



 **5TH IN THE WORLD FOR ENVIRONMENTAL STUDIES**  
*(Centre for World University Rankings 2017)*

**6TH IN THE WORLD FOR GEOLOGY**  
*(Centre for World University Rankings 2017)*

**14TH IN THE WORLD FOR EARTH AND MARINE SCIENCES**  
*(QS World University Rankings 2018)*



## EARTH AND ENVIRONMENT

Undergraduate Degrees 2019

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The University of Leeds achieved a Gold rating in the Teaching Excellence Framework (TEF) 2017

**Important Information**

Important information provided by the University, such as in presentations, University brochures and on the University website, is accurate at the time of first disclosure. However, courses, University services and content of publications remain subject to change. Changes may be necessary to comply with the requirements of accrediting bodies or to keep courses contemporary through updating practices or areas of study. Circumstances may arise outside the reasonable control of the University leading to required changes. Such circumstances include industrial action, unexpected student numbers, significant staff illness (where a course is reliant upon a person's expertise), unexpected lack of funding, severe weather, fire, civil disorder, political unrest, government restrictions and serious concern with regard to the transmission of serious illness making a course unsafe to deliver. After a student has taken up a place with the University, the University will look to give early notification of any changes and try to minimise their impact, offering suitable alternative arrangements or forms of compensation where it believes there is a fair case to do so. Offers of a place to study at the University will provide up-to-date information on courses. The latest key information on courses, entry requirements and fees can be found at [courses.leeds.ac.uk](http://courses.leeds.ac.uk). Please check this website before making any decisions.

# School of Earth and Environment

SCHOOL OF EARTH AND ENVIRONMENT  
UNDERGRADUATE DEGREES 2019



The School of Earth and Environment at the University of Leeds is renowned for its teaching, global research and engagement with industry and government. We bring together physical science disciplines from earth sciences, environmental sciences with environmental social sciences – the study of human interaction with the environment.

**“In the School of Earth and Environment, we are proud of our world leading expertise, and the breadth and depth of our subject knowledge. We are delighted that we can work with our brilliant students to transform them into the next generation of experts. We do this using a broad range of innovative teaching practices and our excellent facilities to bring the best out of our students, and challenge them to reach their potential.”**

*Dr George Holmes, Director of Student Education*



If you love the outdoors and want to understand how physical processes have shaped the complexity of our planet, our Geological Sciences and Geophysical Sciences are for you. Geologists and geophysicists are the forensic scientists of the Earth, looking for clues left behind in ancient rocks by flowing water or magma, or analysing earthquake waves as they pass through.

If you're enthusiastic about delving into the physical and chemical processes of Earth and exploring human influence on the environment, you should consider our Environmental Science courses. Meteorology and Climate Science will be suited if you have a strong background in physical sciences, developing your scientific understanding of the behaviour of Earth's atmosphere and climate. Our Sustainability and Environmental Management degrees explore these topics through the study of human interaction with the environment, and will help you understand both the science of environmental problems as well as their social dimension, and ways of finding sustainable solutions through careful management. By contrast, our Environment and Business course explores business approaches that address long-term solutions to environmental and social challenges.

The School has one of the largest groups of environmental scientists and social scientists in the UK, who are all working together to tackle the planet's most pressing environmental challenges. They'll bring their exciting research into your learning experience, so you can benefit directly from their knowledge and expertise.

## RANKINGS & STATISTICS

**Gold rating** in the Teaching Excellence Framework (TEF 2017), the highest award possible

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**Top 5** in the world for Environmental Studies

(Centre for World University Rankings 2017)

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**6th** in the world for Geology

(Centre for World University Rankings 2017)

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**14th** in the world for Earth and Marine Sciences

(QS World University Rankings 2018)

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**98%** overall students satisfaction on our Geological Sciences courses

(National Student Survey 2017)

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**97%** overall students satisfaction on our Environmental Science

**Courses** (National Student Survey 2017)

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# Learning and Teaching

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At the School of Earth and Environment you'll be engaging with an international community of scientists and social scientists.

You will be taught by eminent lecturers working at the forefront of their specialism, who bring knowledge and passion to their subjects, and your lectures will be based on research that is happening now.

The School has an excellent reputation for world-class research and innovative teaching. The latest Research Excellence Framework (2014) ranks us highly for the quantity of world-leading research.

## Industry-Relevant Courses

Fast-track your career progression to professional chartered status. Our Geological Sciences and Geophysical Sciences degrees are accredited by the Geological Society of London, the national body representing and regulating professional geoscience organisations. Meteorology and Climate Science degrees are accredited by the Royal Meteorological Society.

BSc Environmental Science is accredited by the Institution of Environmental Sciences (IES) and BSc Sustainability and Environmental Management is the only undergraduate course of any Russell Group University to be accredited by the Institute of Environmental Management and Assessment (IEMA). Accredited courses ensure that the teaching is industry-relevant and of the highest standard, making you more employable at the end of your degree.

## Student Support

Throughout your studies you'll benefit from a structured support system, with a personal tutor who will offer help and advice about your approach to studying and how to become adept at independent learning. In addition, our Student Support team is based close to where you'll work and study to help with anything from academic advice to timetabling and project submission enquiries.

The web-based Minerva student portal will allow you access to personal timetables, course materials, academic and social groups, and much more.

## Discovery Modules

Our courses allow you to take optional modules and/or discovery modules which give you the opportunity to broaden your learning and pursue interests outside the School of Earth and Environment.

## Research-Led Teaching

Our academics lead international research across earth and environmental science, with links to society, business and policy.

The University hosts national centres in Atmospheric Sciences, Climate Change Economics and Policy, Industrial Energy, Materials and Products, and Polar Observation and Modelling, and co-hosts the National Centre for the Observation and Modelling of Earthquakes, Volcanoes and Tectonics.

You'll have access to excellent teaching and research facilities, both within the School and as part of the University. Our £23.5m building boasts a suite of state-of-the-art laboratories, including a £200k Earth Visualisation Laboratory, a bank of microscopes and a computer suite that includes latest industry-standard software packages. In addition to the teaching laboratories, you may also be able to use the School's specialist research facilities during your final-year project work.

