

Careers in the Oil and Gas Industry

The oil industry today

Oil and gas are the world's most important energy sources. They produce power for our factories and our homes, run our cars, ships, aircraft and railways, and provide us with plastics and other synthetic materials that, in the modern world, we often take for granted.

With demand for oil and gas increasing, and greater care being taken of our natural resources, the oil industry faces a challenging and exciting future - one that is going to test its ingenuity and expertise to the full.

Perhaps you would like to be a part of this exciting future?

What sorts of people are needed?

The oil industry offers a variety of job opportunities. Many are office based, but some still demand working in difficult conditions, in the far corners of the world.

There are scientists in laboratories, researching into the uses of oil, and roustabouts on platforms in the North Sea, struggling to repair a drill while a gale rages around them. There are engineers at refineries, ensuring the safety of this volatile product, and sales people discussing the latest oil products with customers.

Somewhere within the oil industry there may be a job for you, whether you are leaving school at sixteen, taking A-levels, Highers or other qualifications, or hoping to go on to university. The higher the qualification the better the chance of a job, but what matters most is that your skills match up with the type of job you wish to do.

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What sorts of qualification are needed?

Choosing the right subjects at school or college is important. For any job, a minimum of three GCSE passes or SCE standard grades or equivalent GNVQs/general SVQs, including maths and English, is essential. After that, the most common requirements will be for qualifications in science subjects.

The same is true in further education. Most opportunities are for students with degrees in engineering and applied sciences. Openings for those who are qualified in the arts, languages, social sciences and business studies will usually be on the commercial side of the oil industry, in areas such as marketing, distribution and trading.

What sorts of jobs?

Exploration and production - Exploration and production provide job opportunities at every level. Looking for new oil reserves involves seismic surveying and analysis. Production also includes more specialist jobs in areas such as drilling, and electrical, chemical and mechanical engineering.

Refining - From specialists to general technical assistants, from operating and maintenance staff to instrumentation and computer system experts, a wide range of mainly technical jobs exist.

Marketing and Distribution - A variety of opportunities also exist in this area. From junior accounts assistant to marketing director, from oil depot manager to systems analyst, this is an area where non-scientists can make their mark in the oil industry.

Research and Development - The search for new and better ways of finding and using oil is very important. Some of the most specialised jobs in the whole industry are to be found here. Scientists with degrees of postgraduate qualifications usually lead the work, although there are some opportunities for laboratory and technical assistants.

Commercial Services - The efficient running of all parts of the industry depends on staff specialising in areas such as personnel, finance, contracts, trading, purchase and supply, and information technology.

Careers for Science Students

The Oil and Gas industry offers an exciting environment full of interest and challenge for scientists. Their work is fundamental to every development, whether finding new oil fields or introducing new products.

Here are a few examples of jobs for scientists in the oil and gas industry;

- Geophysicist
- Mudlogger
- Petroleum Engineer
- Hydrologist
- Process Engineer
- Geochemist

Careers for Engineering Students

For the engineer, the Oil and Gas industry has always been full of excitement and variety, technical and personal challenge. Few areas of work can match the variety of different engineering careers the oil industry offers.

Here are a few examples of jobs for engineers in the oil and gas industry;

- Chemical Engineer
- Civil Engineer
- Design Engineer
- Drilling Engineer
- Engineering Geologist
- Mechanical Engineer
- Mining Engineer
- Electrical Engineer
- Process Engineer
- Petroleum Engineer

Careers for Mathematics Students

Mathematicians are essential in the oil and gas industry. Their work is vital to support the scientists and engineers working on new developments and on working oil fields.

Here are a few examples of jobs for mathematicians in the oil and gas industry;

- Engineering Geologist
- Geophysicist
- Mudlogger
- Petroleum Engineer
- Process Engineer
- Hydrologist
- Geochemist

Careers for Business Students

There are opportunities in the oil industry worldwide for women and men equally, in areas as different as accounting, personnel management, purchasing, selling, marketing or commercial trading. Some are purely office-based, others involve frequent travel. There are back-room support roles and tough, demanding, front-line jobs for those who like that sort of challenge. With such a range of choice, it's very likely that there is an ideal job for you.

Here are a few examples of jobs for Business students in the oil and gas industry;

- Account Manager
- Oil Broker
- Marketing Manager
- Personnel Management
- Production Manager
- Plant Manager

What to do next?

Interested? Your next move should be to talk to your careers officer or teacher. They will be able to give you more information as well as supply some of the many leaflets and booklets about working in the energy industry that have been produced by the energy companies themselves.

If you can't get hold of these, or require some more basic information about activities and careers in the energy industry look at our website [Energyzone](#) for lots of useful information to help you plan your career in the Energy industry.