

Department of Earth Sciences

UNDERGRADUATE PROSPECTUS



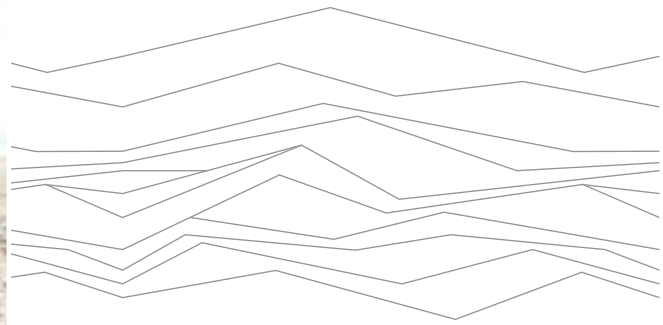
UNIVERSITY OF
OXFORD



EARTH SCIENCES AT OXFORD



Left: Undergraduates on the 2nd year field trip to Dorset.



Below: A radar interferogram showing ground deformation from the 2009 L'Aquila earthquake, measured by satellite.

What is Earth Sciences?

Earth Sciences is the study of our planet.

If you are interested in:

- The origin and evolution of the Solar System, the Earth, and life;
- Physics and chemistry of the Earth's interior;
- Plates, mountains, volcanoes and earthquakes;
- Interactions between the atmosphere, oceans and the solid earth;
- The climate system;
- The fate of glaciers and ice sheets;
- Chemical and biological evolution of the oceans;
- Natural hazards;
- Natural resources;

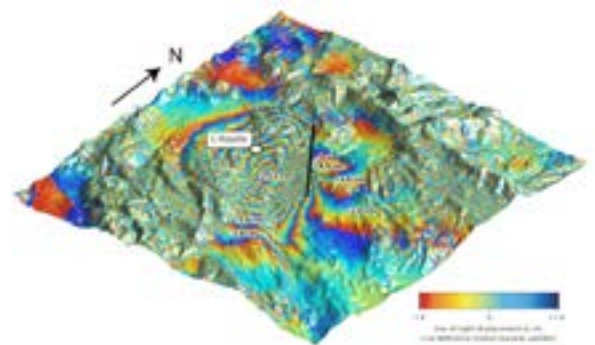
or indeed any aspect of the way the Earth works, then you will be asking questions that can only be answered by a combination of Physics, Chemistry, Biology and Mathematics.

If applying your scientific background to understand your home planet appeals to you, then you should choose Earth Sciences.

So why come to Oxford?

The Oxford Earth Sciences department has received the top grading in all teaching and research assessments. We regard the undergraduate experience as being more akin to an apprenticeship in science to four years of formal teaching. You will be taught by some of the world's best Earth Scientists in settings ranging from the tutorial to the laboratory, and into the field. By your second year you will be on first-name terms with the academic staff, reflecting the informal nature of the Department.

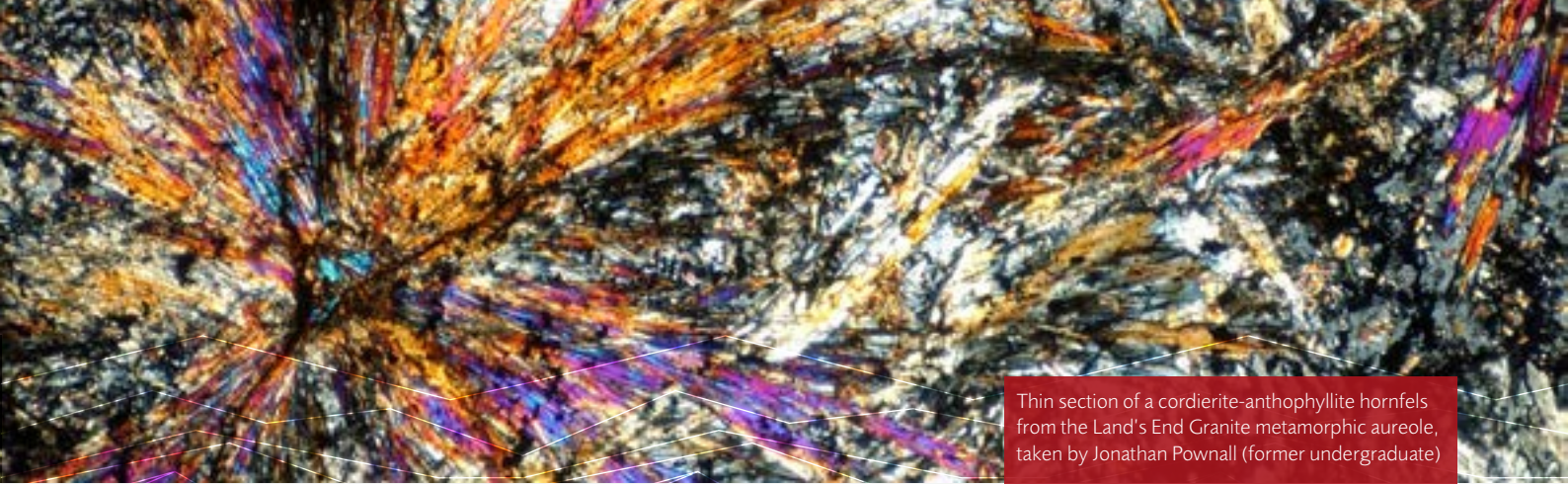
The goal of our course is to give students the analytical and observational apparatus to convert their curiosity into an effective tool for investigation of the physical, chemical, and biological processes that govern the evolution and present state of the planet on which we live.



