Graduate School for the Environment

Joined-up thinking for a better world
Graduate School for the Environment

Our Graduate School for the Environment harnesses the power of three of the world’s foremost research organisations to give students the best possible chance of enjoying productive, impactful and influential careers.

WORLD-CLASS RESOURCES
Facilities, resources and expert knowledge from Lancaster Environment Centre, Rothamsted Research and the Centre for Ecology & Hydrology.

INTERDISCIPLINARY EXCELLENCE
Become a valued member of a stimulating international community of researchers.

REAL-WORLD FOCUS
We will encourage you to look outwards rather than inwards.

GLOBAL OUTLOOK AND IMPACT
Our combined international reach opens up a world of opportunity for you.

CAREER GATEWAY
You will enjoy access and exposure to potential employers from day one.

FLEXIBLE AND ENGAGING DEGREES
Enrol in one of our taught Masters, design a Masters by Research to suit your interests or join one of the largest communities of PhD students in the UK.

For more information visit www.lancaster.ac.uk/gse
Graduate School for the Environment

Combining the world-class expertise, resources and connections of Lancaster Environment Centre, Rothamsted Research and the Centre for Ecology & Hydrology to train the next generation of environmental researchers, scientists, consultants, innovators, project managers, business leaders and decision makers.

The Graduate School for the Environment is a pioneering new collaboration led by three world leaders in environmental research and practice.

For the past ten years Lancaster Environment Centre has been one of the largest and most impactful centres for environmental study in the world. In that time it has forged valuable links with a wide range of influential agencies, institutions and companies including two of the world’s most active and productive research organisations – Rothamsted Research and the Centre for Ecology & Hydrology.

All three organisations share a philosophy. We believe that environmental issues and challenges do not confine themselves to one country or another, that they cannot simply be addressed by one scientific discipline or another, and that solutions cannot be found by researchers, governments and businesses working in isolation from one another. Instead we each advocate an international, interdisciplinary, inter-agency approach.

This shared philosophy is what has driven our decision to pool resources and create the Graduate School for the Environment.

Together we have built on the established success of the postgraduate programmes at Lancaster Environment Centre to form a new and immediately world-leading academic centre – with a truly global outlook and a similarly global network of real-world contacts.

It is a place where each one of our students becomes part of a broad community of like-minded researchers, academics, scientists, agencies and businesses, and where they develop the skills and expertise to be able to pursue a successful career within that community. That’s what the Graduate School is all about. It’s about giving our students the best possible start to their careers, not only by furnishing them with the skills they need, but by opening doors to possible employers, and by instilling the international, interdisciplinary, inter-agency mind-set that we believe is so important.

That way we can create the next generation of experts, ready to play their part in addressing the many environmental challenges that face the world at the regional, national and international level.

For more information visit www.lancaster.ac.uk/gse
I opted to study here on account of the programme itself and the reputation the place wields – in environmental research. I wanted to be exposed to both biochemical and environmental courses which would give me an ample edge to others who major either in environmental or biochemical toxicology. I was able to choose a set of interesting and challenging modules which I have enjoyed doing because of their laboratory orientation. The practical sessions have also afforded me opportunities to work with state-of-the-art facilities.

Next I hope to pursue a PhD programme to enrich my knowledge and make me ripe for the career I would like to pursue. The MSc has been challenging, progressing and fulfilling.

Alzie Alaoma

World-class resources

Lancaster Environment Centre, Rothamsted Research and the Centre for Ecology & Hydrology are all formidable research institutions in their own right, with extensive, contrasting and complementary areas of expertise.

Together, as the Graduate School for the Environment, we have the size, scope and infrastructure to offer an unrivalled level of support to our students – accommodating almost every imaginable environmental research interest. Firstly, we can call on a collective pool of hundreds of experts, up and down the country and from far and wide overseas, to supervise or support your work.

Secondly, we can provide you with cutting-edge facilities, laboratories, equipment and tools – whether that means our new £4.4 million teaching labs in Lancaster, the Controlled Environment Facilities at Rothamsted, or the network of national-scale monitoring platforms and software tools managed by the Centre for Ecology & Hydrology. And that’s to say nothing of the enviable array of field sites we collectively have access to across the world.

