

Earth and Environmental Sciences

Undergraduate brochure



If you find the world around you fascinating and care about the global challenges we face, an undergraduate degree from the Department of Earth and Environmental Sciences at Manchester is for you.

We apply physics, chemistry, mathematics and biology to address humanity's greatest challenges: climate change, pollution and natural hazards like earthquakes, tsunami and volcanoes.

We also delve into the evolution of the solar system and the formation of the Earth.

Our students experience research-led teaching from world renowned scientists, and have access to outstanding facilities and equipment. Our students enjoy life-changing, free field trips within the UK and across the world, and are supported by a close knit community of leading academics within the department.



Why Manchester



We are ranked in the top 10 in the UK for studying Earth and Environmental Sciences.

(Times Higher Education World University Rankings 2022).



Join one of the largest departments of Earth and Environmental Sciences in the UK, giving you access to a wide range of research specialisms.



Our common first year allows you to explore different areas before you decide from one of our eight specalist degree pathways.



Journey
throughout the
UK and across
the world on
CV-enhancing
field trips that will
equip you with
transferable skills,
such as problemsolving and
team-working.



We pride ourselves on the amount of support we offer students, from our dedicated wellbeing hub, to our award-winning PASS (Peer Assisted Student Study) scheme.

Our courses

Earth and Planetary Sciences BSc

Earth and Planetary Sciences MEarthSci

Earth and Planetary Sciences with a Research Placement MEarthSci

Earth and Planetary Sciences with Industrial Experience MEarthSci

Earth and Planetary Sciences with International Study MEarthSci

Earth and Planetary Sciences with an Integrated Foundation Year

Environmental Science BSc

Environmental Science MEnvSci

Environmental Science with a Research Placement MEnvSci

Environmental Science with Industrial Experience MEnvSci

Environmental Science with International Study MEnvSci

Environmental Science with an Integrated Foundation Year BSc/MFnvSci

FLEXIBLE OPTIONS

Our courses have a common first year, giving students the flexibility to transfer to their chosen course up to the end of Year 1, when they are better informed about the pathways and have a deeper understanding of each specialisation.

FOUNDATION YEAR AVAILABLE

You can prepare for the full degree course if you do not have the appropriate qualifications for direct entry by undertaking our foundation course first.

For more information on all our courses visit: uom.link/ug-ees





What you'll learn

In the first year, students on both the Earth and Planetary Sciences degrees, and the Environmental Science degrees take the same course units. These span the breadth of natural sciences and allow you to change between any of our degrees until the end of your first year while you discover where your interests lie.

After the first year, you select one pathway from a choice of eight, through the subject, (there are five pathways in Earth and Planetary Sciences and three in Environmental Science). The geology pathway through the Earth and Planetary Sciences course allows students to develop the core skills you would expect on any geology degree with a focus on independent field-based mapping and project work.

If you study for three years, you will graduate with a BSc degree either in Earth and Planetary Sciences or in Environmental Science, with your chosen pathway named in brackets after this title.

Both degree courses may be extended to four years (MEarthSci and MEnvSci) to give you significant extra research or vocational experience that will make you more attractive to future employers in both academia and industry. You may also switch (grades permitting) between the three-year and four-year variants of your course after you begin your degree course.

If you are on a four-year course with a Research Placement / Industrial Experience / International Study, you will spend the third year of your degree on placement and return to complete Year 4 in Manchester.

Special features

Our MEarthSci/MEnvSci degrees offer the chance to gain significant additional experience, with the option to incorporate a year in industry, complete a research placement or to study at an international university.

INDUSTRIAL EXPERIENCE

Competition in the graduate job market has risen dramatically over the last ten years, and students are increasingly looking for ways to differentiate themselves. An excellent way to do this is by choosing an industrial placement as part of your degree course. This involves spending a year working in industry during your third year of study. As well as the salary that you earn during your placement, you also gain practical experience that can be invaluable, both in your final-year project and when competing for graduate jobs.

To find out more information about industrial experience visit: uom.link/ug-ees-ind-exp

RESEARCH PLACEMENT

Students on our courses with a research placement can carry out an extended individual research project working alongside world-leading scientists using state-of-the-art research facilities.

INTERNATIONAL STUDY

Students have the opportunity of studying for the third year of their course at one of several universities abroad. The University has exchange partners across the world and students build up valuable experience spending time at these universities. The University of Manchester has a wide range of partner universities in many different countries, with Canada, USA, Australia and Singapore being popular destinations.