AFTER EARTH SCIENCES AT OXFORD

Oxford Earth Scientists are highly employable; approximately 80% of our graduates choose their first jobs in an area where their degree can be applied directly. About half of our graduates enter fields such as oil, minerals, water resources, or environmental protection and monitoring. Earth Sciences at Oxford also provides you with essential grounding for a career as a research scientist, and many of our graduates go on to higher degrees (PhD or MSc).

Solving geological problems requires critical thinking, flexibility and the ability to base decisions on the analysis of a wide range of, frequently incomplete, data. These skills are essential in all walks of life, including business.



Thin section of a cordierite-anthophyllite hornfels from the Land's End Granite metamorphic aureole, taken by Jonathan Pownall (former undergraduate)

APPLYING TO READ EARTH SCIENCES

The Courses

4-Year (UCAS Code F644)

3-year (UCAS Code F642)

We offer a 4-Year Masters degree (M Earth Sci.), with the option of leaving after 3 years with a Bachelors degree (BA in Geology). For the first three years the two courses are identical. The 4th Year allows students the option of deepening their training through a choice of higher-level specializations and by carrying out a research project, which runs throughout the year.

Application Procedure

Your application should be made on the standard UCAS form, on which you need to specify either the 3-Year course in Geology or the M. Earth Sci. course (see above). The form also allows you to state your preferred college, but if you have no preference you will be allocated a college during the admission process. Colleges currently accepting undergraduate Earth Sciences students are Exeter, St Anne's, St. Edmund Hall, St Hugh's, St. Peter's, University and Worcester.

Qualifications

In this section we refer to qualifications in terms of A levels, but our remarks refer equally to equivalent levels of qualifications in other examination systems. Your application will be equally welcome if you are aiming towards other qualifications, such as the International or European Baccalaureate or Scottish Highers.

Practical classes in the teaching labs.



We require all candidates to be studying (to A2 level or equivalent):

- Mathematics (for entry any year)
- EITHER Chemistry OR Physics

This provides the best preparation for the course, and will form part of any offer of a place.

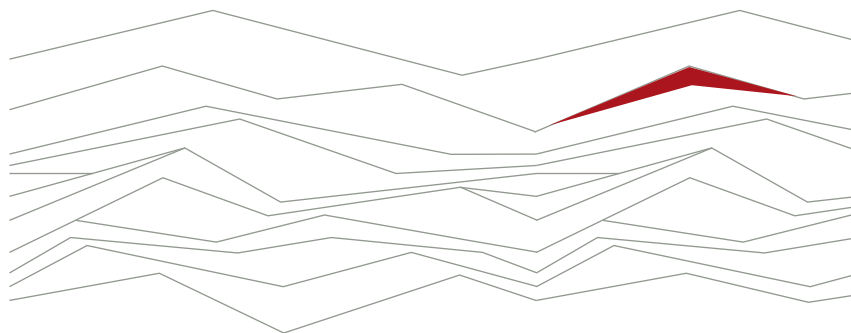
The most highly recommended additional A2 subjects for Earth Sciences are:

- Chemistry
- Physics
- Biology
- Further Mathematics
- Geology/Geography

Additional AS or A2 level qualifications in any of these subjects are very helpful.

Offers

Successful pre-examination candidates are made conditional offers, which are usually A*AA or AAAA at A2 level, or carefully calibrated equivalents in other systems of examination. Post-qualification candidates may receive unconditional offers.