Thirdly, we curate the kind of long-term, national-scale data that can fuel the most powerful of research. We provide a range of tools and expertise to make such data more reusable and accessible and we build applications for different audiences to ensure datasets are delivered in the most appropriate way.

As well as being well connected and well appointed, the Graduate School for the Environment is also well funded. We have the size and capabilities to attract financial support for a wide range of fully-funded PhD studentships, for example, opening up a world of possibility to you and the rest of our postgraduate community.

One way or another, the size and scope of our partnership makes the Graduate School for the Environment a world-leading destination for postgraduate researchers. We have the critical mass to help you make an impact.

For more information visit www.lancaster.ac.uk/gse
That’s how things work in the real world, so that’s the kind of real-world approach we take at the Graduate School for the Environment.

It’s no coincidence, that under our roof you will find biologists, environmental chemists and volcanologists swapping ideas and entering into fruitful collaborations with everyone from political ecologists to human geographers. Researchers of every natural and social science discipline, supported by experts in environmental informatics, form part of our community – as long as their work relates in some way to the environment.

It’s also no coincidence that dozens of businesses have offices at our Lancaster site and that we have connections with thousands more around the world. We believe in this kind of cooperation. It’s what motivated us – Lancaster Environment Centre, Rothamsted Research and the Centre for Ecology & Hydrology – to form the Graduate School in the first place.

We have woven our interdisciplinary approach into every part of life at the Graduate School. You can see it in the structure of our Masters programmes, for example, and in the way we set up and supervise PhD research projects.

Of course, this does not mean that we discourage specialism. The world needs experts and the Graduate School is set up to produce them – in every possible discipline of the natural and social sciences. But what the world needs even more are experts who can apply their knowledge to tackle our environmental challenges. And that’s the invaluable quality that defines our students as they leave the Graduate School to take up careers in the world at large.

Environmental challenges can only be properly addressed when scientists, researchers, government agencies and businesses come together to pool their ideas and devise coherent, practical, comprehensive solutions.

That’s why we do what we do.

That’s why you’re here.

That’s why you’re reading this.

That’s why the Graduate School is different.

That’s why it’s interdisciplinary.

That’s why it’s excellent.

That’s why it’s the Graduate School for the Environment.
That’s why we have forged so many strong links to other research institutions, government agencies and businesses. There are dozens of businesses with offices at the Graduate School, for example, and thousands more partners of all shapes and sizes at a regional, national and international level. These real-world links exist because we understand that practicalities matter – whether it be accessing funding streams, informing environmental policy at national and international level, or attending to the commercial imperatives of the business world where innovation, product design and profit must all be taken into account.

We also encourage our students to look outwards and engage actively – and practically – with the global environmental community. That might mean conducting fieldwork at home or overseas, taking up a placement with one of our research partners, or pursuing a company-based research project in a particular industry. We believe this is the best possible preparation for a career in the world beyond the Graduate School – where academic expertise needs to be married to practical understanding and proven skills.

Real-world focus

Everything we do at the Graduate School for the Environment is driven by the realities of the outside world. All of our research – whether fundamental or applied – is directed at real-world challenges, exploring theory and pushing back the boundaries of our understanding but always with a view to putting that knowledge into practice.

For more information visit www.lancaster.ac.uk/gse

HARRISON BROOK

I wanted to complete my Master’s degree here, due to the high academic calibre of the place as well as its many links within the environmental industry.

Since starting here I have achieved an industry placement at the RSPB, researching the ecological effects of decommissioning off-shore oil and natural gas structures in the North Sea. This was only made possible due to the dedication of the staff and lecturers in Lancaster.

After completing my degree I hope to go on to work in the renewable energy industry; the course has not only given me academic knowledge, it has taught me about the industry as a whole – something I believe to be invaluable.
Global outlook and impact

The Graduate School for the Environment has a strong international focus, which informs everything we do. It is a focus that we share with our students, who hail from all parts of the world, encouraging them to take on research with global as well as national and regional significance, and providing them with the infrastructure they need to make such work possible.

Lancaster Environment Centre, for example, has longstanding international partnerships with the Chinese Academy of Sciences, the Sabah Foundation in Malaysia, the Federal University of Lavras in Brazil and several universities in Nigeria. Lancaster is also the only UK institution to have a physical campus in sub-Saharan Africa – based in Accra, Ghana.

