

Advanced manufacturing and engineering in Coventry & Warwickshire

National Careers Service

Helping you take the next step

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 2022.¹

More women needed - only **9%**



of the engineering workforce is female.²



20,000

predicted shortfall of engineering graduates every year



More jobs will be highly skilled jobs



HS2 will create thousands of jobs for the West Midlands in this sector – both directly and in the supply chain

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 | **flexibility**

These are all areas where innovation will create new roles:

robotics | cyber security | **biomedical technologies** | telecommunications and satellites | **driverless vehicles** | smart energy | **agri-tech** | low-carbon technologies | **intelligent mobility technologies** | mechatronics | **coding**

Skills and qualities

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

Communication

Problem solving

Maths

Creative thinking

Flexibility

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 £22,800

Quality assurance technician £25,700

Motor vehicle technician £26,850

Motor vehicle assembler £34,000

Engineering technician £35,550

Design and development engineer £40,100

CNC (computer control) programmer £41,500

Electronics engineer £43,850

Flight engineer £84,750

*Annual Survey of Hours and Earnings 2017 median salary rounded to nearest £50

¹Engineering UK ²WES



The local picture

Local employers and colleges are creating hundreds of apprenticeships for people in the area so that they can develop the skills needed to access the many jobs which will be available over the next decade or so - jobs that are vital to the local economy.

Across Coventry & Warwickshire our strengths include:

automotive (motor vehicle) | driverless vehicles | **machinery and equipment manufacturing** | intelligent mobility technologies | **aerospace** | fabricated metal products | **low carbon powertrain** | battery technology | **clay modelling** | research & development

Local employment hotspots include: **aerospace** - Coventry and Nuneaton & Bedworth; **research & development** - Coventry & Warwickshire; **rail** - Stratford, Bedworth and Warwick; **energy** - Coventry, Rugby and Warwick; **machinery and equipment** - Coventry, Nuneaton & Bedworth, Rugby, Warwick; **motor vehicles** - all areas of Coventry & Warwickshire have paid employment opportunities in either the production of motor vehicles or the manufacture of their parts.

Amongst the **top 10 jobs** most advertised in Warwickshire are **manufacturing engineer, maintenance engineer, mechanic and product tester.**

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

Advanced manufacturing and engineering **employs 34,000** people locally - around 10% of all employment. The number of people employed in the automotive industry in Coventry & Warwickshire is **57% greater than the UK average.**



Large and valued companies in the area include:

Jaguar Land Rover (9 sites) | Tata | HS2 | Aston Martin Lagonda (4 sites) | HORIBA MIRA | Silson | DMG Mori | AVL Powertrain | Vivarail | Severn Lamb | Rolls Royce | Meggitt | RDM Group | Ricardo | Geely London Electric Vehicle Company | Sertec | Dau Draxelmaier | Grupo Antolin | Brose | Fanuc

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

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
www.jaguarlandrovercareers.com
www.automotiveapprenticeships.co.uk



Routes 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 and technicians of the future allowing an employer to train somebody up while working in partnership with a higher education institution.**

Young people can take advantage of the many colleges and training centres in the area, such as the Advanced Manufacturing Training Centre, MIRA Academy and Warwick Trident College, who work with local employers to offer courses and apprenticeships which match the jobs available in the area. Jaguar Land Rover runs the 'Young Women in the Know' scheme aimed at encouraging women into the sector.

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:



engineering design and draughtsperson, welding, composites technician, maintenance and operations engineering technician, vehicle maintenance and repair, motorsport, CNC machinist, performance engineering, nuclear technician and high-speed rail and infrastructure technician.