

Manufacturing, Science & Innovation

RATIONALE

Although small, this sector has high growth potential, and fast-moving skills needs due to changing technologies. There is much inward investment into the area (including in Health and Life Sciences) which will likely drive growth in the supply chain.

LABOUR MARKET

In early 2022, there were 120 businesses involved in Manufacturing (Science and Innovation) in Oxfordshire. This was an increase of 4% compared to the Business Register in 2017. The vast majority were micro businesses, or small enterprises with 5 medium-sized companies and 5 large.

The total number of jobs in the Manufacturing *Science & Innovation) sector in Oxfordshire in 2022 was 4,400. This is an increase of 600 (16%).

SECTORAL CHALLENGES

With the pipeline of development work in the area remaining strong, growth may occur.

However, although the identified Standards are being delivered in Oxfordshire, participating numbers remain small (2021/22). For example, Science Manufacturing Process Operative L2 had less than 5 starts in Oxfordshire in 2021/22. This offers a challenge to providers for affordability and may be an opportunity for collaboration.

Better careers advice around jobs in engineering – what types of roles are available, how to excite people to join the industry.

SPECIFIC REPORTED SKILLS GAPS

Continuous Improvement Principles (CI).

Employability: communication, listening, team working.

Cross skilling- improving productivity through people undertaking more than one role or activity.

TABLE 1 Recruitment Difficulties Reported by Employers	Technical Occupations (Levels 2-3)	Higher Technical Occupations (Levels 4-5)	Professional Occupations (Level 6+)	T Levels
Production Managers		Product Development Manager L4 Process Leader L4 MG		Design & Development- Mechanical Engineering
Mechanical Engineers	Engineering design and draughtsperson - Control & Instrumentation or Mechanical L3 MG	Engineering Manufacturing Technician L4 MG		Design & Development- Mechanical Engineering
Design & Development Engineers	Engineering Design & Draughtsperson L3 MG	Product development manager (L4) Senior CAD Engineer		Design & Development- Mechanical Engineering
Production & Process Engineers	Science Manufacturing Process Operative L2 MG Science Manufacturing Technician L3 MG			Engineering, Manufacturing, processing and Control
Electrical and Electronic Engineers	Battery Manufacturing Technician L3			Engineering, Manufacturing, processing and Control
Engineering Technicians	Science Manufacturing Process Operative L2 MG			Engineering, Manufacturing, processing and Control
Quality Assurance Technicians	Lean Manufacturing operative - Inspection/Quality L2 MG			Engineering, Manufacturing, processing and Control

SECTOR SPECIFIC: MANUFACTURING SCIENCE & INNOVATION

DESCRIPTION OF CHANGE AND EXPECTED BENEFIT	ACTIONS	OWNER	EMPLOYER CHAMPION	TIMESCALE	POTENTIAL FUNDING
<p>The LSIP will promote expansion, development, and delivery of provision in the identified priority areas.</p> <p>The T level in Engineering, Manufacturing, Process and Control is only being offered from 2024 onwards by UTC Oxfordshire. There are no current providers of Maintenance, Installation and Repair for Engineering and Manufacturing. This leaves much of Oxfordshire without access to these technical routes.</p>	<p>Education & Training Providers to use LSIF, Innovation Fund or Skills Bootcamps as alternative sources of funding to align delivery to the priority skills needs via new programmes such as short, modular courses.</p>	<p>ERB ETPs Partners Employers</p>	<p>TBC</p>	<p>Summer 2023- March 2025</p>	<p>LSIP LSIF AEB 16-18 Bootcamp App Emp Other</p>
	<p>Education and Training Providers to work together collaboratively, through the LSIF to invest in up-to-date technologies, capital and spaces for Science and Innovation.</p>			<p>March 2024</p>	
	<p>The Product Development Manager L4, Process leader L4, Senior CAD Engineer are identified as an industry need; however, a Trailblazer Group has yet to be formed to develop an Apprenticeship. The Battery Manufacturing Technician L3 is under development. The LSIP will test appetite amongst Oxfordshire employers to develop these standards.</p>			<p>March 2024</p>	
<p>Employers reported some need for cross-skilling, for example, increasing productivity through the upskilling of the workforce to be able to multi-task.</p>	<p>Education & Training Providers to explore the market for T Levels in Engineering in their catchment areas and consider implementation accordingly.</p> <p>Explore a pilot with an employer and local ETP to create a suite of training modules (using employer investment) to provide cross-skilling opportunities to improve productivity.</p>	<p>ERB ETP Emp</p>	<p>TBC</p>	<p>September 2024</p>	<p>Emp</p>

Information Key PARTNERS

ERB

The Employer Representative Body- Thames Valley Chamber of Commerce (Thames Valley Skills Unit)

WDP

Workforce Development Partnerships

ETPs

Education & Training Providers

LEP

Thames Valley Berkshire LEP

PARTNERS

Including Trade Bodies, Careers Advisers, JCP and other agencies

CEIAG

Careers Education, Information, Advice & Guidance

Information Key FUNDING

LSIP

Local Skills Improvement Plan Funding

LSIF

Local Skills Improvement Fund (funding)

AEB

Adult Education Budget (inc Innovation Fund and Loans)

App

Apprenticeship Funding

16-18

16-18 year old education funding

Emp

Employer funded, or time commitment

Bootcamp

Skills Bootcamp