

Energy Engineer

The harnessing of energy, from mining or from renewable sources, is a huge concern across the world, and a career as an energy engineer will put you in the forefront of this vital sector.

As an energy engineer, you'll be involved with the production of energy through natural resources, such as the extraction of oil and gas, as well as from renewable or sustainable sources of energy, including biofuels, hydro, wind and solar power. Your focus will be on finding efficient, clean and innovative ways to supply energy.



Skills:

You'll need to show:

- an interest in science, technology and the environment
- general understanding of the energy market
- knowledge of relevant legislation surrounding energy efficiency and carbon emissions
- good communication skills, both written and oral
- scientific and mathematical ability
- organisational and negotiation skills
- IT skills, including knowledge of 3D software such as AutoCAD
- commercial awareness and an understanding of business
- project management skills
- initiative and the ability to recognise emerging problems and proactively develop solutions.

Qualifications:

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. You'll usually need 2 or 3 A-Levels, or equivalent, including maths and a science for a degree. You'll need a degree in a relevant subject for postgraduate study. You may be able to start by doing a degree apprenticeship in: power engineering/nuclear engineering/power and propulsion/gas turbine engineering. You'll usually need 4 or 5 GCSEs at grades 9 to 4 (A* to C) and A-Levels, or equivalent.

Working hours:

If you work within design, research or development, you'll typically work 9am to 5pm, Monday to Friday. In power plant or drilling operations, you may find you need to cover a seven-day shift pattern. Part-time work and career breaks may be an option in some organisations. Self-employed and freelance work is available in energy or environmental consultancy once considerable experience has been achieved.

Salary:

- Starting salaries for energy engineers range from £25,000 to £35,000.
- With experience, you could earn a salary in the range of £35,000 to £60,000.
- Salaries can be considerably higher at the most senior levels within large companies.

<https://www.prospects.ac.uk/job-profiles/energy-engineer>