Rothamsted Research too has an impressive global presence. In the past few years alone it has collaborated on projects in no fewer than 58 countries worldwide and it has particularly well-established links in India and China.

The Centre for Ecology & Hydrology also has strong international links, collaborating with colleagues worldwide and recently increasing its work in Africa. Its scientists chair and provide expert advice to more than 400 national, European and global committees; it coordinates UK input to UN freshwater science programmes; and it is also part of major international collaborations such as the International Long Term Ecological Research Network.

These international links mean that as a Graduate School student, you could find yourself engaged in research work in any corner of the globe. That might mean monitoring pollution in China’s Pearl River basin. Studying the impact of invasive plant species in New Zealand, assessing tree population dynamics in Brazil, analysing glacial meltwaters in Iceland, examining food security in Ghana, or helping to develop more sustainable wheat production in India.

We have also built an international component into many of our courses, calling on PhD supervisors from all over the world, providing overseas placements and secondments, and designing shared and dual Masters programmes.

We believe that our outward-looking focus makes us better placed to tackle environmental issues at an international level. It also opens up a world of opportunity for our students, giving them the kind of global perspective that employers value, and a network of contacts in the UK and overseas that they can use to expand their own career possibilities.

Lancaster Environment Centre

JOHN BROWNING

Lancaster Environment Centre has one of the largest groups of volcanologists in the country, carrying out world-leading, cutting-edge research.

When I met my MSc course director for the first time I was blown away by his enthusiasm for the subject and also by the depth of volcanology research that Lancaster conducts.

Highlights of studying for my Masters were attending field courses in the Lake District and at Mount Etna in Sicily, as well as undertaking exciting and novel research, whilst being given guidance and inspiration from supervisors who are leaders in their field.

During my research, I used the thermal laboratory at Lancaster Environment Centre to try to understand more about the processes of bubble growth in magma. I presented the findings from my final research project at the Volcanic and Magmatic Studies group meeting and was awarded the Geoff Brown prize for best student poster.

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And that’s what the vast majority have within six months of being awarded their qualification – a first job or the award of a place for further study. That’s no accident. It’s down to the way that we put careers at the very centre of what we provide at the Graduate School.

If you arrive at the school with a particular career already in mind, we can weave it inextricably into your studies – perhaps via an industry-focused PhD, a careers-dedicated module, a business-based research project, or an international placement with one of our partners. Alternatively, if you are unsure of your preferred career path, we can expose you to an unrivalled range of possible directions so that you can make an informed decision further down the line.

In both cases, one great advantage of studying at the Graduate School is our outward-looking approach. We work with a wide range of research institutes, government agencies, non-governmental organisations, multinational companies, and small and medium-sized enterprises – every one of which could prove to be a potential employer. And there are thousands of them – locally, nationally and internationally. What’s more, we have an Enterprise and Business Partnerships team at Lancaster specifically designed to get you working with one of these organisations during your studies – with the distinct possibility that you could end up carving out your own career opportunity. And that’s to say nothing of our dedicated careers service.

It’s all part of our demand-led approach. You come to the Graduate School for a purpose. And we make it our purpose to meet that demand – for training, for opportunities and, most of all, for a career.

By unveiling the nature of CR7 piece by piece, we understood that not only had we found by far the most luminous distant galaxy, but also started to realise that it had every single characteristic expected of Population III stars — the first generation of stars that were born out of the primordial material from the Big Bang. It doesn’t really get any more exciting than this! This is the frontier of research, and Lancaster University is the perfect place to really push it forward.

LAURA LEWIS

LAURENCE LEWIS
The partners

Lancaster Environment Centre

Students of the environment at Lancaster have always been a step ahead. It was here that the world’s first department of Environmental Science was established, and it was here too that some of the first students anywhere across the globe were able to graduate with a full degree in Ecology. Lancaster Environment Centre is now the largest department at Lancaster University and one of the largest centres in the world for environmental research. We work across the full span of natural and social sciences, taking a unique interdisciplinary approach to address the major environmental challenges facing the world.

