

# A LEVEL GEOLOGY

If you enjoy science subjects and love learning about the natural world, this is the course for you! It's a perfect fit for students who love environmental or natural sciences (e.g., marine biology, palaeontology, etc.) It is taught from scratch, assuming no prior knowledge, and is assessed entirely by examination at the end of the 2-year course. There is also a Practical Endorsement, similar to the other sciences, which includes laboratory- and computer-based practicals as well as 4 days of fieldwork.



## WHAT IS GEOLOGY?

Geology is the branch of science concerned with the structure, evolution and dynamics of the Earth and with the exploitation of the mineral and energy resources that it contains in a sustainable way. Geology examines hazards, resources, plate tectonics, past life and extinctions, map and field skills. Geology applies physical, chemical and biological principles to the investigation of the Earth but also involves a distinctive scientific methodology, invoking internal and external Earth processes to explain the evolution of the planet through geological time.

## WHY SHOULD I STUDY GEOLOGY?

Geology is considered a science by universities, so can open doors to degrees that require science A levels. It supports a range of careers in the natural sciences (e.g., volcanologist, palaeontologist, environmental scientist, marine biologist), as well as civil engineering or work in extractive industries such as oil/gas or precious metal mining. It is also highly relevant to those wishing to specialise in areas that tackle climate change, such as renewable energy production. We have a dedicated Earth Science Laboratory equipped with a very large teaching collection of maps, rocks, minerals and fossils from all over the world spanning 2000 million years!

## USEFUL SKILLS & INTERESTS

Geology students typically will have enjoyed Science and Geography at school and want to learn about volcanoes, earthquakes, fossils and minerals, although you will not be disadvantaged by not having a GCSE in Geography or Geology. You will enjoy a lot of hands on practical work, map work and laboratory tests. You should have a deep interest in the sciences and not be overly frightened of maths, as 10% of the course does come from mathematical skills.

## COURSE COMMITMENT

You will be expected to attend four days of fieldwork as part of the skills section of the course; this may be in the form of a residential visit. You should aim for 100% lesson attendance and homework completion to deadlines set.

## COURSE STRUCTURE & CONTENT

- Topic 1: Elements, Minerals and Rocks
- Topic 2: Surface and Internal Processes of the Rock Cycle
- Topic 3: Time and Change
- Topic 4: Earth Structure and Global Tectonics
- Topic 5: Rock-forming Processes
- Topic 6: Rock Deformation
- Topic 7: Past Life and Past Climates
- Topic 8: Earth Materials and Natural Resources
- Topic 9: Geohazards
- Topic 10: Geological Map Applications
- Topic 11: Geology of the Lithosphere

## HOW WILL I BE ASSESSED?

This qualification is linear which means that students will be assessed by examinations at the end of the course. The practical endorsement is a non-graded pass/fail credential awarded based on practical work (including fieldwork).

## COURSE COSTS

There are 4 days of fieldwork required for the Practical Endorsement. In recent years this has been done as a 5-day residential visit to the Lake District; the cost of this is kept as low as possible and students on the college bursary may have a proportion of their costs covered.

## ENTRANCE REQUIREMENTS

For entry on to this course you will need to meet the college standard entry requirements for Advanced Level study of 5 GCSE passes (grades 4 - 9) including a minimum of a grade 5 in Maths, English Language and Science. No prior knowledge is expected or assumed – the course is taught “from scratch” although there is an overlap with Physics, Maths, Chemistry, Biology and Geography.



## PROGRESSION ROUTES

Many students studying Geology choose Geology or Earth Science degrees at University. Geology is considered by most universities as a science. There are many careers that use Geology, in particular; Engineering, Mining, Environmental Services, Law, Accountancy, Armed Services, Planning, Teaching, Oil and Gas industries, Civil Engineering, Quarrying and even Medicine to name but a few!

Geologists were named in the ‘Top 10 Earners’ in the Times this year.

Some of the students who studied this course at Prior Pursglove College progressed on to:

- Oxford University – Physics
- Portsmouth University – Marine Biology
- University College London (UCL) – Civil Engineering
- Hull University – Geography / Geology with Physical Geography
- Keele University – Applied Environmental Science & Geology
- Leeds University – Geological Sciences
- Leicester University – Geology
- Northumbria University – Environmental Management
- Nottingham University – Environmental Science

## STUDENT COMMENTS

What our Geology students say:

“Geology is interesting and gives you the chance to study something new that you’ve never done in school.”

“An enjoyable and interesting subject. Learning about what lies below the ground we walk on and the power of the earth.”

## FURTHER INFORMATION

If you require further information please contact the college.

*Please note that the information in this leaflet is correct at the time of publication, but circumstances may arise which cause us to revise our provision  
Feb 2023*