Our team of committed researchers work across the world on projects that take them from the busy metropolitan cities of Europe to the hot deserts of Africa and into the Arctic Circle. Their dedication to innovative research is yielding new knowledge and technologies that are shaping the decisions of business, policymakers and NGOs the world over.

The School of Earth and Environment at the University of Leeds is a major international powerhouse for environmental research that is having wide-ranging positive impacts on the world we live in. Our research is carried out within five institutes, representing our core research areas, but much of our work is cross-cutting, tackling complex global challenges such as climate change, energy security and natural hazard management.

- **The Earth Surface Science Institute (ESSI):** is advancing understanding of Earth surface processes, both in modern and ancient environments. The institute's research strengths lie in environmental geochemistry, reconstructions of past environments, biological evolution and extinction through Earth history, palaeoclimate and biogeochemical modelling, experimental, isotope and organic chemistry, and water and land quality.
- **The Institute of Applied Geoscience (IAG):** researches fundamental geoscience with application and impact towards energy, environmental, industrial and infrastructural problems.
- **The Institute of Geophysics and Tectonics (IGT):** focuses its research on a wide range of disciplines including geodynamics, structural geology, geomagnetism, geodesy, seismology, igneous and metamorphic petrology, isotope geochemistry, hydrothermal processes, and volcanology.



- **The Institute for Climate and Atmospheric Science (ICAS):** is advancing our understanding of climate change, weather, atmospheric composition, palaeoclimates, and impacts on our planet and society.
- **The Sustainability Research Institute (SRI):** researches environmental social sciences, drawing on aspects of geography, sociology, politics, planning, economics, management, development studies, and science and technology studies.



## Enhance Your Experience

The School of Earth and Environment's wide range of options gives you the opportunity to add value to your degree and broaden your university experience.

We offer four ways you can gain invaluable experience, either by preparing you for further study or for a career in industry or academia. Our courses also include a choice of pathways that enable you to focus on a particular specialism.

### Three-Year Degrees (BA/BSc)

Our traditional three-year BA/BSc degrees prepare you for your working career or for further study at Masters level.

### Four-Year Industrial Degrees (BA/BSc)

Once you've enrolled on a three-year degree, you can register your interest to spend an additional year in industry before returning to Leeds to complete your final year of study. This is a great way to improve your employability by gaining valuable hands-on experience and developing a range of new and transferable skills.

The marks you achieve in your placement do not count towards your final degree grade. However, you must pass the year in order to obtain 'Industrial' in your degree title.

### Four-Year Study Abroad Degrees (BA/BSc)

Once you've enrolled on a three-year degree, you can register your interest to spend an additional year overseas before returning to Leeds to complete your final year of study. Spending an additional year studying at an overseas university is a fantastic opportunity that will expand your networks, broaden your horizons and develop your confidence – giving you skills employers look for in graduates. If you find a placement within the EU, you may be eligible for Erasmus+ funding (conditional on UK universities remaining part of the Erasmus+ programme).

The marks you achieve in your studies abroad do not count towards your final degree grade. However, you must pass the year in order to obtain 'International' in your degree title.

### Four-Year Integrated Masters (MEnv, MGeol, MGeophys)

One of the advantages of studying with us is that all our four-year Integrated Masters courses include a year spent studying abroad at a partner university. This gives you the opportunity to experience a new culture and access a range of different modules. It also counts towards your final degree classification.

Similar degrees at other universities often don't offer the chance to study abroad. Our option offers fantastic value for money, including a year abroad at a much-reduced fee. On returning to Leeds, you will complete your final year of study at Masters level, leading to the award of an enhanced MEnv, MGeol or MGeophys qualification. This is an excellent route for those interested in a career in research, and will also give you the experience valued by employers.

### What do our Degrees Lead to?

Many of our BSc graduates go on to pursue one of our MSc degrees. These Masters qualifications are an excellent way to improve your employment prospects in a specific area such as exploration geophysics or environmental consultancy, or will help you develop a career in research. University of Leeds graduates can apply for an alumni discount on the MSc fees.

## ACCREDITATIONS



Fieldwork is a key feature of all of our degrees – our students say this is one of the most enjoyable and sociable parts of the course, and a great chance to get to know staff and fellow students better.

Fieldwork is a key part of all our Earth and Environment degrees where you gain valuable hands-on experience:

- Our field classes are intensive but very rewarding. You'll gain valuable hands-on experience to complement the theory you have learnt, collecting and analysing data to develop and test hypotheses from your own observations.
- Fieldwork is an excellent way to develop the individual research skills vital for your final-year research project. You will also develop personal skills in communication and teamwork, qualities that will make employers notice you.
- Depending on your degree, you'll visit a variety of field course locations across the world. From areas in the British Isles, such as the Lake District, Scotland, South Devon, Wales and Yorkshire, to destinations further afield including the Alps, Amsterdam, Cyprus, Greece, Ireland, Lanzarote and Tanzania.

The School heavily subsidises or covers the cost of all compulsory field courses, although you may have to contribute depending on the destination you choose.

**“Our trip to Amsterdam was amazing. We were given the responsibility to carry out our own research: planning, choosing who to interview, getting in touch with people, and going around the city to collect data. My research was on water management and adaptation to climate change. It was fun and a great opportunity to strengthen relationships with classmates. Amsterdam is beautiful; I loved exploring the city on my red bicycle.”**

*Paola Laini, BSc Sustainability and Environmental Management*



# Careers and Employability

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Making yourself employable is about more than just getting a degree.

To maximise your benefit from your time at university, you also need to understand the skills, qualities and qualifications employers are looking for. While it's easy to be engrossed in day-to-day studying, coursework and lectures – not to mention social life – it's actually a great time to network and make connections that can positively impact your future career.

## Rewarding Careers

A degree from the School of Earth and Environment prepares you for a wide range of career roles in your chosen field. Graduates are always in demand in companies that value teamwork skills, independence, numeracy and scientific literacy.