We have also broken new ground by putting real-world partnerships at the very centre of our activities. We share our facilities, laboratories and offices with the Environment Agency and over two dozen environmental businesses, and we provide a home for one of the government’s top environmental research laboratories, run by the Centre for Ecology & Hydrology. There are few, if any, places in the world where students can find themselves working so closely alongside such a range of expert practitioners.

There are few other places, too, where students can benefit from such a wide range of international opportunities. We have longstanding partnerships, for example, with the Chinese Academy of Sciences, the Sabah Foundation in Malaysia, the Federal University of Lavras in Brazil and several universities in Nigeria. We are also the only UK institution to have a physical campus in Africa – based in Accra, Ghana.

The decision to establish the Graduate School for the Environment is our next leap forward, maintaining and extending our position as a world leader in environmental training and research. Any postgraduate student coming through our doors will remain a step ahead.

Rothamsted Research

Rothamsted Research has always led from the front. It was here, following our establishment in 1843, that the foundations for modern scientific agriculture were laid and that the principles of crop nutrition were first developed.

Over 170 years later, we are still collecting data from some of the original ‘Classical Field Experiments’ conducted at the site, giving us access to a tremendous, powerful archive of soil and plant samples. It is no coincidence, in fact, that the roots of modern statistical theory and practice can also be traced back to Rothamsted; we pioneered work in this field in the early twentieth century precisely so that we could extract full value from the enormous amount of data we were collecting. This link to the field of statistics speaks volumes for the broad-minded approach we have always taken to science here at Rothamsted. We do not believe that a single approach can deliver success in our mission, which is to deliver the necessary knowledge and new practices to increase crop productivity and quality and to develop environmentally sustainable solutions for food and energy production.

Instead we have always advocated an integrated, multi-disciplinary approach, with our scientists performing pioneering work, for example, in the disparate fields of pesticide resistance, metabolomics, soil science and ecology. We are committed to extending this approach across the world, establishing a wide international and multi-sector network of partnerships, and we have long placed education at the heart of our work, with over 60 PhD students contributing to our cutting-edge research today.

We share vital elements of this vision with Lancaster Environment Centre and the Centre for Ecology & Hydrology, which is why we are proud to support the foundation of the Graduate School for the Environment. It is an immediately world-leading institution, just as we have always sought to be at Rothamsted throughout our long, proud history.

Centre for Ecology & Hydrology

Every day at the Centre for Ecology & Hydrology, some 360 scientists and 120 postgraduate students are engaged in world-class, innovative, independent and interdisciplinary research into terrestrial and freshwater ecosystems and their interaction with the atmosphere.

You can find us at one of four national research stations in Lancaster, Wallingford, Edinburgh and Bangor, at one of our extraordinary network of 180 field sites and monitoring platforms, or working with our overseas partners, for example, across Europe and in various countries in Africa, as well as in China and India.

All of our staff share one mission: to provide the evidence and data necessary to make sure that decisions and innovations by policy-makers and businesses will contribute to sustainable development and an improvement in society’s environmental legacy.

We also go several steps further. We do not merely look to provide the evidence; we seek to engage with those who will apply it so that our work has as powerful an impact as possible. That means facilitating academic, public, private and voluntary partnerships and working at the nexus of these communities – we welcome any application of our research that seeks to address today’s environmental challenges. Our emphasis on the power of research and our belief in a practical multi-spectrum approach to its application is something we share with Lancaster Environment Centre and Rothamsted Research. We see the establishment of the Graduate School for the Environment as a natural extension of this shared vision. Together we have the power to produce the next generation of researchers, scientists, policy-makers and innovators.
Studying for a Taught Masters degree at the Graduate School

With our proven high-quality teaching and well-funded research environment, the Graduate School is an excellent choice for your Masters degree.

The taught Masters programmes available at the Graduate School for the Environment are designed so that you can tailor them to suit your particular interests. You can select from a broad array of taught modules, conduct a substantial personal research project, and choose to study on a full-time or part-time basis.

Research advantages

The programmes have been designed to make the most of the broad range of natural and social sciences expertise brought to the Graduate School by Lancaster Environment Centre, Rothamsted Research and the Centre for Ecology & Hydrology – with the opportunity for you to work in collaboration with staff across our sites.