Read more about International Study: uom.link/ug-ees-study

FIELD TRIPS

Our field trips are a key component of our undergraduate degrees, providing you the opportunity to travel to fascinating locations in the UK and abroad in every year. Your tuition fees include all compulsory, taught field courses. Previous locations included Spain, France, Guatemala, Italy, Montserrat, Nicaragua, Scotland, USA, and Wales.

Read more about our field trips here: uom.link/ug-ees-field-trips



"I learnt about global warming and the contribution of corporate emissions during my degree and that made me want to work in a role where I could be involved in influencing a company to have a more positive impact on the environment."

Madeleine Loveday / BSc (Hons) in Environmental Science alumni

Read more about Madeleine's time at Manchester: uom.link/ug-ees-madeleine

FACILITIES

Field and laboratory work lie at the core of our research and teaching in the fields of Earth, Planetary and Environmental Sciences. Our teaching resources provide students with the very best opportunities:

- Access to advanced software like remote sensing applications, and for studying subsurface seismic data.
- Innovative, research-led, eLearning tools to enhance your understanding, such as the Build Your Own Earth app (www.buildyourownearth.com) which was shortlisted for the Global Reimagine Education Awards 2018
- A well-equipped, dedicated undergraduate study area providing a place for relaxation and somewhere to work with your fellow students within the Department
- Extensive collections of minerals, rocks and fossils within the Department and through our close links to Manchester Museum.

OUR STUDENT COMMUNITY

The GEMS Society (Geology and Environment for Manchester Students) run by our students, is the hub of our flourishing social and academic activities. The society organises many events throughout the year, including the annual GEMS summer ball.

uom.link/ug-ees-student-union

Open days

The University holds undergraduate open days regularly where you have the opportunity to find out more about our courses, the support we offer and see our facilities. Attending an open day is a great way to find out what studying at Manchester is like.

For information about our open days visit: uom.link/ug-ees-open-days



How can taking one of our eight undergraduate degree pathways offer you the opportunity to make a difference? Watch the video and find out: uom.link/ug-ees-video



"My Planetary Science course gave me a great amount of insight into satellites and Geographic Information Systems (GIS), the primary areas of work within the satellite sector of the global space industry... My interaction with clients and sales has similarly been driven by what I learned during tutorials and later units in my master's year, such as public and media science communication."

Jonathan Hicks / MEarthSci Earth and Planetary Science alumni

Read more about Jonathan's time at Manchester: uom.link/ug-ees-jonathan

Employability and careers

Benefit from our research into climate change, pollution control, ecosystem conservation, energy and resources, opening doors to roles that can make a difference. Fieldwork will give you multidisciplinary problem-solving and team-working skills, which graduate employers actively look for.

WHAT OUR GRADUATES DO:

- · Scientific research
- · Public policy
- · Environmental consultancy
- Energy and earth resources industries
- Space industry
- · Teaching.

WHERE OUR GRADUATES WORK:

- Atkins
- GeoCon
- Jacobs
- KPMG
- · Malcolm Hughes Surveyors
- RSK
- Stantec
- RoC Consulting
- Chemostrat
- · Galliford Try
- Schlumberger
- WSP
- · The Met Office
- · United Utilities
- The Environment Agency.

Find out more about the careers opportunities the University and our department offer, so that you graduate with a range of skills and experience: uom.link/ug-ees-careers

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DISCLAIMER

This brochure was produced in 2022 It has therefore been produced in advance of course starting dates. For this reason, course information, including course content, may be amended prior to your applying for a place on a course of study. There are a number of reasons why changes to course information and/or published term dates may need to be made prior to your applying for a place on a course. These may include, but are not limited to: the need to make reasonable changes to the content and teaching offered in relation to any course for operational and/or academic reasons; the withdrawal of courses due to insufficient numbers; a course not receiving the required accreditation; and/or interruption or loss of key services due to circumstances beyond our control, including fire, flood or other operational issues. Prospective students are therefore reminded that they are responsible for ensuring, prior to applying to study at The University of Manchester, that they review up-to-date information by searching for the relevant course at uom.link/fse-ug-courses

STUDY ABROAD/INDUSTRIAL EXPERIENCE DISCLAIMER

Some aspects of the study abroad/industrial experience/research placement programmes may continue to be impacted by the COVID-19 pandemic. The situation is fast-moving and dynamic and may require adjustments at short notice.

FIELDWORK DISCLAIMER

The Department aims to run advertised fieldwork and we very much hope that students will be able to enjoy the fieldwork experience in the usual way. The ability of fieldwork to proceed, and whether any changes to proposed fieldwork might be necessary, will remain subject to COVID-19 restrictions and based on the U.K. government guidelines. We will therefore assess on a regular basis the viability of any travel and fieldwork and communicate any decisions to our students at the earliest possible opportunity.

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