For example, laboratory and fieldwork help you gain practical and observational skills, and develop your ability to analyse and interpret data. You'll also hone your independent research and investigative skills in your final year.

Over 92% of our recent graduates have successfully secured employment or gone on to further study within six months of graduating (Destinations of Leavers from HE survey 2017). Our graduates find positions in areas such as business analysis, consultancy, corporate social responsibility, sustainability entrepreneurship, environmental monitoring, environment remediation and protection, meteorology, climate change, government policy creation, geoscience, hydrocarbons and postgraduate research.

We're committed to helping you get ahead. Our curriculum is designed to ensure that employability is embedded into all our courses and it's also a big part of the School's culture. From the careers modules that are part of your degree to the highly successful Year in Industry scheme, we offer a range of initiatives to ensure you receive the highest level of support during your studies.





## Careers Support

Our University Careers Centre has an excellent reputation that brings employers from all sectors of business and industry to our recruitment fairs and other events; it was recently highly commended at the National Council of Work Experience Awards.

The centre is one of the largest in the country, with experienced advisers and strong relationships with graduate recruiters.

A range of initiatives are offered to ensure you receive the highest level of support throughout your studies, such as one-to-one support, professional careers modules, alumni networking events and talks, an Environment Careers Fair, employer visits and graduate career opportunities.

The University of Leeds is a top five university targeted by employers (The Graduate Market in 2017, High Fliers Research).

## Strong Industrial Links

We have more than 650 graduate recruiters visiting campus each year and long-standing partnerships with organisations including Boliden Mines and BP, Arup, Asda, British Waterways, the Environment Agency, Gtech, Hilton, Marks and Spencer, Mott Macdonald, Panasonic, Procter & Gamble, Rolls-Royce, RSPB, Samsung, Sony, Unilever, Vauxhall and Yorkshire Water.

## Industrial Placement

A year's work placement – whether with a commercial company, an environmental group or a government agency – is a fantastic way of exploring your own strengths and the realities of working life. Experience shows that a placement can dramatically improve your career prospects.

You'll have your very own Employability team on hand, who work with the Careers Centre, academic staff, employers and former students to ensure you are armed with the key skills required for employment. They'll guide you in looking for, and setting up, your work placement and support during this year. They'll also visit you during your placement in the UK, or arrange Skype meetings if you choose to work overseas.

Organisations providing placements for our Environment students have included local city councils, regional development agencies, environmental consultancies, and international financial and IT companies. Our Geological Sciences and Geophysical Sciences students have carried out placements at international mining companies, engineering geology consultancies, and geophysical services and petroleum companies in the oil industry.

In the past, our students have worked for companies such as AECOM, Arup, Asda, Atkins, British Waterways, the Environment Agency, Hilton, IBM, Mott Macdonald, Panasonic, PwC, RSPB, Samsung, Sony, Transport for London, Unilever, Vauxhall and Yorkshire Water.



## Study Abroad

The School of Earth and Environment at Leeds was the first department in the UK to offer integrated degrees with a year in North America and we extended the scope of this highly successful programme by offering additional partner institutions worldwide.

Spending a year abroad is not only an adventure, it is a chance to add real value to your degree by experiencing environmental challenges that simply don't exist within the UK. It also offers the opportunity to study modules or visit locations that would otherwise be unavailable. Studying abroad shows a willingness to adapt, not just to another institution but to another society, and to develop the personal and professional skills that employers look favourably upon.

There are two options to study abroad as a School of Earth and Environment student:

- Apply for one of our four-year Integrated Masters courses and study at one of the specified institutions abroad. This option requires a higher grade than the non-integrated degree and counts towards your overall degree classification. Our study abroad Integrated Masters courses offer you fantastic value for money, including a year abroad at a much reduced fee. On returning to Leeds, you complete your final year of study at Masters level, leading to the award of an enhanced MEnv, MGeol or MGeophys qualification. This is an excellent route for those interested in a career in research, and also adds the experience greatly valued by employers.
- Apply for one of our three-year non-Integrated Masters courses, where you'll have the choice of undertaking a 'pass/fail' study abroad year. This offers a broader range of institutions to study at, and a lower grade requirement.

- Australian National University, Australia
- Griffith University, Australia
- Monash University, Australia
- University of Adelaide, Australia
- University of Queensland, Australia
- Dalhousie University, Canada
- McMaster University, Canada
- University of Toronto, Canada
- York University, Canada
- Arizona State University, USA
- Pennsylvania State University, USA
- Purdue University (Indiana), USA
- University of Illinois Urbana-Champaign, USA
- University of Wisconsin-Madison, USA



**“I’m really enjoying throwing myself into the American university lifestyle and being able to take a module that is not related to my degree. This semester I am taking a class in international relations and finding it really interesting. Outside of studying, I have joined a pom team, as well as taking part in a weekly acapella workshop. We have been out exploring the city of Rochester, visiting the waterfall, the George Eastman Museum of Film, and even cycling the 20-mile round trip to Ontario beach.”**

*Ellen Stirling, BSc Meteorology and Climate Science, Study Abroad Year at the University of Rochester, USA*

## MGeol/MGeophys Overseas Partners

- Australian National University, Australia
- Curtin University, Australia
- University of Adelaide, Australia
- University of Western Australia
- University of Queensland, Australia
- Dalhousie University, Canada
- Queens University, Canada
- University of Alberta, Canada
- University of Calgary, Canada
- University of Toronto, Canada
- University of Victoria, Canada
- Western University, Canada
- University of Auckland, New Zealand
- Victoria University of Wellington, New Zealand
- Colorado School of Mines, USA
- Pennsylvania State University, USA
- Purdue University (Indiana), USA
- University of Illinois Urbana-Champaign, USA

Please contact our admissions office to confirm which partners are available for which degree. The number of places available in partner institutions varies year on year.





