

Earth Sciences



Undergraduate study

Courses

Single Honours

BSc Environmental Geoscience

three years F640

BSc Geology

three years F600

BSc Geophysics

three years F661

BSc Palaeontology and Evolution

three years CF17

MSci Environmental Geoscience

four years F641

MSci Environmental Geoscience with Study Abroad

four years F644

MSci Geology

four years F603

MSci Geology with Study Abroad

four years F609

MSci Geophysics

four years F662

MSci Geophysics with Study Abroad

four years F663

MSci Palaeontology and Evolution

four years CF16

This leaflet contains information for students planning to start university in autumn 2019. We have made every effort to ensure all details are correct at the time of going to press (June 2018). However, since this information is subject to change, you are advised to check the University's website, bristol.ac.uk/ug-study, for the latest updates.

Why study earth sciences at Bristol?

Earth scientists study the solid Earth, its atmosphere and hydrosphere, structure, processes, history, materials and the evolution of life upon it. Earth sciences at Bristol encompass geology, environmental geoscience, geophysics and palaeontology and evolution, and have strong links with chemistry, physics, mathematics, geography and biology. It is an excellent subject to study if you enjoy a holistic approach to science. The whole Earth is our laboratory and fieldwork is an integral part of our teaching.

Our teaching is cutting edge and our students are problem solvers, with quantitative skills much sought after by employers. Earth sciences have been taught in Bristol for over 100 years. We are housed in the spectacular neo-gothic Wills Memorial Building that contains state-of-the-art teaching facilities. Our Geology Museum contains more than 100,000 specimens of historical and scientific importance and the newly refurbished Wills Memorial Library in our building has dedicated study space.

The school has around 260 undergraduate and 120 postgraduate students who are taught and supervised by 35 academic staff members, the majority of whom have high international research profiles in the fields of volcanology, deep earth processes, palaeobiology, geochemistry, climate change, geophysics and tectonics. We can simulate the kinds of temperatures and pressures encountered hundreds of kilometres below Earth's surface. We can reconstruct ancient oceans, determine how magma moves, and work out what colour dinosaurs were and how they ran. Students have ample opportunity to interact with staff in the classroom, laboratory and field classes.

'Bristol's School of Earth Sciences has world-leading researchers across all subject fields and staff are always keen for undergraduates to get involved. I have had the opportunity to work with and get to know many faculty members which has opened doors for my life after university. The staff and students love their work so it is a very positive atmosphere.'

Sam (MSci Geology with Study Abroad)

What will you study?

Our four degree streams – Geology, Geophysics, Environmental Geoscience, and Palaeontology and Evolution – can be studied as a BSc in three years or as an MSci in four years. The MSci courses in Geology, Geophysics and Environmental Geoscience can also be studied with a year abroad, and we are currently hoping to introduce a year abroad option in Palaeontology and Evolution.

Geology degrees deal specifically with the solid Earth, its physics and chemistry and, ultimately, life on Earth through time.

Environmental Geoscience investigates the solid Earth and how it interacts with the atmosphere, hydrosphere and biosphere. It also deals with issues such as global climate change and remedying damage caused by human activity and industry.

Geophysics teaches you about the history, structure and dynamics of the Earth system and how the inaccessible parts of Earth can be studied through remote sensing techniques such as seismology.

On our Geology and Environmental Geoscience degrees, students have a common first year that lays firm foundations for progressing through the course, covering mathematics, physics and chemistry, and introducing computer programming and fieldwork skills. Following year one, some units are specific to your subject, while some are common to all our degree streams. For example, we offer units that provide an introduction to satellite remote sensing, applied geophysics and geographical information systems (GIS), demonstrating how to use advanced geophysics and remote sensing to survey both Earth's surface and subsurface, monitor natural hazards, prospect for natural resources, and help archaeological and engineering site investigations.

In year three you can choose 60 per cent of your course content. In year four of an MSci degree you will devote half your time to an advanced research project, the subject of which is a guided choice. In this unit you will work closely with established researchers in the school to design and plan an individual experimental project that may be largely field-, laboratory-, or specimen-based, or of a theoretical character. Projects will provide an insight to the research approach and allow you to place your results in the context

of existing work. You will present and discuss the results of your findings so they cross the gap between merely reading what others have said and contributing your own observations and ideas to the scientific world. These projects are frequently of publishable standard and give students an immediate trajectory into a research career or industry.

