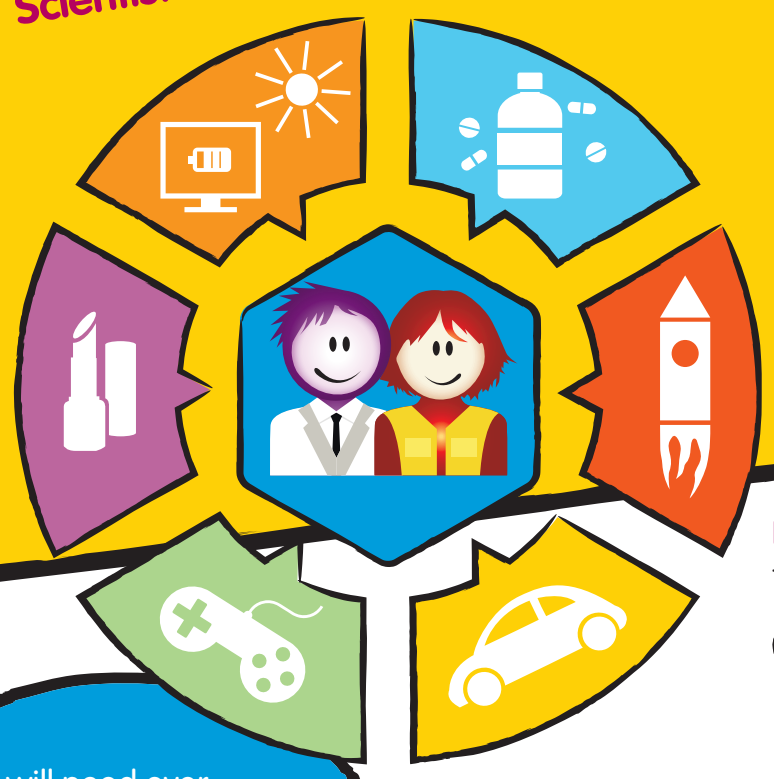
10 great reasons to become a scientist or engineer

The Big Bang
UK Young Scientists & Engineers Fair

Scientists and engineers are developing many innovative solutions and products:



- **Artificial limbs** for the injured and disabled
- **Treatment** and **medicine for diseases** like cancer and Ebola
- **3D** games consoles
- **Solar powered** laptops
- **Advanced make-up** that automatically matches skin tone
- Systems to **reduce the risk of flooding**
- New modes of transport, such as **driverless vehicles**
- **Smart fabrics** that react to heat and light, with in-built digital technology
- **Space crafts** for future tourists
- **Supercomputers** that predict the effects of climate change

Engineering and technology can be found in practically every industry: from **sport**, **fashion** and **music** to **medicine**, **transport** and **renewable energy**.

We will need over **2 million** new scientists, engineers, technicians and mathematicians in the UK **by 2022**

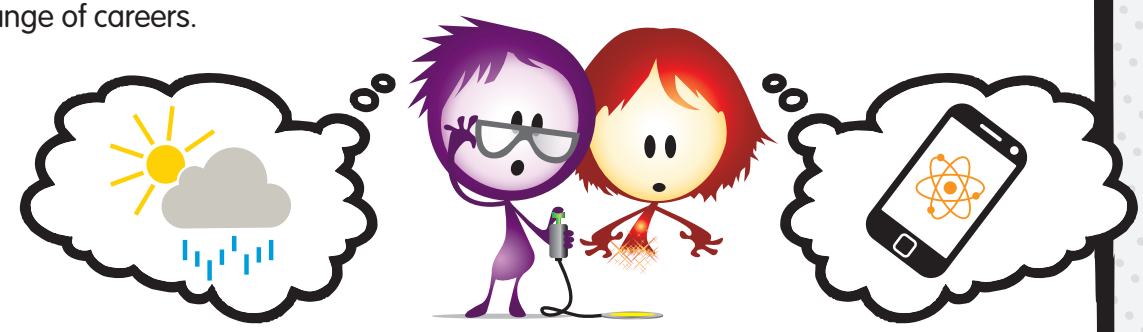
Engineering companies need to recruit around **56,000 engineering technicians** per year between **2012** and **2022**.

Apprentices help meet this demand, but we need to double the numbers.

Take our short quiz to discover your crew and gain careers inspiration: **thebigbangfair.co.uk/whosecrewareyou**

Engineers and scientists tackle some of the world's most pressing problems – from dealing with **cyber security** and **maintaining clean water** and **energy supplies** to finding sustainable ways to **grow food**, **build houses** and **travel**.

Studying physics and maths are important for hundreds of different careers, from predicting climate change to designing apps. We need more young people – particularly girls – to take physics and maths, to keep their options open for a huge range of careers.

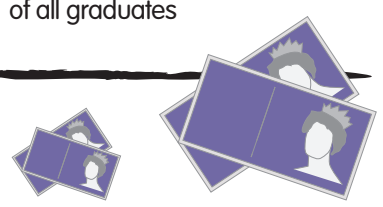


The average graduate starting salary for engineering and technology is over 20% higher than for all graduates.

Average engineering and technology starting salary

Average salary of all graduates

On average, engineering apprentices earn **over double** the national minimum apprentice wage



Minimum apprentice wage

Engineering apprentice wage

The UK renewable power sector will create an extra **70,000 jobs** in the next 10 years, including developing wind farms and capturing tidal energy.

Studying science – biology, chemistry and physics – and maths uncovers lots of exciting career possibilities.

Careers information and inspiration...
thebigbangfair.co.uk/careers

engineering: **tomorrowsengineers.org.uk**
biology: **societyofbiology.org/students**
chemistry: **rsc.org/careers/future**
physics: **physics.org/careers**
maths: **mathscareers.org.uk**