

Have you ever wondered . . .

- How the planet Earth formed?
- Why dinosaurs grew so large?
- If we should we allow fracking?
- Why sinkholes form?
- Could a mega-tsunami strike Britain?

Study A Level Geology to find out the answers to these questions and more . . .

A Level Geology

A Level Geology will introduce you to the science which studies the whole Earth. It covers a range of real life geological contexts (e.g. geohazards in Britain and the evolution of flight) and the challenges that face contemporary geoscience. Around half of all UK Earth Science undergraduates studied Geology A level and it is also an accepted science qualification for progression to other science courses (including marine science), archaeology and civil engineering.

You will learn about geology in a range of different contexts. The course assumes no prior experience of geology but builds on GCSE science concepts that it applies to the study of the Earth to develop an understanding of concepts that have both an academic and practical application.



Are you . . . ?

- Wanting to be a civil or geotechnical engineer?
- Passionate about helping others through practical overseas development projects?
- Thinking of a career in conservation or land management?
- Fascinated by fossils and want to discover how they can help solve crime and find new oil reserves?
- Interested in resources and minerals?
- Planning to study Oceanography or Marine science?
- Keen on working outdoors in remote areas?
- Or do you prefer laboratory based investigation?
- Up for the challenge of prospecting and developing energy resources?
- Studying other sciences or maths?

What are the benefits?

- The Geology course gives you hands-on practical experience of how geology works in a number of real world applications.
- Introduces the transferable skills that geology graduates are highly regarded for within corporate and financial management: their ability to work effectively in multidisciplinary teams and their skills in evaluating and making decisions based on partial data sets.
- Subject cross-over with biology, chemistry, geography, physics and maths makes a powerful combination to optimise your A level grades and let's you stand-out from the crowd.

Thought provoking questions

- Does fracking cause earthquakes and make tap water burn?
- Was there life on Mars?
- Are birds just tiny dinosaurs?
- Can we learn from geological history to avoid major environmental disasters?
- What is the risk that a giant meteorite strike would trigger a mass extinction?
- Can geology help us to bridge the energy gap?

Key features

- Simple straightforward assessment through examinations
- Based on key contexts relevant to real life geology
- Opportunities to develop practical geological and science skills through fieldwork and in the classroom
- In-depth study of real life geology contexts: Geohazards and Petroleum geology (fossils, physics and fieldwork).

What's included?

- Development of practical skills in geology
- Fieldwork
- Minerals and rocks
- Fossils and time
- Earth structure
- Plate tectonics
- Geological structures
- Sedimentary environments and time
- Geochronology
- Applied sedimentology
- Fluids and geological processes
- Igneous petrology
- Metamorphic petrology
- Mining geology
- Geohazards
- Engineering geology
- Key concepts for basin analysis
- Basin analysis in practice.

Practical endorsement

Fieldwork is the arena in which geologists at all levels develop their skills and learn to apply their knowledge and understanding. To achieve a Practical Endorsement, through a range of fieldwork and laboratory investigations, you will:

- Participate in 4 days of fieldwork (min.)
- Apply an investigative approach when using instruments and equipment
- Dynamically assess safe working
- Make and record observations
- Integrate research, referencing and reporting
- Be prepared for undergraduate practical science components.

How will you be assessed?

- The examinations in Geology are all **synoptic**, meaning that they cover all the content of the course.
- Total of **6 hours** of examinations (2 x 2 hours 15 minutes and 1 x 1 hour 30 minutes) taken at the end of the course.
- A **wide range** of question types which include **multiple choice**, **short answer** and **extended response** questions.

Where can the qualification take me?

STEM degrees

Engineering:

Chemical Engineering with Oil & Gas Technology, Civil Engineering, Environmental Engineering, Civil & Coastal Engineering, Engineering with Environmental Management, Engineering Geology & Geotechnics, Environmental Engineering, Geotechnics, Material Science, Mining Engineering, Petroleum Engineering, Petroleum and Gas Engineering.

Geology:

Applied Geology, Archaeology & Earth Science, Earth & Ocean Science, Earth Science, Environmental Geology, Environmental Science, Geoinformatics, Geology, Geological Hazards, Geological Oceanography, Geophysics, Geology with Physical Geography, Palaeobiology, Palaeoecology, Palaeontology, Petroleum Geology, Petroleum Geoscience, Planetary Science, Resource Geology.

A range of opportunities including Conservation & Countryside Management, Environmental Management, Environmental Studies, Forensic Science, Geography, International Development, Marine Science, Ocean Science, Soil Science, Sustainable Development.