You will benefit from lectures and seminars run by cutting-edge, research-active scientists, have the chance to use state-of-the-art facilities, be given opportunities to conduct fieldwork in the UK and around the world, and enjoy access to a network of global research institutes and business partnerships.

Career boost

A large number of our students take advantage of the work placements we organise each year, gaining practical experience to add to a qualification which is valued by employers across the sector. Many then go straight into employment after completing their Masters degree.

MSc Environmental Management

Whether it is monitoring, providing solutions or managing resources in the environment, students on this scheme can select from our wide range of modules to tailor their Masters to their career plan. You can take the opportunity to study a broad range of different options or, if you prefer, you can select modules leading to specialisms in water, energy, food security or pollution.

MSc Conservation and Biodiversity

This vocational degree offers you the chance to blend ecological and environmental science topics with those from areas such as social science, geography, and statistics. You will gain an understanding of the relationships between living organisms and their physical, chemical and biotic environment whilst learning important skills related to environmental monitoring and management.

MSc International Innovation

This MSc offers a ground-breaking curriculum, blending academic studies, company projects and cultural experiences. Drawing from internationally recognised faculties from across the University, this unique scheme offers ambitious students the opportunity to work on high impact collaborative projects with companies both in the UK and China. The environment pathway draws on the strengths of Lancaster Environment Centre, and provides a foundation in the areas of technology, design and management but with a specialist focus on environmental science.

MSc Sustainable Water Management

This scheme combines modules in hydrology, water quality and ecology with a research project tailored towards developing skills relevant to a career in the UK or international water sector. You will be taught by world experts in the field, including staff from the Centre for Ecology & Hydrology and industry leader JBA Consulting. Your specialised project (including placements) benefits from our strong research links with organisations such as Dwr Cymru Welsh Water, United Utilities, JBA Consulting, the Environment Agency, Defra and Government Research Councils.

MSc/MA Environment and Development

The need for sustainable development is a global concern. This programme provides the ideal education for anyone interested in a career that addresses environment and development issues, in the private, public, or not-for-profit sectors.

MSc Volcanology and Geohazards

Volcanoes threaten millions worldwide and improved hazard mitigation is a high priority. Our MSc provides training in field, theoretical and laboratory volcanology, including a highly popular field course on Etna. Alongside specialist taught modules on volcanic and other geological hazards, additional modules provide broader training in environmental science, management and data analysis. You will join our active volcanology research group, conducting a research project alongside internationally recognised experts and participating in many seminars, workshops and discussions. This MSc is ideal preparation for PhD research or work in the environment sector, and suitable for students with a wide range of first degrees.

For more information visit www.lancaster.ac.uk/gse
Masters by Research

A Masters by Research degree is for those who would prefer to carry out an in-depth research project without specific taught modular components. As a period of research training our Masters by Research programmes offer you a good preparation for PhD study, but they are also a postgraduate qualification in their own right and provide excellent preparation for research careers in the public and private sectors.

Enrolling for a Master by Research allows you to immerse yourself in a subject and benefit from the kind of specific skills training you need to be able to investigate it. You will be expected to conduct innovative, original research and then to write up an extended thesis with a view to submitting it for publication.

If you are interested in pursuing this route, we will work with you to help design the most appropriate research project for you – making sure that you get the very most out of all the Graduate School has to offer in that area.

As a Masters by Research student, you may also be co-supervised with an external research, policy or business partner.

For more information visit [www.lancaster.ac.uk/gse](http://www.lancaster.ac.uk/gse)
As a PhD student, you will immediately become a valued member of one of these research groups, each of which is headed up by one of our internationally respected academics and supported by an array of post-doctoral research associates and technicians. You will make your personal contribution to the group – and be taught the research skills you need – under the guidance of one or more supervisors specifically chosen to suit your area of interest. It is with the support of your supervisors and your research group colleagues that you will be able to extract full value from your time at the Graduate School.

Support structure
As a PhD student, you will immediately become a valued member of one of these research groups, each of which is headed up by one of our internationally respected academics and supported by an array of post-doctoral research associates and technicians. You will make your personal contribution to the group – and be taught the research skills you need – under the guidance of one or more supervisors specifically chosen to suit your area of interest. It is with the support of your supervisors and your research group colleagues that you will be able to extract full value from your time at the Graduate School.

