

# Engineering

**2% of employment in the Humber is in Engineering.**

Engineering is the application of scientific, social, and practical knowledge in order to invent, design, build, maintain, research, and improve structures, machines, devices, systems, materials, and processes.

The discipline of engineering is extremely broad, and encompasses a range of more specialised fields of engineering, each with a more specific emphasis on particular areas of applied science, technology and types of application.

### Will there be opportunities available?

- New industries and technologies are emerging, adding to already significant demand for engineering skills. 203,000 people with Level 3+ engineering skills are needed every year to meet demand.
- There is an annual shortfall of up to 59,000 engineering graduates and technicians to fill core engineering roles nationally.
- It is forecast that between 2014 and 2024, 13 million job openings will arise across the economy as a result of those who leave the labour market (replacement demand) and a further 1.8 million openings will arise as newly created jobs (expansion demand).
- There is predicted to be an annual demand for 124,000 engineers and technicians with core engineering skills across the economy.

### Did You Know?

- The Engineering Sector accounts for 2% of the region's workforce, employing over 7,500 people.
- 11% of the UK engineering workforce is female.
- Engineering is not just about getting dirty it is very creative work and involves problem solving.
- Engineers can work in many different industries including chemicals, food manufacturing, technology, the motor and aerospace industries.
- Engineers use computers and new technologies to design new products.
- The Humber is home to a number of specialist engineering institutions including Grimsby Institute, Engineering UTC Northern Lincolnshire, Ron Dearing UTC, HETA and HOTA.

Types of Job	National Average Salary
Robotics Engineer	£27,500 to £55,500
Maintenance Fitter	£16,000 to £35,000
Mechanical Engineer	£22,000 to £55,000
Design Engineer	£20,000 to £55,000
CAD Technician	£15,000 to £35,000
Electronics Engineering Technician	£18,000 to £35,000
CNC Machinist	£18,000 to £35,000

**Skills/qualities**

- Problem solving
- Attention to detail
- Communication
- Accuracy
- Creative thinking
- Interest in how things work

**Useful subjects include**

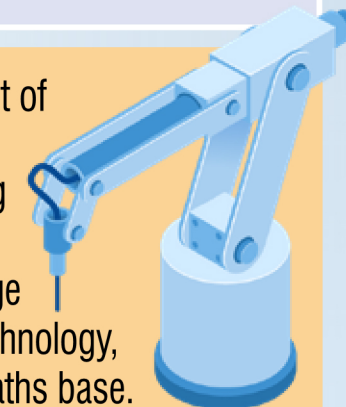
- Design and Technology
- Maths
- IT
- Science
- Engineering

**Some local employers**

BAE Systems  
Spencer Group  
Donaldson Filtration Solutions  
British Steel  
GWF Engineering  
APT Marine Engineering  
Britcon  
Allied Protek

Sources: Business Register Employment Survey, Annual Survey of Hours and Earnings, Office for National Statistics, Engineering UK.

**Good to Know:** A lot of newer and really exciting engineering jobs that offer a good salary package need a science, technology, engineering and maths base.



**For information...** [www.nationalcareers.service.gov.uk/](http://www.nationalcareers.service.gov.uk/) [www.engineeringuk.com](http://www.engineeringuk.com)  
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**Search for jobs by...** popping in to your local Job Centre

- checking your local newspapers
- attending events and seminars
- checking out YouTube and Social Media
- talking to family and friends