and small-group tutorials. You will gain a deep understanding and hands-on experience of how these principles are applied in the study and conservation of species and the ecosystems in which they live.

Throughout your degree, you will have the opportunity to experience a range of inspiring fieldwork modules and residential courses in the UK and overseas.

Your first year will begin with a rounded introduction to ecology and conservation biology. You will participate in a field course in southern Spain or Cornwall, and you will study a series of modules in animal and plant ecology, evolutionary biology and conservation.

Specialisation from the second year onwards allows you to choose topics that match your interests. A diverse range of modules will equip you with key practical skills and expose you to cutting-edge research, and you can choose from a selection of optional modules such as Evolution and Environmental Physiology.

In the third year, you will carry out an independent research project. Module choices include Animal Behaviour, Coral Reef Ecology and Conservation in Practice.

During your degree you'll conduct your own independent research project where you'll benefit from the research experience of our internationally renowned staff. You also have the option of applying to undertake your project in conjunction with a commercial partner or external organisation in a related sector. This opportunity is continued in our MSci degree, in which the fourth year includes an extended project and a work placement with an external partner together with Master'slevel modules.

Year 1

Core modules

- + Aquatic Ecology
- + Biodiversity & Conservation
- + Environmental Processes & Systems
- + Evolutionary Biology
- + Global Change Biology
- + Global Environmental Challenges
- + Spanish-Doñana Field Trip

OR Eden Project Field Trip

- + Zoology
- + Placement Preparation (Placement Year only)

Optional and skills modules

- + Numerical Skills I ◆
- + Up to 5 further optional modules in another science subject

Year 2

Core modules

- + Experimental Design & Analysis
- + Field Biology
- + Populations to Ecosystems
- + Principles of Biodiversity Conservation
- + Research Design & Delivery
- + Work Based Learning Preparation (Placement Year only)

Optional modules

- + Environmental Physiology
- + Evolution
- + Introduction to Eco-Innovation
- + Soil Science
- + Spatial Analysis and Geographic Information Systems
- + Vertebrate Biology

Year 3

Core modules

+ Dissertation OR Dissertation with Work Placement*

Optional modules

- + Alpine Environmental Processes Field Course
- + Animal Behaviour
- + Climate & Society
- + Coral Reef Ecology
- + Environment, Politics & Society in Amazonia
- + Environmental Plant Biology
- + Environmental Remote Sensing & Image Processing
- + Food and Agriculture in the 21st Century
- + Host-Parasite Interactions
- + Issues in Conservation Biology
- + Lakes, Rivers and Estuaries
- + Scotland Field Trip
- + Sustainable Agriculture
- + Water Resources Management

Year 4

For Placement Year students

The core and optional modules described in Year 3

+ Work Based Learning Reflection

For Professional Experience students

Core modules

- + Professional Experience Dissertation
- + Professional Experience Placement

Optional modules

- + Conservation Biology
- + Contaminated Land and Remediation
- + Data Analysis and Interpretation
- + Habitat Management
- + Soil Science
- + Sustainable Soil Management



- ◆ Depending on whether you have GCSE Mathematics grade A/7 or above, you will be required to take a numerical skills module in order to ensure you have the necessary knowledge to succeed in year two and beyond
- * Dissertation with Work Placement available to C180 and 0X48 students only

Come and meet us

Open days

Join us at one of our open days to experience what life as a student at Lancaster is like. You will have the opportunity to see what facilities are available and explore our beautiful 560 acre campus including our award-winning accommodation, newly refurbished library, the Students' Union and sports facilities. You can also visit Lancaster Environment Centre where you have the opportunity to chat with current staff and students about studying ecology and conservation.

Campus tours

We organise regular campus tours to give you a flavour of life at Lancaster. The tour is designed to acquaint you with our friendly campus, showing you our award-winning student accommodation, social venues, library and a lot more.

You can book onto open days and campus tours at

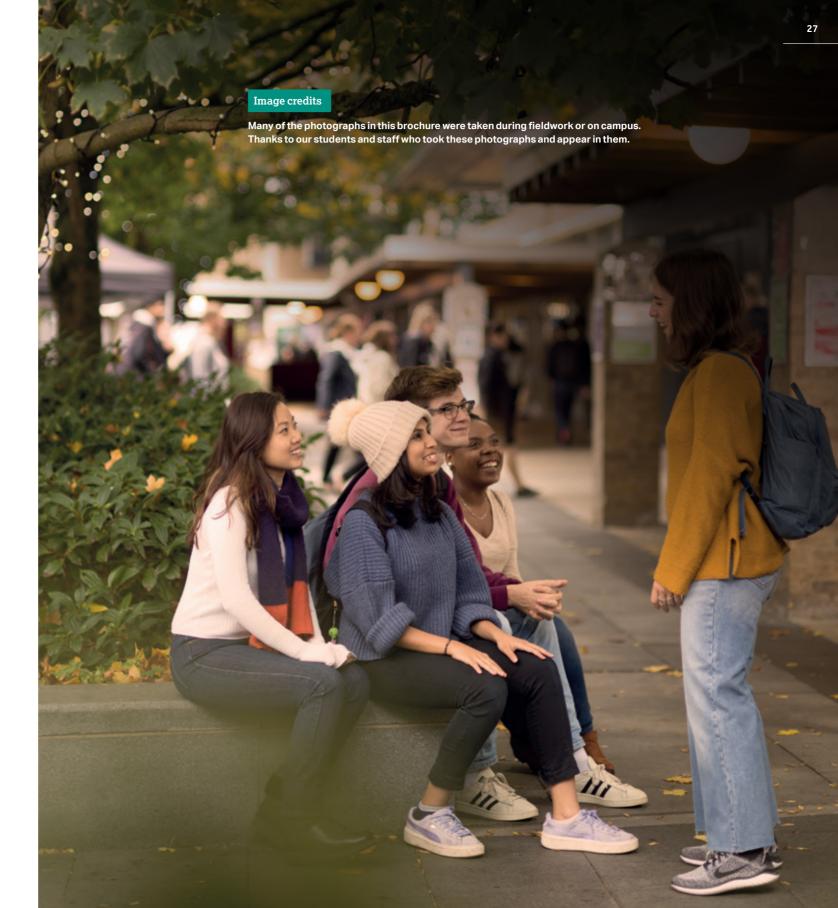
www.lancaster.ac.uk/visitus

Offer holder events

We will be offering both online and in-person events. If you are offered a place on one of our degrees you will automatically be invited to attend one of our offer holder events in January to April. It's not compulsory, but we highly recommend you take part to get a feel for our community. At these events, you will have the opportunity to hear all about the University and department, watch live demonstrations and speak with academics and current students. Offer holder events are designed to give you a real taste of what it is like to be a student with us at Lancaster. You will receive further information about these events over the next few months.

Visiting us

Lancaster is very well served by road, rail and air networks and is nearby to major cities such as Manchester and Liverpool. More information about visiting the University can be found at www.lancaster.ac.uk/travel





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Disclaimer

The information provided in this brochure relates primarily to 2024/25 entry to the University and every effort has been taken to ensure the information is correct at the time of printing in June 2023. The University will use all reasonable effort to deliver the course as described but the University reserves the right to make changes after going to print. You are advised to consult our website at www.lancaster.ac.uk/study for up-to-date information before you submit your application. Further legal information may be found at www.lancaster.ac.uk/compliance/legalnotice.