## Environment and Business BA

**UCAS CODE: FN8C**

ENTRY GRADES: ABB

DURATION: 3 YEARS

YEAR IN INDUSTRY AND STUDY ABROAD OPTIONS AVAILABLE

## Environment and Business MEnv

**UCAS CODE: FN02**

ENTRY GRADES: A\*AA

DURATION: 4 YEARS

INTEGRATED MASTERS WITH A STUDY ABROAD YEAR

If you're passionate about the environment and want to lead change and influence business practice and ethics, then this course is ideal for you.

On this course, you'll combine your understanding of the natural environment and sustainability issues with business and management practice, developing the skills to drive innovation and transform business for the better.

As a result of the contemporary environmental agenda, you'll also explore the opportunities and pressures facing businesses such as issues of sustainability and corporate social responsibility.

You may choose to take advantage of an exciting opportunity to spend a year in industry or a year abroad. The year in industry gives you a chance to put your skills into practice, earn some money and improve your employability. The year abroad will challenge you to think differently about how sustainability problems can be addressed in different geographical contexts.

Alternatively, you may choose to take advantage of exciting study abroad opportunities as part of the Integrated Masters course and study at one of our partner universities such as Griffith University in Australia or Arizona State University in the USA.

### Year 1

Study the underlying principles of business, the natural environment, and human impacts. You'll also build your business skills and knowledge of sustainability problems.

### Year 2

Develop your business skills through a range of core and optional modules influenced by your own interests. In this year you'll have interaction with business executives and will work on real-world issues in environment and business.

## Final Year

Produce your own work at a professional level in your final year project and make recommendations to business. You will be able to choose modules that enable you to pursue your specialist interests. These may include: climate change, law, marketing and advertising, business management or corporate strategy.

If you choose the MEnv Integrated Masters, you'll spend your third year studying at one of our international partner universities, returning to take a final year of Masters-level modules and independent research.

## Field Trips

In your first year, you will research a sustainability problem and apply your new research skills to a real-world situation. Optional modules include one-day field classes where you will develop skills in data collection and analysis. Second-year fieldwork in research methods involves an overseas residential field class, where you can apply different research approaches and data collection methods to prepare you for your individual research project in your final year. Some optional modules include one-day field visits where you can gain insights from practitioners about particular environmental issues.

Because we recognise the value of field experience, the School covers the transport and accommodation costs for all compulsory taught field classes and many optional field trips.

## Career Paths

You'll be ideally placed to appreciate the fundamental advantages and challenges of a sustainability-oriented approach. You'll develop expertise in a unique combination of sustainability and business topics in order to deliver long-term solutions to environmental and social challenges.

Potential career options are available in business analysis, consultancy, management, corporate social responsibility and sustainability entrepreneurship. You may also find work in government or non-governmental agencies, or in business in the UK or overseas.

### Hannah Irvine

#### BA Environment and Business

I started as mainly a business-orientated person but have since found my focus has shifted to sustainability. There are so many people on our course with diverse backgrounds and we work with environment students and meteorology students, which gives me a collective and holistic view of social and environmental issues.





## Environmental Science BSc

**UCAS CODE: F851**

ENTRY GRADES: ABB

DURATION: 3 YEARS

YEAR IN INDUSTRY AND STUDY ABROAD OPTIONS AVAILABLE

## Environmental Science MEnv

**UCAS CODE: F856**

ENTRY GRADES: A\*AA

DURATION: 4 YEARS

INTEGRATED MASTERS WITH A STUDY ABROAD YEAR

Study the processes controlling the complexity of Earth's natural environment and its interactions with human activities. You'll cover a broad range of topics, from biogeosciences and atmospheric science to ecological principles and environmental management.

The course provides you with the opportunity to make independent observations through fieldwork and answer key environmental questions across a range of areas. You may choose to take advantage of exciting study abroad opportunities, for example at McMaster University in Ontario or Monash University in Melbourne. Alternatively, you may choose to spend a year industry – putting your environmental skills into action, earning some money and improving your employability.

### Year 1

Introductory modules across a broad range of topics covering Earth's environmental system will give you fundamental knowledge of a range of scientific approaches and perspectives relating to environmental issues. You'll explore substantive aspects of human environmental relations in the context of key environmental problems and debates, while developing practical competencies in environmental analysis techniques through field and laboratory work.

### Year 2

Develop a deeper understanding of particular environmental problems from a range of interdisciplinary perspectives and learn to apply field and analytical skills in environmental monitoring. As you begin to understand and analyse the complex relations between human and environmental systems, you'll learn to apply your knowledge to decision-making. During this year you'll choose three of the five specialist pathways.



## ACCREDITATIONS



## Final Year

If you choose the BSc, a significant proportion of your final year is spent completing your independent research project on a topic that reflects your study and career interests. You'll also continue to study modules appropriate to two of your three chosen pathways.

If you choose the MEnv Integrated Masters, you'll spend your third year studying at one of our partner universities overseas, then return to take a final year of Masters-level modules and independent research.

## Pathways

Choose from one of our five pathways, enabling you to specialise in a particular area of study.

**Earth** – Explore Earth's lithosphere, geological and sedimentary processes, and their interactions with the climate system and natural resources, including the study of volcanoes, earthquakes, fossil records, and their relationships with environmental change.

**Atmosphere** – Ideal if you are interested in meteorology, climate and air pollution. Investigate weather forecasting, high-impact weather, local air quality, atmospheric chemistry, and atmospheric interactions with the climate system and biosphere.

**Water** – Study global and regional-scale processes in the oceans, rivers and ice sheets. Explore oceanography, river management, water quality, and interactions between oceans, ice and the climate system.

**Biosphere** – Investigate global and local-scale ecosystems, and interactions with the earth system, terrestrial and marine ecosystems, ecology, conservation of natural resources, nutrient and carbon cycles, and palaeobiology.

**Environmental management** – Examine human influence on the environment and environmental impacts on society, global environmental change, energy and food security, and effective management of environmental problems on local and global scales.

## Career Paths

The complexity of environmental problems creates a need for trained specialists. You would be suited to careers involving environmental monitoring, consultancy, remediation and protection. You could also go on to roles across the wider graduate employment market or into postgraduate study, where your skills in critical analysis, numeracy and problem-solving are in high demand.

