

Geophysical Sciences



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Further information

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Admissions Policy

Applicants for the Geophysical Sciences programmes should hold an A level (or equivalent) in Mathematics. AS level Mathematics is not acceptable. Foundation courses are acceptable but must contain a high level of mathematics (see page 242 for details of the foundation year of UEA's degree in Science).

All applicants must have GCSE Mathematics and English Language at grade C or above. We encourage applications from students with alternative qualifications. Please see page 43 or contact our Undergraduate Admissions Office for details. We invite all suitably qualified applicants to visit us to see the campus and our laboratories and to meet students and staff.

Teaching and Assessment

Most of our course modules are taught through lectures and practical classes, but about 30 per cent of teaching time is devoted to field work and seminars. Group work in the field and the laboratory provides valuable opportunities for informal communication between students and staff. All these programmes incorporate a large element of choice. Personal advisers help construct your chosen programme of study. Work is assessed through a combination of coursework and end-of-year examinations.

Career Prospects

Geophysical Sciences graduates are in demand, and most find employment in which they can use their geophysical skills, such as in the oil exploration and extraction industry, the water and environmental protection industries, consultancy, research laboratories or teaching. Many of our graduates study for higher degrees – PhD or MPhil degrees by research or postgraduate taught courses.

Research Areas

Teaching in geophysics benefits from the active research community in the Schools of Environmental Sciences and Mathematics. Research areas include solid earth geophysics, volcanoes, earthquakes, sedimentology, earth history, climatic change, meteorology, hydrology and oceanography. You will be able to undertake your final year research project in one of these areas, with access to the School's state-of-the-art research facilities. We try to share with you the sense of excitement in discovering more about how the environment works.

New Degrees for 2010

The School of Environmental Sciences will be offering a new Climate Science degree which will include a four-year integrated MScience pathway in addition to the three-year BSc. Integrated MScience pathways for the School's existing degree programmes may also be available in 2010.

Key facts

- ✦ Degree programmes incorporating a year in Australasia, North America, Continental Europe or Industry
- ✦ World leader in Environmental Research – graded 5** in the 2001 Research Assessment Exercise
- ✦ Taught within the internationally renowned School of Environmental Sciences – rated 'Excellent' in the latest Teaching Quality Assessment
- ✦ Integrated teaching approach offering a wide range of course modules
- ✦ Opportunities for field work in the UK and overseas
- ✦ Excellent career prospects

“The year abroad programme took me to New York. The experience was incredibly rewarding and broadened my horizons in the academic environment. It's a once in a lifetime chance to travel and study.”

Chris Ellison, Geophysical Sciences

Geophysical Sciences

BSc Geophysical Sciences UCAS code F640

A level (typical offer): ABB-BBB
International baccalaureate: 32-31
(incl 3 HL grade 5)
Special entry requirements:
A level Mathematics
Length of course: 3 years

BSc Geophysical Sciences with a year in Australasia UCAS code F662

BSc Geophysical Sciences with a year in North America UCAS code F641

A level (typical offer): AAA-AAB
International baccalaureate: 34-33
(incl 3 HL grade 6)
Special entry requirements:
A level Mathematics
Length of course: 4 years
Study abroad: Yes

BSc Geophysical Sciences with a year in Continental Europe UCAS code F642

A level (typical offer): ABB
International baccalaureate: 32
(incl 2 HL grade 6)
Special entry requirements: GCSE
Language/A level Mathematics
Length of course: 4 years
Study abroad: Yes

BSc Geophysical Sciences with a year in Industry UCAS code F660

A level (typical offer): ABB-BBB
International baccalaureate: 32-31
(incl 3 HL grade 5)
Special entry requirements:
A level Mathematics
Length of course: 4 years

Course brochure: Tel 01603 593139
or email env.admiss@uea.ac.uk

Geophysical Sciences at UEA aims to help you understand why and how natural phenomena occur. You will learn to apply the powerful techniques of mathematics and physics to explain events such as weather systems, earthquakes and floods. Approximately one third of your degree will be spent studying mathematical techniques and equipping you with the skills necessary to analyse the physical environment. Field work forms an essential part of your training and may include seismic and gravity investigations, magnetic and electrical surveys, or beach shore processes. There is a wide choice of modules of study and it is possible to follow a number of routes through the programme, for example, geological, atmospheric, marine or any combination of your own choosing. Such decisions only need to be finalised at the start of your second year, in consultation with your adviser.

Year 1

The first year will develop your basic scientific skills, so courses in mathematics, statistics, computing and research skills are compulsory, providing you with a solid foundation to the honours years of your degree. You will have an element of choice and current optional modules include:

- Earth Surface Processes
- Environmental Biology and Chemistry
- Probability
- Mapping

The Honours Years

In the second and final years of the programme you will have considerable flexibility to tailor your degree according to your personal interests and career aspirations. You will choose from the substantial range of optional modules available which currently cover topics in palaeoclimatology, volcanoes, earthquakes, weather forecasting techniques, and energy resources.

A Year Abroad

Australasia

This programme offers you the chance to spend the third year of your studies at an exchange university in either Australia or New Zealand. Collaborating Australasian universities include: Macquarie University, Sydney; Griffith University, Brisbane; Murdoch University, Perth; University of Adelaide, Adelaide; Lincoln University, New Zealand.

North America

Our North American exchange programme is long-established and continues to maintain its popularity. You will have the opportunity to study at one of ten exchange universities in either the USA or Canada. Collaborating North American universities include Alaska, North Carolina, Miami, Maine, Oregon, Colorado, California, State University of New York, Louisiana, and British Columbia.

Europe

Students on the European exchange programme will take appropriate language modules during the second year, in preparation for the third year spent at a university in Continental Europe. Our present exchange agreements include Marseille (France) and Granada (Spain).

A Year in Industry

This programme incorporates an additional placement year (third year) in industry. You will have the opportunity to gain valuable work experience in the field of geophysical sciences. The School of Environmental Sciences will offer you full support and guidance in identifying and negotiating work placements.