Industry-focussed PhDs
We also offer a range of industry-focussed PhDs, in which you get to work in partnership with a particular business, learning practical real-world skills as well as cutting-edge academic research techniques. These may be fully funded within the Centre for Global Eco-Innovation.

Whatever your field of interest in relation to the environment – whether in the natural or social sciences – the size and scope of the Graduate School for the Environment means that you are guaranteed to find a suitably stimulating research project to work on.

Our research community is made up of a series of groups set up to address specific areas of environmental research: Atmosphere, Climate and Pollution; Earth Observation; Earth Science; Ecology and Conservation; Environmental and Biogeo Chemistry; Environmental Social Science; Plant and Crop Science; Political Ecology; Soil, Plant and Land Systems; and Water Science.

As part of our vibrant community of PhD students you will make a direct contribution to the world-class research output of the Graduate School, and develop the skills you need to enjoy a rewarding career in your chosen field.

For more information visit www.lancaster.ac.uk/gse
Doctoral Training Centres

The three partners at the heart of the Graduate School for the Environment have a strong track record for creating new and pioneering opportunities for postgraduate researchers in the form of a number of leading Doctoral Training Centres.

Envision
Led from Lancaster, but with university and business links across Britain, Envision is a government-funded £4.9 million initiative designed to create the next generation of environmental scientists. As a successful candidate, you will receive the doctoral training and real-world employment experience you need to launch you on a successful career in the environmental sector.

STARS
Soils Training And Research Studentships (STARS) is a doctoral training centre involving eight universities and research institutes. It offers PhD studentships to a cohort of eleven graduates every year, providing you with an unparalleled UK-wide support structure to help you establish yourself as a soil science specialist.

Centre for Global Eco-innovation
Led by Lancaster Environment Centre, the Centre for Global Eco-innovation is designed to support collaboration between universities and businesses, delivering high-quality, business-led research to create eco-innovative technologies, products and services. This work is underpinned by a team of postgraduate researchers, who are given the chance to study for an industry-focused funded PhD and launch their own careers in research and development.

North West Doctoral Training Centre
Every year around 60 postgraduates begin studentships at the North West Doctoral Training Centre – the largest such centre to be funded by the Economic and Social Research Council in England. Drawing on the capabilities of the universities of Lancaster, Liverpool and Manchester, the centre supports postgraduate research across the full range of social science disciplines, including in areas such as human geography, development and the environment.

Lancaster Environment Centre, Rothamsted Research and the Centre for Ecology & Hydrology all play a central role in several Doctoral Training Centres designed to offer dozens of fully funded PhD studentship opportunities every year. They take a characteristically multidisciplinary approach and involve collaborations with other universities, research institutes, industry partners and non-governmental organisations. They represent an additional way in which we can help you advance your studies and career prospects – surrounded by a cohort of 11 graduates and working in a well-funded environment designed to promote high-quality, high-impact research.

For more information visit www.lancaster.ac.uk/gse
Professional Training

We have a team at the Graduate School dedicated to designing, delivering and expanding a portfolio of professional training programmes, so that you can study for a postgraduate qualification or take a professional development course alongside your job.

Our professional training programmes are organised on a flexible module-by-module basis, which makes it easier for you to fit your studies around your work. Some are taught online, with additional face-to-face workshops. Others are taught in residential blocks of two-to-three days duration.

Each module is worth a certain number of credits, which can count towards a postgraduate qualification. Some students simply choose to take a single module for the purposes of their continued professional development. Others start by studying to Postgraduate Certificate level, which requires a total of 60 credits. You can then choose to progress to a Postgraduate Diploma, which requires 120 credits, and if you complete an additional supervised research project, you can be awarded a Masters degree.

Current opportunities
We currently offer programmes in Food Challenges for the 21st Century and Flood and Coastal Risk Management and we welcome enquiries from businesses who would like to sponsor students to take any of the modules on offer. We are also happy to devise new professional training programmes specifically for particular organisations. If you would like to explore this possibility, please contact us.

For more information visit www.lancaster.ac.uk/gse
Research at the Graduate School

As a student at the Graduate School for the Environment you have the opportunity and support to make an active, original and exciting contribution to our world-leading research output.