Marijn Rubens

BSc Environmental Science  
(Industrial)

Retail Accounts Coordinator,  
Philips 66

I feel that I'm getting more out of my degree by spending a year in industry which is equipping me with valuable world experience. In today's world it's becoming more and more important to get relevant work experience at a young age, so being able to get a placement with such a reputable company made me very happy. The varied nature of my role also means that I get experience across many different parts of the business, something that will no doubt be very useful both now and later in life.





## Meteorology and Climate Science BSc

**UCAS CODE: F790**

ENTRY GRADES: ABB

DURATION: 3 YEARS

YEAR IN INDUSTRY AND STUDY ABROAD OPTIONS AVAILABLE

## Meteorology and Climate Science MEnv

**UCAS CODE: F791**

ENTRY GRADES: A\*AA

DURATION: 4 YEARS

INTEGRATED MASTERS WITH A STUDY ABROAD YEAR

If you are interested in using science to understand and predict the behaviour of Earth's atmosphere, and to investigate the key challenges facing our time such as atmospheric pollution, climate change and severe weather, this degree is for you.

The demand for knowledge and practical skills in atmospheric science is increasing. At Leeds you'll develop a broad range of tools to tackle critical environmental issues right from the start.

Traditional meteorology courses take a very theoretical approach, but our course is unique. We combine theory with practice, so you can build a strong understanding of the processes in the atmosphere and then put that knowledge to the test in the real world. You'll enjoy plenty of practical experience during our fieldtrips each year, including weather forecasting and taking atmospheric measurements on the Scottish island of Arran.

Leeds is one of very few universities in the UK offering a degree focused entirely on meteorology and climate science. We work closely with the Met Office through the Met Office Academic Partnership. What's more, this degree is accredited by the Royal Meteorological Society.

You can choose to take advantage of study abroad opportunities in meteorology and climate science, for example at the University of Illinois or the University of Wisconsin in the USA. Alternatively, you could gain practical experience through a year in industry – earning some money and improving your employability.



### ACCREDITATIONS





## Year 1

Concentrate on the core skills in maths, physics and chemistry that you'll need throughout your degree. Introductory courses in meteorology and weather forecasting and your study of Earth's atmosphere offer you an overview of the subject. Practical work is important right from the start.

## Year 2

Build on the skills and knowledge gained in your first year, studying important aspects of atmospheric dynamics and physics in more detail and developing key skills in statistics and computing. The residential field course is a challenging and enjoyable highlight of this year.

## Final Year

If you choose the BSc, in your final year you'll gain a truly in-depth knowledge of atmospheric science. The variety of modules on offer enables you to tailor your studies to reflect your particular interests. You'll also carry out independent research.

If you choose the MEnv Integrated Masters, you'll spend your third year overseas studying at a partner university and return to take a final year of Masters-level modules and independent research.

## Career Paths

You could pursue a successful career in meteorology, climate science and air pollution, as well as in industry, commerce and government services, where knowledge of the atmosphere is increasingly essential to policy and decision-making.

Your understanding of climate change and meteorological issues will be highly valued by the Met Office and commercial weather forecasting companies, the armed forces, public organisations such as local authorities and the Environment Agency, and by commercial sectors such as insurance.

Isaac Tan

BSc Meteorology and Climate Science (Industrial)

Intern at Meteorological Service Singapore (MSS)

I enjoy the experience of having my meteorology knowledge from first and second years applied in the real working world. I am especially interested in the spatial and temporal patterns of rainfall in Singapore since thunderstorms can pop up anytime and interact with the environment in very dynamic, unpredictable ways. I am working on designing a web interface to help forecasters to predict accurately where and when it will rain, as well as the risks of rainfall exceeding certain rates that would trigger flash flooding in various regions.





## Sustainability and Environmental Management BSc

**UCAS CODE: F7M0**

ENTRY GRADES: ABB

DURATION: 3 YEARS

YEAR IN INDUSTRY AND STUDY ABROAD OPTIONS AVAILABLE

## Sustainability and Environmental Management MEnv

**UCAS CODE: F750**

ENTRY GRADES: A\*AA

DURATION: 4 YEARS

INTEGRATED MASTERS WITH A STUDY ABROAD YEAR

Sustainability is at the core of current thinking about the environment and our place in it. We face increasing pressure because of our demands for natural resources and the waste generated by our modern lifestyle.

This course will enable you to define, understand and explore the complexities and challenges of sustainable development and natural resources management using case studies from around the world to develop your sustainability and environmental management skills and knowledge.

Our degree options give you the choice to spend a year abroad gaining an international appreciation of sustainability issues. Or you could choose to spend a year in industry – gaining practical experience, earning some money and improving your employability.

Our BSc is approved by the Institute of Environmental Management and Assessment (IEMA). This is widely recognised by employers as a real benefit for anyone in a role with environmental responsibility. The University of Leeds is the only Russell Group university to offer an undergraduate degree accredited by IEMA.



### ACCREDITATIONS



## Year 1

Gain a theoretical and practical grounding in the natural science base of the process underpinning environmental and sustainability problems. You will also be introduced to the related social and policy aspects of sustainability and environmental management. All essential for building a solid base for pursuing the rest of the degree.

## Year 2

Choose from specialist pathways in natural and social sciences that enable you to tailor your degree to your interests. Issues of environmental change, policy and economics, business and management will all be explored, and you will have opportunities to develop your research skills.

## Final Year

As a final-year BSc student, you will have the opportunity to pursue areas of study that interest you through your selection of optional modules. These cover themes such as sustainability, conservation and climate change. You'll also carry out independent research.

If you choose the MEnv Integrated Masters, you'll spend your third year studying at one of our partner universities such as the Australian National University, Griffith University and Adelaide University in Australia, the University of California (Berkeley), University of Arizona and University of Illinois in the USA, and York University and Dalhousie University in Canada, returning to take a final year of Masters-level modules and independent research.

