Career of the fortnight



Energy Engineer - research, design and build power generation plants, and work in the oil and gas industry.



Entry requirements:

You can do a **degree** in an engineering or a scientific subject. Some employers may expect you to have a postgraduate qualification.

Relevant subjects include:

- mining or petroleum engineering
- energy engineering
- Earth sciences
- environmental engineering
- renewable or sustainable energy

If you're interested in postgraduate research and want to continue your studies up to PhD level, you may be able to apply for a course like an EngD.

Entry requirements

You will usually need:

- 3 A levels including maths and either biology, physics or chemistry
- a degree in a relevant subject for postgraduate study

You may be able to start by doing a **degree apprenticeship** in power or nuclear engineering.

Entry requirements

You will usually need:

 4 or 5 GCSEs at grades 9 to 4 (A* to C) and college qualifications like A levels for a higher or a degree apprenticeship

Skills required:

You will need:

- knowledge of engineering science and technology
- maths knowledge
- analytical thinking skills
- to be thorough and pay attention to detail
- thinking and reasoning skills
- excellent verbal communication skills
- the ability to use your initiative
- knowledge of building and construction
- to be able to use a computer and the main software packages competently

What you will do:

Your day-to-day tasks may include:

- researching and designing new generating sites
- deciding on the best locations for sites
- planning and overseeing production programmes for sites
- managing and coordinating teams of technicians or site workers
- designing and selecting equipment
- meeting environmental standards, like carbon reduction targets
- finding the most cost efficient and productive processes
- carrying out laboratory experiments
- converting experiments into large-scale industrial processes
- working with geologists, geophysicists and specialist contractors
- managing projects and budgets

What you will earn:

• Starter: £20,000

• Experienced: £80,000

These figures are a guide

Working hours, patterns and environment:

- You could work in a laboratory, on a rig or in an office.
- You will work 41 to 43 hours, including evenings and weekends away from home

Career path and progression:

 With experience, you could move into planning, policy development, or freelance consultancy.