

Energy Engineer

What is it?

An energy engineer is a professional who designs, develops, and implements systems and technologies to improve energy efficiency and harness renewable energy sources. They work to optimise energy use in buildings, industrial processes, and transportation, as well as develop sustainable energy solutions to reduce environmental impact.

Qualifications/Experience Required:

To become an energy engineer in the UK, you typically need a degree in energy engineering, mechanical engineering, electrical engineering, or a related field. Many universities offer specialised programs in energy engineering or renewable energy. Professional qualifications, such as Chartered Engineer (CEng) status from the Engineering Council, can enhance career prospects.

What the Work Involves:

Conducting energy audits to assess energy use and identify opportunities for efficiency improvements. Designing and developing energy-efficient systems and renewable energy projects, such as solar, wind, or bioenergy systems. Analysing and modelling energy data to optimise energy consumption and reduce costs. Implementing energy management strategies and monitoring their performance. Ensuring compliance with environmental regulations and energy standards.

Future Prospects – Labour Market Information:

The demand for energy engineers is expected to grow due to increasing focus on sustainability, energy efficiency, and the transition to renewable energy sources. Opportunities exist in various sectors, including construction, manufacturing, utilities, and consultancy.

Average annual Salary - £25,000 - £60,000

Typical weekly hours – 41 – 43 per week

Type of person who may be suited to this job:

This job may be suited to individuals who are analytical, innovative, and have a strong interest in sustainability and energy technologies. Energy engineers need to have strong problem-solving skills, attention to detail, and the ability to work both independently and as part of a team.

Money/Wage Guide:

Entry-level energy engineers can expect to earn around £25,000 to £35,000 per year. With experience and specialisation, this can increase to £35,000 to £50,000 or more. Senior engineers or those in managerial roles may earn upwards of £60,000 per year.

Related Opportunities:

- Renewable energy engineer
- Environmental engineer
- Mechanical engineer
- Sustainability consultant

Further Information:

The Energy Institute:

<https://www.energyinst.org/>

Institution of Mechanical Engineers (IMechE): <https://www.imeche.org/>

Institution of Engineering and Technology (IET): <https://www.theiet.org/>