## Pathways

Choose from our four pathways, enabling you to specialise in an area of study and enhance your career prospects.

**Business and sustainability** – Examines the interaction between business and sustainability, and equips you for a career in corporate social and environmental responsibility.

**Energy and the built environment** – Focuses on transport and energy, and develops your knowledge and skills for a career in policy and planning departments.

**Natural resources and biodiversity** – An interdisciplinary approach to biodiversity and natural resource management, preparing you for a career in environmental consultancy and policy.

**Earth systems** – Gain in-depth knowledge of climate change, pollution and regulation, mixing social and natural science, giving you robust knowledge on addressing global environmental problems.

## Career Paths

You'll be ideally placed to fill a growing number of positions which require people who understand both the nature of the environmental problem and its social dimension, as well as acquiring the necessary skills for the management challenges to resolve it. This could mean working for a public sector organisation (local government, the NHS, a university) needing to meet obligations to 'green' its activities or a private sector company trying to ensure it follows environmental rules. Some of our graduates work in the charity sector, in campaigning organisations or in delivering government environmental policies.

Robin Spurr

BSc/MEnv Sustainability and Environmental Management (International)

Study Abroad Year, Australian National University

I have loved my course and the modules I've taken have ranged as much as I had hoped. From Natural Hazards and Chemistry first year, to Sustainable Futures and Business and Corporate Social Responsibility this year, all have been diverse in terms of both lecture staff and the scope of the module.

Taking a study abroad year in Australia gave me the chance to take new modules, and learn about sustainability from a different world context. My highlights include a month long research trip to Vietnam and I had the opportunity to work and save money for extensive travel in South-East Asia, Oceania and Central America.





## Geological Sciences BSc

**UCAS CODE: F600**

ENTRY GRADES: AAB

DURATION: 3 YEARS

YEAR IN INDUSTRY AND STUDY ABROAD OPTIONS AVAILABLE

## Geological Sciences MGeol

**UCAS CODE: F601**

ENTRY GRADES: A\*AA

DURATION: 4 YEARS

INTEGRATED MASTERS WITH A STUDY ABROAD YEAR

This broad-based degree emphasises the fundamental processes underlying the development of the Earth's crust, the formation of rocks and the evolution of life on Earth.

You'll study all the essential earth science disciplines, with a strong emphasis on applying your knowledge in the real world through practical hands-on learning and field trips to national and international destinations. You can also learn from international scientists by choosing to spend a year abroad at, for example, the Victoria University of Wellington in New Zealand. Or you can choose to spend a year in industry – putting your geological skills into practice, earning some money and improving your employability.

### Year 1

Gain a thorough introduction to Geological Sciences. This will involve a lot of practical work in the field or in our Earth Visualisation Laboratory using maps, microscopes, rocks and fossil specimens. The main field course is a week in South Wales where you work in teams to learn the basic skills of a field geologist. At the end of the year, you will put your geological mapping skills into practice on a two-week field trip to the north of Scotland.

### Year 2

Develop your earth science knowledge and skills further on your Easter field class in Ireland, working on sedimentary and metamorphic rocks. After exams, you will carry out fieldwork for your final-year independent project, which typically involves a six-week geological mapping project in a small group.

The range of topics and mapping areas offered is linked to areas of staff expertise, which ensures you are supported by an assigned academic staff supervisor. Typical field areas might include England, Scotland, Bulgaria or the Pyrenees.



## ACCREDITATIONS



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## Final Year

For BSc students, the main part of your final year is an independent research project. This involves you producing a report based on the field data gathered in your second-year six-week mapping project. You can choose a residential field class and from a range of optional modules, depending on which pathway you have chosen. If you choose the MGeol Integrated Masters, you will study with a partner university overseas and return to take a final year of Masters-level modules and independent research.

## Pathways

Choose from one of four pathways to create a more specialised degree and acquire skills in particular areas of geology.

**Geology** – Expand on what you've learned in year one and study the complete range of geological processes that have shaped our planet, gaining a broad education suitable for general employment or further study.

**Petroleum** – Respond to the particular needs of the oil and gas industries. Focus on the most relevant topics for the petroleum industry: structural geology, sedimentology, exploration geophysics and petroleum geoscience.

**Minerals** – Focus on aspects of geology relevant to ore formation, mineral exploration and resource development. This is an ideal route if you are considering a career in minerals exploration or mining geology.

**Environment** – Develop aspects of environmental geology. This pathway is recommended if you're intending to pursue a career in environmental and engineering geology, or wish to work for a geotechnical company.

## Careers

You will be highly regarded by employers for your skills in teamwork, problem-solving, IT, data handling and manipulation. While you'll study the full range of geological science, our pathways enable you to focus your studies towards a favoured aspect of the discipline, acquiring specific geology skills and maximising your chances of employment in the major geoscience sectors.

Nicole Almond

BSc Geological Sciences (Industrial)  
Year in Industry,  
Leap Environmental, UK

I'm a trainee undergraduate for a company that provides site investigation, geotechnical design, and environmental consultancy services. My role involves taking on-field work, including gathering data out on site, supervising site works, compiling reports and logging samples. Being able to spend a year in industry is helping me gain the relevant experience, which will help me to direct my career better. A year in industry is also a great way to meet lots of new people and possibly live in another part of the country for a year.





## Geophysical Sciences BSc

**UCAS CODE: F640**  
 ENTRY GRADES: AAB  
 DURATION: 3 YEARS  
 YEAR IN INDUSTRY AND STUDY ABROAD OPTIONS AVAILABLE

ENVIRONMENT COURSES

## Geophysical Sciences MGeophys

**UCAS CODE: F641**  
 ENTRY GRADES: A\*AA  
 DURATION: 4 YEARS  
 INTEGRATED MASTERS WITH A STUDY ABROAD YEAR

Study Earth through the application of physical principles and tackle a wide range of subjects, often closely linked to geological data.

Geophysicists work in geotechnical, surveying and geophysical services. They also, explore for hydrocarbons and mineral deposits and monitor natural hazards. Others also investigate the interior of Earth and other planets, measure the movements of Earth's plates and assess the impact of human activities on the environment.

