

Advanced Manufacturing

Worcestershire

**National
Careers
Service**

Helping you take
the next step

Advanced Manufacturing is a term that describes the use of new and innovative technology to develop and improve manufacturing processes, and is often linked to high value sectors such as automotive and aerospace engineering and manufacturing.

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, especially women, to roles in areas such as engineering and technician work.

Worcestershire overview

There are around 12,250* jobs in advanced manufacturing in the Worcestershire LEP area. More than half of these jobs are in Redditch and Wychavon districts (57.2%).

Advanced Manufacturing accounts for 4.7% of the total workforce jobs in Worcestershire, which is higher than across the West Midlands (4.5%) and the rest of Great Britain (3.1%)



Top sub-sectors with the most jobs in advanced manufacturing in Worcestershire include the **manufacture of parts and accessories for vehicles other than electrical or electronic parts**, and the **manufacture of electronic instruments and appliances for measuring, testing and navigation**.

*BRES

Future trends

Engineering UK estimates that **124,000** engineers and technicians with core engineering skills are needed every year.

New digital technologies such as **autonomous robots, big data and 3D printing**, are transforming the manufacturing sector and while some roles will become automated, there will still be plenty of roles for those looking to work in this sector.

Across the West Midlands we can expect to see jobs growth in areas such as: **next generation transport; medical technologies and pharmaceuticals; future food processing; and energy and low carbon**.

This means opportunities at all levels of jobs.

Local employers include:

Worcester Bosch, Yamazaki Mazak, Morgan Motor Company, Gtech, Reddiplex, Inductotherm, Komatsu, Air Products Cryoease, Rockline, Brintons Carpets Ltd, Vision Labs, Southco Manufacturing, Mettis Aerospace, Titan Steel Wheels, Thorlux Lighting, Heller Machine Tools, Indra Renewable Technologies, Arconic Fastening Systems



Job roles in advanced manufacturing include:

3D printing technician • Aerospace engineer • Agricultural engineer • Automotive engineer • Building services engineer • Car manufacturing worker • Chemical engineer • CNC machinist • Design and development engineer • Electronics engineer • Energy engineer • Engineering craft machinist • Manufacturing systems engineer • Marine engineer • Mechanical engineering technician • Metrologist • Motorsport engineer • Paint sprayer • Production manager (manufacturing) • Quality control assistant • Rail engineering technician • Research and development manager • Robotics engineer • Supply Chain Manager • Toolmaker • Welder

Skills and qualities

In manufacturing and engineering, employers are particularly looking for:

Advanced digital and ICT skills • Confidence in working with numbers • **An analytical and logical approach to solving problems** • An interest in maths, science and technology • **Communication** • Teamwork and interpersonal skills • **Health and safety awareness** • Ability to manage own time and prioritise tasks • **Technical and practical skills** • Creativity and design • **Presentation skills** • Ability to speak other languages

What could you earn?

3D printing technician **£18,000 - £33,000**

Paint sprayer **£18,000 - £30,000**

Production manager **£20,000 - £40,000**

Motorsport engineer **£18,000 - £60,000**

Quality control assistant **£12,500 - £25,000**

Design and development engineer **£22,000 - £55,000**

Find out more

<https://semta.org.uk/careers>

www.jaguarlandrovercareers.com

www.tomorrowsengineers.org.uk

<http://www.skills4worcestershireshire.co.uk/>

Routes into this sector

Ways to get into this sector will vary depending on the job role.

Apply directly for some roles that don't ask for specific qualifications or ask for GCSEs – basic IT skills may help. A temp job may also be a good way in.

Choose a **college course** at level 3 (A level equivalent) or level 4 to add to your qualifications.

An apprenticeship could be a good route in – from **engineering operative** (intermediate apprenticeship) and **equipment maintenance technician** (advanced apprenticeship) to **materials process engineer** (degree apprenticeship). Always check the requirements for each individual apprenticeship.

For some roles, employers will look for someone who has a **university degree** but also check to see if a degree apprenticeship route is an option for a graduate-level job.

Work your way up to roles such as supervisor or manager by training on the job.

For more job profiles and careers information visit the National Careers Service website: <https://nationalcareers.service.gov.uk> or call 0800 100 900



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