# Petroleum/Reservoir Engineer





### Petroleum/Reservoir Engineer

### Job description

Once oil and gas are discovered, petroleum engineers work with geologists and other specialists to understand the geologic formation of the rock containing the reservoir. They then determine drilling methods, design and implement the drilling equipment, and monitor operations.

### Education/certification required:

Four-year degree (bachelor's) degree, usually in areas of petroleum engineering, mechanical engineering or chemical engineering

### High school courses should include:

Math subjects such as algebra, trigonometry and calculus; and science classes such as biology, chemistry and physics

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### Engineer Chemical/Process





### **Chemical/Process Engineer**

### Job description

BP's chemical engineers are vital to meeting the growing demand for energy. They work on some of the largest, most complex and most challenging energy projects in the world. They design chemical plant equipment and devise processes for manufacturing chemicals and products, such as gasoline, synthetic rubber, plastics and detergents. They also play an important role in developing new technologies, such as transport fuels and chemicals from unconventional sources, including natural gas and biomass.

### Education/certification required:

Four-year (bachelor's) degree, usually in chemical engineering

### High school courses should include:

Science classes such as chemistry, biology and physics; and math subjects such as algebra, trigonometry and calculus

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### Geologis





### Geologist

### Job description

As a geologist at BP, you may find yourself working in exploration, involved in our new ventures and taking responsibility for evaluating the hydrocarbon potential of unexplored basins, or developing a prospect inventory that supports our wildcat exploration wells. Or you may work in developments, where the challenge lies in understanding exactly how much resource has been discovered and how best to produce those valuable hydrocarbons. While working in production, you could be technically challenged ensuring the maximum recovery from established assets using the latest in modeling techniques and sophisticated wells technology.

### Education/certification required:

Four-year (bachelor's) degree or advanced (masters or doctorate) degree, usually in geology, physics or geosciences

### High school courses should include:

Math subjects such as algebra, geometry and trigonometry; science classes such as chemistry and physics

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## Petroleum Engineer





### **Petroleum Engineer**

### Job description

From exploration to production, BP's petroleum engineers play a crucial role in our field operation success. They are essential to ensuring we extract hydrocarbons safely and efficiently from our global discoveries and support the entire lifecycle of an oil or gas field. This covers everything from evaluating prospects and determining potential productivity and profitability, to developing the areas to optimize hydrocarbon production.

### Education/certification required:

Four-year (bachelor's) degree, usually in areas of petroleum engineering, mechanical engineering or chemical engineering

### High school courses should include:

Math subjects such as algebra, trigonometry and calculus; and science classes such as biology, chemistry and physics

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## Computer Scientis





### **Computer Scientist**

### Job description

BP relies on information. It's what tells us where to safely drill our wells and how best to manage our reservoirs. It keeps us informed of global energy prices and the costs of our projects. It keeps our business running and protects our integrity. Our systems are some of the most advanced in the world, enabling us to take on projects that are as complex as they are geographically distant. Computer scientists at BP develop and deploy high-tech solutions for the discovery, development and operations related to the energy sector.

### Education/certification required:

Four-year (bachelor's) degree or advanced (masters or doctorate) degree, usually in computer science, information systems or information technology

### High school courses should include:

Computer knowledge is essential, so classes in computer modeling, data analysis and digital mapping are useful, in addition to math and science courses.

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## Financial Analyst





### **Financial Analysts**

### Job description

BP is always on the lookout for qualified accountants to meet our business needs. We rely on individuals with experience in areas such as audit and control, finance learning and development, finance assurance, risk management, finance planning and reporting, treasury, tax, accounting policy and other areas.

Some finance roles include: finance analyst, finance manager, treasury manager, compliance manager, performance manager, planning manager, financial reporting manager, financial accountant, report analyst and lead accountant.

### Education/certification required:

Four-year (bachelor's) degree, usually in the area of finance, accounting or business; advanced (master's) degree; accounting certifications (CPA, ACA, etc.)