You need Maths and Physics at A-level or equivalent to qualify for a Geophysical Sciences degree, and you'll continue to use these skills throughout your studies. Graduates who can demonstrate the required high level of numeracy are in demand by many professions.

If you choose to spend a year abroad, for example at the Colorado School of Mines in the USA or the Victoria University of Wellington in New Zealand, you'll continue to learn from internationally renowned geophysicists. Alternatively, you may spend a year in industry, applying geophysical skills, earning some money and improving your employability.



### ACCREDITATIONS



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## Year 1

Cover the full range of geophysical sciences, developing a solid knowledge of geology, physics, geophysics, mathematics and computer programming, including modules from the School of Physics.

On the one-week field class in South Wales at Easter, you'll work in teams to learn the basic skills of a field geoscientist. After this year, you'll choose optional modules that give a particular focus to your studies. End this year making geophysical observations during a field course in the Yorkshire Dales.

## Year 2

Compulsory modules train you in the key geophysics techniques used in resource exploration and the study of tectonic plates. You'll also study the advanced mathematical and computer programming needed to understand and process geophysical data. Optional modules enable you to specialise in topics from exploration geophysics, natural hazards or physics.

## Final Year

At the start of the year, spend two weeks performing geophysical surveys on an international field trip, which has been held in Lanzarote in recent years. If you choose the BSc, you'll study a number of core and optional geophysics modules. You'll also submit your independent geophysical research project, which can be based either on data collected in the field or modelling under the supervision of a member of staff.

If you choose the MGeophys Integrated Masters, you will spend your third year overseas with one of our partner universities and return to take a final year of Masters-level modules and independent research.

## Career Paths

You can pursue a career in geotechnical, surveying and geophysical services, and in oil and mineral exploration. You'll also be valued in research, financial and governmental environments or as a computer programmer.

You could go on to a successful career in the hydrocarbons industry or with government bodies, or further study, taking a vocational MSc which further enhances employability. You may also progress to a PhD as the first step towards a career in academic research.

### Jonathan Marsh BSc Geophysical Sciences (Industrial)

I have learnt a variety of skills including computer programming and understanding geophysical concepts. The staff are approachable and supportive especially during fieldtrips where the learning is more practical.



# The Faculty of Environment

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The Faculty of Environment comprises the School of Geography, the School of Earth and Environment and the Institute for Transport Studies.

The Faculty is home to a community of scientists and eminent lecturers working at the forefront of their specialisms, who bring knowledge and passion to their subjects.

The Faculty of Environment is a world leader in responding to global challenges, with over 400 staff actively engaged in research and teaching across a wide range of topics covering Earth sciences, environmental science and sustainability, human and physical geography, and transport planning. Our integrated programmes of study offer exciting opportunities to work alongside research leaders and to develop the skills and knowledge required by future decision-makers, industry leaders and informed global citizens.

Have you considered our Geography degrees?

- BA Geography (human)
- BSc Geography (physical)
- BA Geography with Transport Studies
- BSc Geography with Environmental Mathematics
- BSc Geography and Geology
- Be Geography and Business Management
- BA Economics and Geography
- BA Geography and Sociology
- BA Geography and Business Management
- BA Geography and History

For more information, visit [courses.leeds.ac.uk](https://courses.leeds.ac.uk)

## Director of The British Antarctic Survey as New Chancellor

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Director of the British Antarctic Survey and leading polar scientist Professor Dame Jane Francis was announced as the new Chancellor of the University of Leeds in December 2017. Jane has conducted pioneering research, including numerous expeditions to the Arctic and Antarctic, and undertaken a wide range of international roles to promote the UK's polar interests. Jane was a Professor of Palaeoclimatology, Head of the School of Earth and Environment, and Dean of the Faculty of Environment from 2008 to 2013.







“I loved my time at Leeds and feel truly honoured to be back as chancellor. Helping to inspire passion and achievement is what excites me in my work, and in this role I hope to be able to do just that.”

*Professor Dame Jane Francis, University Chancellor*

# How to Apply and Entry Requirements

Our standard entry requirements are listed below. Lower offers can be made based on demonstrated interest and aptitude for the subject.

## Environment and Business BA

**UCAS CODE: FN8C**

A-LEVEL: ABB

ACCESS TO LEEDS: BBC

INTERNATIONAL BACCALAUREATE 34

OVERALL, 16 AT HIGHER LEVEL

Preferably including two from Biology, Business Studies, English, Ethics, Geography, History, Law, Philosophy, Politics, Psychology and Sociology. Other subjects may be considered.\*

## Environment and Business MEnv (International)

**UCAS CODE: FN02**

A-LEVEL: A\*AA

ACCESS TO LEEDS: AAB

INTERNATIONAL BACCALAUREATE 35

OVERALL, 19 AT HIGHER LEVEL

Preferably including two from Biology, Business Studies, English, Ethics, Geography, History, Law, Philosophy, Politics, Psychology and Sociology. Other subjects may be considered.\*

## Environmental Science BSc

**UCAS CODE: F851**

A-LEVEL: ABB

ACCESS TO LEEDS: BBC

INTERNATIONAL BACCALAUREATE 34

OVERALL, 16 AT HIGHER LEVEL

Including two from Biology, Chemistry, Environmental Studies, Geography, Geology, Mathematics and Physics; one must be Mathematics or a science subject. Other subjects may be considered.\*

## Environmental Science MEnv (International)

**UCAS CODE: F856**

A-LEVEL: A\*AA

ACCESS TO LEEDS: AAB

INTERNATIONAL BACCALAUREATE 35

OVERALL, 19 AT HIGHER LEVEL

Including two from Biology, Chemistry, Environmental Studies, Geography, Geology, Mathematics and Physics; one must be Mathematics or a science subject. Other subjects may be considered.\*

