GEOSCIENTIST

JOB DESCRIPTION

This is the perfect career for those who love to study our planet, its structure, and how the oceans, atmosphere, and living things interact.

Geoscientists use their knowledge of physics, chemistry, and mathematics to study a variety of issues in the world—from predicting volcanic activity, to ensuring clean water supplies, to finding the best way to extract natural resources

SALARY

Newly qualified geoscientist ****
Experienced geoscientist ***

INDUSTRY PROFILE

Job opporunities worldwide • Industry demands highly technical skills • Higher salaries offered by oil and gas companies

AT A GLANCE



YOUR INTERESTS Geology • Physics • Scientific exploration • Mathematics • Engineering • Chemistry • Biology • Computers



ENTRY QUALIFICATIONS A bachelor's degree is required. Employers may look for candidates with higher degrees in geology, geophysics, or Earth science.



LIFESTYLE Geoscientists usually work regular office hours, but they also may have to do field work, which can lead to extremely varied schedules.



LOCATION When not in the office, geoscientists may work from various locations, such as oil rigs, earthquake zones, quarries, and nuclear waste sites.



THE REALITIES Traveling to sites across the world and working with equipment, such as drilling machines, can be physically demanding.

CAREER PATHS

(such as oil and gas) from the ground.

Geoscientists may work in research, focusing on issues such as climate change, or in government, advising on policy. Most jobs are in either mineral and extraction industries or in consultancies that advise on the impact of developments, such as dams and waste-treatment projects. Government-related geoscience jobs are the most likely to include volcanic studies and watershed studies.

GRADUATE A degree in geoscience or a related subject is required.
Accreditation from a professional body may be required as well, and field experience is highly regarded.



POSTGRADUATE Most employers expect you to have a master's degree or PhD, combined with some academic research experience.



▼ RELATED CAREERS

- ► METEOROLOGIST see pp. 152–153
- ARCHAEOLOGIST Excavates and explores ancient sites. The role may involve working in museums or research organizations, and specializing in particular fields, such as historical periods or geographic locations.
- ► CARTOGRAPHER Studies and produces maps and geographical charts. Using the latest technology, cartographers produce maps for the public and the military, as well as for surveying purposes.
- HYDROLOGIST Studies the movement, distribution, and quality of water on Earth. They may look at rainfall patterns or the issue of melting ice caps and its effect on the environment.



SKILLS GUIDE



The ability to communicate effectively and use diplomacy to address sensitive issues



A logical, methodical, and organized approach to solving problems.



Knowledge of mathematics and statistics to handle detailed measurements and calculations.



Competence in technology to work with scientific equipment and interpret results.



Attention to detail for precise measurements and making accurate calculations.

MINING GEOSCIENTIST

Works for mining companies, exploring and evaluating production sites and making recommendations about extraction techniques.





PETROLEUM GEOSCIENTIST

Specializes in the exploration and extraction of oil and gas, usually working for large multinational petrochemical companies.



GEOSCIENTIST Specializes in a specific area once they are qualified. The areas include geology, mining, petroleum, and energy resources.



ENVIRONMENTAL GEOSCIENTIST

Applies scientific knowledge to environmental issues, such as pollution and waste disposal, and to issues concerned with large-scale construction projects. The best-paid geoscientists work in the oil industry.