### High school courses should include:

Math classes such as business math, algebra and economics

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### **Energy Trader**





### **Energy** Trader

### Job description

At BP, energy traders represent a diverse range of talents in supply and trading. They try to work out how much oil and gas from our various fields and from the global marketplace should go on to each of our refineries in order to be safely turned into useful products. They must also figure out how to get it there. As products leave the refinery - in the form of gasoline, chemicals or heating oil - the same complex questions apply: Who wants to buy it, where are they, and how will we get it there safely?

### Education/certification required:

Four-year (bachelor's) degree, usually in the areas of business, finance, accounting or economics

### High school courses should include:

Math classes such as business math, algebra, economics and statistics

Test your ability to analyze, anticipate and react quickly! Play Trading Up, a business trading game: welcome.bp.com/ist-game/index.html

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## Electrical Engineer





### **Electrical Engineer**

### Job description

Ensure existing production plants remain safe and reliable by effectively using manpower and equipment to carry out electrical maintenance, repairs and improvements. For new plants, like onshore oil and gas processing plants and offshore oil and gas production platforms, you will design all the electrical systems and equipment. Covering generators, transformers and electric motors, your hard work will ensure power is produced and utilized in the most efficient and cost effective way.

### Education/certification required:

Four-year degree (bachelor's) degree, usually in areas of electrical engineering

### High school courses should include:

Math subjects such as geometry, algebra, trigonometry and calculus; and science classes such as chemistry, biology and physics.

### Other helpful courses:

Auto shop to get hands-on experience with machines and tools and computer science as it closely relates to electrical engineering

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### Petrophysicist





### Petrophysicist

### Job description

Ability to integrate data and work in multidisciplinary environments is key as you will continuously communicate between a geologist, reservoir engineer, geophysicist and a completion engineer. You will generate subsurface estimates for reservoir storage and volumes of oil and gas-in-place. You may find yourself working with reservoir engineers to optimize the well spacing in the development of the field or designing water floods to maximize the total volume of hydrocarbons recovered.

### Education/certification required:

Four-year (bachelor's) degree or advanced (masters or doctorate) degree, in the area of Petroleum Engineering, Geology, Physics, Mechanical Engineering or Electrical Engineering

### High school courses should include:

### Calculus, Physics and Chemistry

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## Mechanical Engineer





### Mechanical Engineer

### Job description

Ensure the ongoing integrity and availability of our facilities from initial equipment design, selection, specification and layout through to maintenance and inspection of rotating machinery and static equipment. These roles will routinely interact with contractor mechanical engineering project staff, providing mechanical engineering technical guidance and assurance for major projects with strict adherence to approved codes, specifications, design basis documents, and BP integrity management and health, safety, security and environment principles.

### Education/certification required:

Four-year degree (bachelor's) degree, usually in areas of mechanical engineering or civil engineering

### High school courses should include:

Math subjects such as algebra, trigonometry and calculus; and science classes such as chemistry, biology and physics

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### Environmental, Safety, Occupational Engineer HSSE





### HSSE

### Environmental, Safety, Occupational Engineer

### Job description

The safety of our sites, the well-being of our people and our impact on the environment are absolutely fundamental to our business. That is why HSSE is a global discipline that crosses so many areas of our business. Our responsibility is to communicate key policies and requirements to BP teams working on operational sites or projects, and keeping HSSE issues at the forefront just like other business drivers like cost and schedule.

### Education/certification required:

Four-year degree (bachelor's) degree, usually in areas of Occupational Health and Safety, Industrial Hygiene degree

### High school courses should include:

Plenty of math and science courses such as chemistry, biology physics, and health science along with building communication skills in English and speech classes

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## Project Engineer





### **Project Engineer**

### Job description

BP's project engineers work on some of the largest, most complex and most challenging energy projects in the world. Project Engineers play a key role in interfacing with the numerous discipline engineers and the various business support functions within BP to integrate the various scopes and deliver the functionality of the project while satisfying the outside stakeholders. They are involved in all stages and all scopes of the project which helps them develop an overall, broad perspective of a multimillion dollar project at a rapid pace.

### Education/certification required:

Four-year degree (bachelor's) degree, usually in areas of engineering e.g. chemical, mechanical and electrical

### High school courses should include:

Science classes such as chemistry, biology and physics; math subjects such as algebra, trigonometry and calculus

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