**Job title: Energy Engineer**

|  |  |
| --- | --- |
| **Job title: Energy Engineer** | Energy engineers 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'll 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'll 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'll 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'll 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’ll 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. |