Our Palaeontology and Evolution degrees are the same for the first three years. In year one you will spend one third of your time studying biology and two thirds studying units from the School of Earth Sciences. From year three you will have a small number of optional units to choose from. One unit unique to this subject stream is Mesozoic Stratigraphy and Palaeontology Fieldwork. This is devoted to palaeontological, sedimentological and stratigraphic observations of terrestrial and marine environments on the Dorset Coast and Isle of Wight. It allows you to develop the field skills necessary for depositional and palaeoenvironmental contextualisation. You will interpret phenomena such as fossilisation (taphonomy), palaeoenvironmental assessment and stratigraphic correlation through use of depositional, cyclic and bio-stratigraphic tools. As with our other MSci degrees, in year four you will devote half of your time to an advanced research project.

Teaching is a mixture of lectures, laboratory practical classes, tutorials and field classes. We are a small school, with an undergraduate student to staff ratio of 8:1, so we get to know our students well. You can expect an average of 20 contact hours per week. Assessment is through a combination of coursework and examination.



Careers and graduate destinations

Our graduates have excellent career prospects and an outstanding reputation among employers in the sector. Some graduates move out of the subject area and join diverse graduate schemes or go on to further study; our MSci graduates often win funded PhD positions both here and at other universities.

A science degree from a top-ranking university is an excellent investment both for students and for employers. Our Geology, Environmental Geoscience and Geophysics degrees are accredited by the Geological Society of London, our professional body. An accredited degree can be counted towards the requirements for becoming a chartered geologist or scientist.

Many of our recent graduates contribute to our careers programme by coming back to talk about their jobs, their research and their companies.

The University of Bristol has one of the best employment records in the UK. We are rated sixth in the UK in the QS Graduate Employability Rankings 2018 and are the fourth most targeted university by top UK graduate employers (High Fliers Research 2018).



Making your application

Typical offer for, BSc/MSci Environmental Geoscience, BSc/MSci Geology and BSc/MSci Palaeontology and Evolution*

For other qualifications visit bristol.ac.uk/ug19-envirogeoscience, bristol.ac.uk/ug19-geology or bristol.ac.uk/ug19-palaeontology.

A-levels AAB (contextual ABC[†]) including a core science/mathematics subject and another science-related subject (contextual AB in any order[†]), or ABB in three core science/mathematics subjects.

IB Diploma 34 points overall (contextual 31[†]) with 17 points at Higher Level (contextual 15[†]) including 6, 5 in any order at Higher Level in a core science/mathematics subject and another science-related subject, or 32 points overall with 16 at Higher Level, including 6, 5, 5 in three core science/mathematics subjects.

English Language profile C^{††}

GCSEs Standard numeracy requirement (C in GCSE Mathematics or equivalent) and standard literacy requirement (C in GCSE English or equivalent).

Typical offer for BSc/MSci Geophysics*

For other qualifications visit bristol.ac.uk/ug19-geophysics.

A-levels AAB (contextual ABC[†]), including A in Mathematics and B in Physics.

IB Diploma 34 points overall (contextual 31[†]) with 17 points at Higher Level (contextual 15[†]) including 6 at Higher Level in Mathematics and 5 at Higher Level in Physics.

English Language profile C^{††}

GCSEs Standard literacy requirement (C in GCSE English or equivalent)

[†]For information on contextual offers, visit bristol.ac.uk/contextual-offers.

^{††}For details of English language profiles, visit bristol.ac.uk/ug-language-requirements.

Selection UCAS or Common Application. Mature applicants and those who have not followed one of the above routes of education will be invited for an interview and test.

*The typical offer is indicative only and the University accepts a wide range of qualifications. The information is correct at the time of printing (June 2018); however, we recommend you check the University's website for the most up-to-date information: bristol.ac.uk/ug-study.

We are interested in selecting applicants with firm foundations in physical (and in the case of Palaeontology and Evolution applicants, biological) sciences. We like active people with enquiring minds who can manage their time and achieve a great deal, who show an interest in the natural and outdoor world, and who demonstrate a passion for how the earth and life work.

Demonstrating relevant work experience in your application is desirable but we do not require it as it is often hard to find in our field. We may run selection tests and interviews for people applying from non-standard routes, (for example Access to Science qualifications in the case of mature students) but not for recent school leavers with standardised qualifications, such as A-levels.

Further information

Find out more about the School of Earth Sciences: bristol.ac.uk/earthsciences.

Contact us

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If you have any questions about courses, applications or any aspect of being a UK or international student at Bristol please contact the Enquiries Team.

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bristol.ac.uk/disability-services

University guide to the city of Bristol

bristol.ac.uk/citybristol

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