Every researcher at the Graduate School for the Environment has the chance to make a real difference. In fact you have a better chance of making an impact with your work here than at most other institutions – we are one of the three most highly ranked institutions in the UK for the way in which our research has a practical and positive effect on the outside world.

There’s a reason for our success. It’s because we have put together the right blend of people, resources, support structure and culture to help you succeed.

Just imagine what you could achieve in this kind of world-class environment – the skills you could acquire, the places you could see, the experts you could work with, the data you could gather, the equipment you could use, the insights you could have, the breakthroughs you could make, the career you could launch. It’s an exciting prospect.

Research with impact

We only undertake research at the Graduate School if it is designed to address the important environmental issues facing the world. That way we can make sure our output is as focused and effective as possible.

Our research community is organised to address the key global environmental challenges by inspiring researchers from a stimulating mix of disciplines ranging across the natural and social sciences. It’s an approach that generates innovative methods, exciting collaborations and original insights.

The research you conduct at the Graduate School can have a global impact well beyond our lecture halls and state-of-the-art laboratories. It can also give you the opportunity to get out into the field both here in the UK and in some of the most extraordinary places on the planet.

As a researcher at the Graduate School for the Environment, you have the chance to call on the resources and facilities of Lancaster Environment Centre, Rothamsted Research and the Centre for Ecology & Hydrology. It adds up to a powerhouse of possibilities.

Our research themes

We undertake a broad range of fundamental and applied research so that we have the underlying knowledge and practical understanding to find effective solutions to three key global challenges.

All of the research that we conduct at the Graduate School is outward-looking and challenge-led. We have made it our mission to address three key issues, all of which demand complex, international, multi-disciplinary solutions.

The first is Understanding a Changing Planet. How does our planet function? How does it respond to change? What can we do to protect our environment from threats such as pollution and climate change?

The second is Improving Global Stewardship. How do we find a sustainable way to manage the world’s resources? How do we secure global access to a clean water supply? What can we do to achieve food security?

The third is Innovation for a Better Environment. How can we reduce the environmental impact of the products we use? What is the most efficient way to manage our energy use? How can we enhance crop quality without damaging the surrounding ecosystem?

Together these three vital and wide-ranging issues represent our inspiration, as well as our challenge. And, as one of our community of researchers, you will have the opportunity to identify the specific role you want to play in tackling them.

For more information visit www.lancaster.ac.uk/gse
Our facilities

Lancaster Environment Centre, Rothamsted Research and the Centre for Ecology & Hydrology all provide excellent facilities for research. Together, as the Graduate School for the Environment, we offer you a wonderful range of opportunities.

State-of-the-art laboratories
We have a broad array of laboratories, specially equipped and staffed so that you can perform highly focused and highly effective experimental and analytical work.

Leading research facilities
From glasshouses to insectaries, biomolecular analysis to mass spectrometry, we offer a wide range of specialist facilities to our postgraduate students.

Widespread field sites
During your studies here, you can conduct fieldwork of all types across the UK and at an exciting range of overseas locations.

Cutting-edge technologies
Whether in the laboratory or the field, our researchers have access to specialist equipment that can transform the effectiveness and scope of their work.

Rich data resources
You can gain access to a truly unique set of large-scale long-maintained data sets and take advantage of our powerful analytical, modelling and statistical capabilities.

We are easy to find

The Graduate School for the Environment is located at five centres across the UK. The following directions are for Lancaster:

By road
From the north or south leave the M6 motorway at junction 33 and take the A6 north towards Lancaster for about 2 miles. The University is on the right.

For Sat Nav use: LA1 4YW.

By rail
There are direct rail links between Lancaster and London (Euston), Birmingham, Leeds, Manchester, Glasgow and Edinburgh. The single journey between London and Lancaster takes between 2.5 and 3 hours.

Buses and taxis are available from just outside the station.

By coach and bus
Lancaster city is on the national coach network; National Express coaches call at the University. Local buses (numbers 2, 2A, 3, 4, X4, 42) from Lancaster bus station run to the University every 5 minutes on weekdays.

Further details can be found on www.lancaster.ac.uk/gse

For more information visit www.lancaster.ac.uk/gse