

ADVANCED MANUFACTURING AND ENGINEERING

Engineering and manufacturing plays a vital role in the UK economy and its future but despite there being lots of opportunities, the sector is struggling to recruit people to roles in areas such as engineering and technician work.



182,000 people with engineering skills needed in the UK each year to 2022¹

More **women** needed - only 9% of the engineering workforce is female²

HS2 will create **thousands of local jobs** in this sector – both directly and in the supply chain

More jobs will be **highly skilled jobs**

20,000 predicted shortfall of engineering graduates every year



COMPANIES IN THE AREA

Large and valued companies in the area include:

Caterpillar • Bridgnorth Aluminium • Smithers Rapra • Stadco • Grainger and Worrall • Doncasters Group • Fullwood • BAE Systems • Cedo UK • Classic Motor Cars ...and close-by Jaguar Land Rover

But there are many more smaller employers offering a broad range of careers.



FUTURE TRENDS

The sector is becoming more hi-tech and the UK is playing its part in leading the way in innovation and cutting-edge technology. This means employers are on the look-out for people with: **STEM qualifications • creative talent • problem solving skills • digital skills**

These are all areas where innovation will create new roles:

robotics • cyber security • biomedical technology • telecommunications and satellites • driverless vehicles • smart energy • agri-tech • low-carbon technology



THE LOCAL PICTURE

In Shropshire, our strengths include:

automotive • machinery and equipment manufacturing • metals and polymers (such as plastics) • food and drink production

We are also becoming a UK leader in developing agricultural technologies to help better growing of food and we can expect to see more jobs in low carbon – or 'green collar' -industries such as alternative fuel vehicles and sustainable energy.

How many people are employed in a manufacturing job in our area?

More than 11,000 people are employed in manufacturing in Shropshire³ – that's around 10% of all employment which is slightly higher than the UK average.

¹Engineering UK

²WES

³Business Register of Employment Survey 2015



SKILLS AND QUALITIES

Some employers report that they struggle to find candidates with the right personal and people skills. In engineering and manufacturing, employers are particularly looking for:

- Communication
- Problem solving
- Maths
- Creative thinking
- Leadership and management
- Advanced ICT and digital skills
- Design
- Attention to detail
- Languages
- Teamwork



WHAT COULD YOU EARN?

These are the average salaries you might expect to earn in manufacturing and engineering*

Metal working machine operative	£21,350	Engineering technician	£35,050
Plastics process operative	£22,450	Design engineer	£39,150
Production technician	£26,300	Electronics engineer	£46,500
Motor vehicle assembler	£31,950	Mechanical engineer	£41,750



GETTING IN

As well as the BTECs, HNC/Ds or a degree route, higher and degree apprenticeships will play a larger part in training the engineers of the future allowing an employer to train somebody up while working in partnership with a higher education institution. There's no age cut off for starting an apprenticeship and nor is there one set route - it's possible to switch between qualification and training pathways depending on your starting point.

Types of apprenticeships include: rail engineering operative, welder, composites technician, aviation maintenance mechanic and nuclear technician.

Many of the colleges and universities in the West Midlands and local training centres such as the In-Comm Training Academy offer courses which match the jobs available in the area.



FINDING OUT MORE

- www.semta.org.uk/careers
- www.tomorrowsengineers.org.uk
- www.futuremorph.org/my-future-finder
- www.wisecampaign.org.uk
- www.engineeringuk.com/research

*Annual Survey of Hours and Earnings median salary rounded to nearest £50