## Geological Sciences BSc

**UCAS CODE: F600**

A-LEVEL: AAB

ACCESS TO LEEDS: BBB

INTERNATIONAL BACCALAUREATE 35

OVERALL, 17 AT HIGHER LEVEL

Including two from Biology, Chemistry, Geology, Geography or Environmental Studies (not both), Mathematics and Physics. Other subjects may be considered.\*

## Geological Sciences MGeol (International)

**UCAS CODE: F601**

A-LEVEL: A\*AA

ACCESS TO LEEDS: AAB

INTERNATIONAL BACCALAUREATE 35

OVERALL, 19 AT HIGHER LEVEL

Preferably including two from Biology, Chemistry, Geography, Geology or Environmental Studies (not both), Mathematics and Physics. Other subjects may be considered.\*

## Geophysical Sciences BSc

**UCAS CODE: F640**

A-LEVEL: AAB

ACCESS TO LEEDS: BBB

INTERNATIONAL BACCALAUREATE 35

OVERALL, 17 AT HIGHER LEVEL

Including Mathematics and Physics. Other subjects may be considered.\*

## Geophysical Sciences MGeophys (International)

**UCAS CODE: F641**

A-LEVEL: A\*AA

ACCESS TO LEEDS: AAB

INTERNATIONAL BACCALAUREATE 35

OVERALL, 19 AT HIGHER LEVEL

Including Mathematics and Physics. Other subjects may be considered.\*

## Meteorology and Climate Science BSc

**UCAS CODE: F790**

A-LEVEL: ABB

ACCESS TO LEEDS: BBC, INCLUDING

B IN MATHEMATICS

INTERNATIONAL BACCALAUREATE 34

OVERALL, 16 AT HIGHER LEVEL

Including Mathematics and either Physics or Chemistry. Other subjects may be considered.\*

## Meteorology and Climate Science MEnv (International)

**UCAS CODE: F791**

A-LEVEL: A\*AA

ACCESS TO LEEDS: AAB

INTERNATIONAL BACCALAUREATE 35

OVERALL, 19 AT HIGHER LEVEL

Including Mathematics and either Physics or Chemistry. Other subjects may be considered.\*

\*Offer excludes General Studies

For further information and for alternative qualification entry requirements, visit the website or email [admissions@see.leeds.ac.uk](mailto:admissions@see.leeds.ac.uk)

## Sustainability and Environmental Management BSc

UCAS CODE: F7M0

A-LEVEL: ABB

ACCESS TO LEEDS: BBC

INTERNATIONAL BACCALAUREATE 34

OVERALL, 16 AT HIGHER LEVEL

Preferably two from Biology, Chemistry, Economics, English, Environmental studies, Geography, Geology, History, Law, Mathematics, Physics, Politics and Sociology. Other subjects may be considered.\*

## Sustainability and Environmental Management MEnv (International)

UCAS CODE: F750

A-LEVEL: A\*AA

ACCESS TO LEEDS: AAB

INTERNATIONAL BACCALAUREATE 35

OVERALL, 19 AT HIGHER LEVEL

Preferably two from Biology, Chemistry, Economics, English, Environmental studies, Geography, Geology, History, Law, Mathematics, Physics, Politics and Sociology. Other subjects may be considered.\*

## How to Apply

All undergraduate applications should be made through the Universities and College Admissions Service (UCAS). Full instructions on how to apply are available at [www.ucas.com](http://www.ucas.com)

## Offer Process

Suitable applicants will be invited to an applicant day, which we strongly encourage you attend as it gives you the opportunity to meet our students, academic and admission staff, and find out more about your course.

An interview with an academic will normally form part of this process. This will give you the chance to discuss your application in more detail, check that it's the right course for you and your career plans, have your questions answered and find out more about studying at Leeds.

## Entry Requirements

We welcome applications from students with a wide range of level 3 qualifications. Information about the qualifications we accept and our full admissions policy can be viewed online. **Note:** we do not accept General Studies or Critical Thinking as part of the entry requirements for any of our degrees. All courses also require GCSE English and Mathematics at grade C or above unless stated otherwise.

## English Language Requirements

English language at grade C or above, or an appropriate English language qualification such as IELTS:

- IELTS 6.0 overall, with no less than 5.5 in any component.

Email our Admissions team at [admissions@see.leeds.ac.uk](mailto:admissions@see.leeds.ac.uk) for information on equivalent English language qualifications.

## International Foundation Year

Our International Foundation Year (IFY) is intended for international students who do not yet have a formal qualification required for entry to year one of our degree courses.

[Internationalfoundationyear.leeds.ac.uk](http://www.internationalfoundationyear.leeds.ac.uk)

## Language Centre

Our Language Centre provides the Academic English for Undergraduate Studies pre-session course, which is designed to help international students develop the necessary language and academic study skills for undergraduate study.

[www.leeds.ac.uk/languages](http://www.leeds.ac.uk/languages)

## Open Days

We hold open days in June, September and October each year. These events are an ideal opportunity to find out more about our courses, student life in Leeds, and to visit the University and the School. In addition, all applicants offered a place on one of our courses will be invited to an applicant open day which may include a short, informal interview with a member of teaching staff. We encourage you to visit the School to find out more about our degrees first-hand from staff and students and to ask any questions you may have.

## Fees and Student Support

For full information on fees and student finance, visit

[www.leeds.ac.uk/yourfinances](http://www.leeds.ac.uk/yourfinances)

## Mature Students

If you are a mature applicant, you will receive individual consideration, taking account of existing academic qualifications, relevant work experience and personal motivation for study.

## International Students

If you are looking to move to the UK for your studies, the School welcomes students from countries around the globe. You'll benefit from our large and diverse community of cultures while studying at a premier Russell Group university. Find out more at [www.leeds.ac.uk/international](http://www.leeds.ac.uk/international)

## Further Information

For further information on our admissions process, including the application and selection process, download a copy of our admissions policy or contact our admissions office:


[admissions@see.leeds.ac.uk](mailto:admissions@see.leeds.ac.uk)

## Find us online:

[www.see.leeds.ac.uk](http://www.see.leeds.ac.uk)

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**School of Earth and Environment**

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**UNIVERSITY OF LEEDS**

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