THE COURSE

Using Earth as the laboratory, Earth Sciences at Oxford aims to produce quantitative physical scientists, trained to delve into and solve multifaceted science-based questions. The first two years of the course provide you with the basic tools needed to probe and understand how the Earth works. From the end of the second year onwards, you can specialise in your developing interests and increasingly develop skills for independent research.

The first three years of the course are taught using lectures, practicals and tutorials. A range of field excursions accompany these lecture courses and reinforce what is learnt in the Department in a wide range of geological contexts.

Choosing the 4-Year M Earth Sci. course allows you to pursue your own interests by completing an original project in a world-class research group in your fourth year. The taught component of the fourth year consists of seminar-style taught courses, but the main focus of the year is the project.

There are several field trips throughout the degree course that are widely acknowledged as one of the best things about Earth Sciences at Oxford. Students get to put into practice what they learn in lectures, making the link between theory, laboratory experiments and the natural processes that operate on the Earth.



Earth Sciences building



4th years studying volcanology in Santorini, Greece.



4th year students sample sea water on the Oceanography field trip to Bermuda.

OPEN DAYS

We encourage interested candidates to attend our Science Open Days, which are held in late June or early July and mid September each year. The Open Days give you a taste of the work that goes on in the Department and allows you to meet with staff, students and other visitors.



Tlaca Volcano, Nicaragua



In the lab: students carry out an independent research project in their 4th year.



The 3rd year field trip to Spain

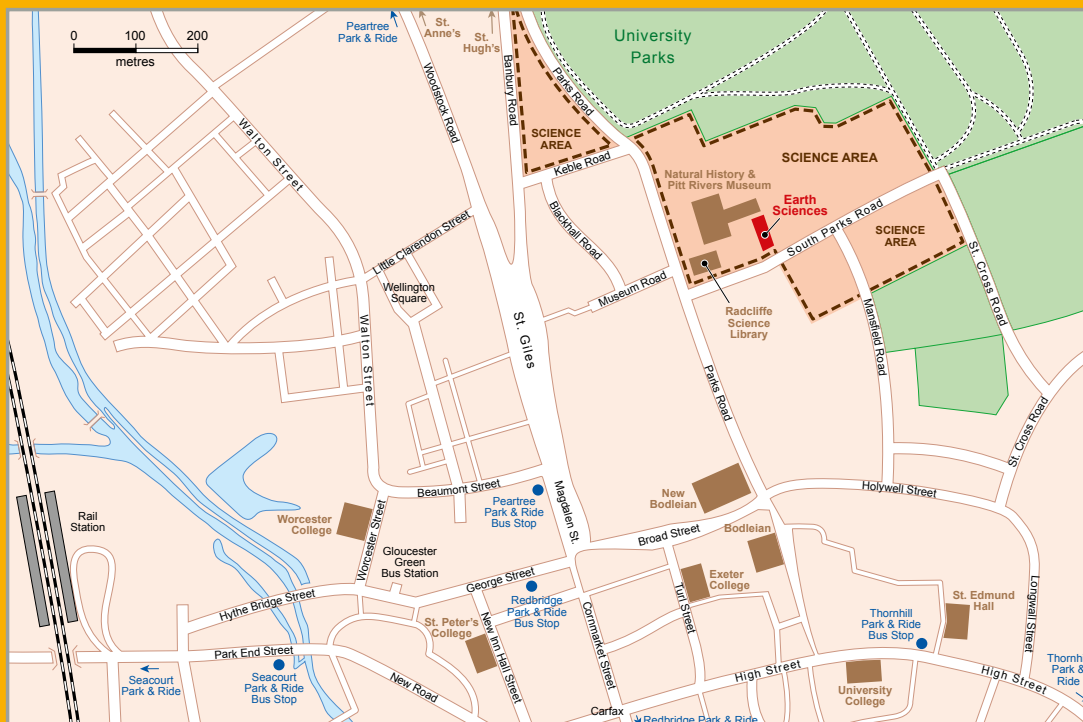
Students examine the evidence of tectonics at a >100 m high fault scarp in Greece.

ENQUIRIES

If you have any queries, please contact:

Academic Administration
Department of Earth Sciences
South Parks Road
Oxford OX1 3AN
0044 (0)1865 272040
enquiries@earth.ox.ac.uk

For further details on the course, please see the website:
www.earth.ox.ac.uk/undergraduate_admissions



EARTHSCIENCES

