

# EARTHwork

Choices after Higher Education



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If you are an undergraduate student at university, and want to make decisions about your future career then this leaflet is for you. A companion leaflet offering advice to those still at school or college is also available.

There are three options for you to consider as you reach your final year...

## **Direct entry to geoscientific employment**

You may enter the profession as soon as you graduate but long-term prospects may be compromised. Jobs include monitoring drilling activity, well logging, site investigation, some posts with the Environment Agency, quarrying and aggregates, etc. You can gain good experience which may lead to more senior positions and management roles, but most career geoscientists enter with higher degrees. While a first degree provides the basics, it does not teach specialist skills. In addition, there is considerable competition for jobs which means that graduate candidates can find themselves at a disadvantage during selection compared to candidates with further qualifications.



## Postgraduate education

If you finish university with a good honours degree (first or upper second class) you should qualify for a place on a higher degree course.

Masters courses (MSc) are either one or two years in length, and many one-year taught MSc courses are available in specialist subjects such as hydrogeology, petroleum geology etc.

A PhD or DPhil (Doctorate) research degree is normally required for a research appointment in industry or for a university or museum post. The usual time taken to gain a PhD/DPhil is three years. Those who enter geoscientific employment with a postgraduate degree have excellent prospects (depending on fluctuations within the professions) with opportunities in the UK and across the world. Salaries can be relatively high and many posts offer the chance to use geological expertise on a regular basis.

## Non-geological careers

More than half of all geoscience graduates will enter a non-geological career. The skills gained, such as numeracy, problem solving, working as a team etc. give an excellent base for a wide variety of careers. Many geoscience graduates enter professions such as accountancy, banking and teaching.

For teaching posts in secondary or further education, a Postgraduate Certificate in Education (PGCE) is required. (See the ESTA Web site, Further Information)







## Employment trends

As geoscientists are concerned with the Earth and natural materials distinct trends in employment tend to follow the discovery, exploitation and demand for resources. The oil and gas industry is the main employer of geoscientists at all levels, although here demand is especially cyclical due to changes in world economy and political stability.

Growth areas at the moment are environment-related – hydrogeology; waste disposal; pollution control; and land quality/remediation.

The largest employers of geoscientists in the UK are the British Geological Survey (BGS) and the Environment Agency. The BGS is responsible to government for the geological survey of the British onshore and offshore areas; the provision of a national geoscience information service and related scientific activities including consultancy. The Environment Agency is the leading body for protecting and improving the environment (air, land and water) in England and Wales.

Your current place of study will be able to provide details of potential PhD topics and opportunities for further research.

## Where do I look for a geoscience job?

Visit your university careers centre first. Visits by potential employers may be scheduled, and they may have vacancy advertisements. They will also be able to give guidance on completing application forms and laying out your CV. Web sites that list vacancies are given in Further information.

Remember that employers will see many applicants with strong academic skills. They are looking for what makes you stand out: for instance, attending geological meetings (such as those held by your local Geological Society Regional Group); running a local club; involvement in geoconservation. What will make them notice you?



## What could I earn as a geoscientist?

Salaries for geoscientists who choose to use their degrees in their employment vary according to sector, but are comparable with other science-based careers. Public sector employers (schools, universities, local councils and government agencies) offer average salaries but often holiday allowance is more generous and the environment may be less stressful than working in the private sector. ('Private sector' denotes that the organisation is not directly controlled by the state; larger private companies will appear on the stock market, have shareholders etc.)

If making money is your main motivator, and you can cope with the regular changes in fortunes of the oil and gas industry, then the highest earning potential probably exists in hydrocarbons; though starting salaries, especially with service companies rather than the major oil companies, may be no higher than average. Whatever you choose, it may take a few years to find the type of employer and overall package with which you feel comfortable. For details of what you might earn at the moment, look at current vacancies online (some suggestions are given in Further information).

## Work placements

A period of weeks or months gaining experience of working or shadowing geoscientists can help you make decisions about where you want to be in the future. However this sort of experience is only commonly available in 'industry' – for example with engineering, petroleum, or environmental or water companies.

You will generally have to arrange the placement yourself, by contacting a suitable company and sending them your CV. Reference sources such as The Geologist's Directory online and your local telephone directory list details (see Further Information).



The Geological Society of London is the UK national learned and professional body for geoscience. We are a membership organisation with over 9000 Fellows all over the world. If you have a geoscience degree or similar qualification you can join us as a Fellow or beforehand as a Candidate Fellow. Full details of the requirements, cost, and benefits are on our Web site at [www.geolsoc.org.uk](http://www.geolsoc.org.uk).

If in addition you have significant work experience as a professional geoscientist, we offer the prestigious title of Chartered Geologist.



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## Further information

- Geologist's Directory online – accessed via the Geological Society Web site **[www.geolsoc.org.uk](http://www.geolsoc.org.uk)**
- Earth Science Teachers' Association  
**[www.esta-uk.org](http://www.esta-uk.org)**
- Information on funding opportunities/awards from The Natural Environmental Research Council  
**[www.nerc.ac.uk](http://www.nerc.ac.uk)**
- Careers information for graduates & postgraduate course listings  
**[www.prospects.ac.uk](http://www.prospects.ac.uk)**
- British Geological Survey  
**[www.bgs.ac.uk](http://www.bgs.ac.uk)**
- The Environment Agency  
**[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)**
- Association of Graduate Recruiters  
**[www.agr.org.uk](http://www.agr.org.uk)**
- Geoscience jobs online  
**[www.earthworks-jobs.com](http://www.earthworks-jobs.com)**



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