



# Define Your Career

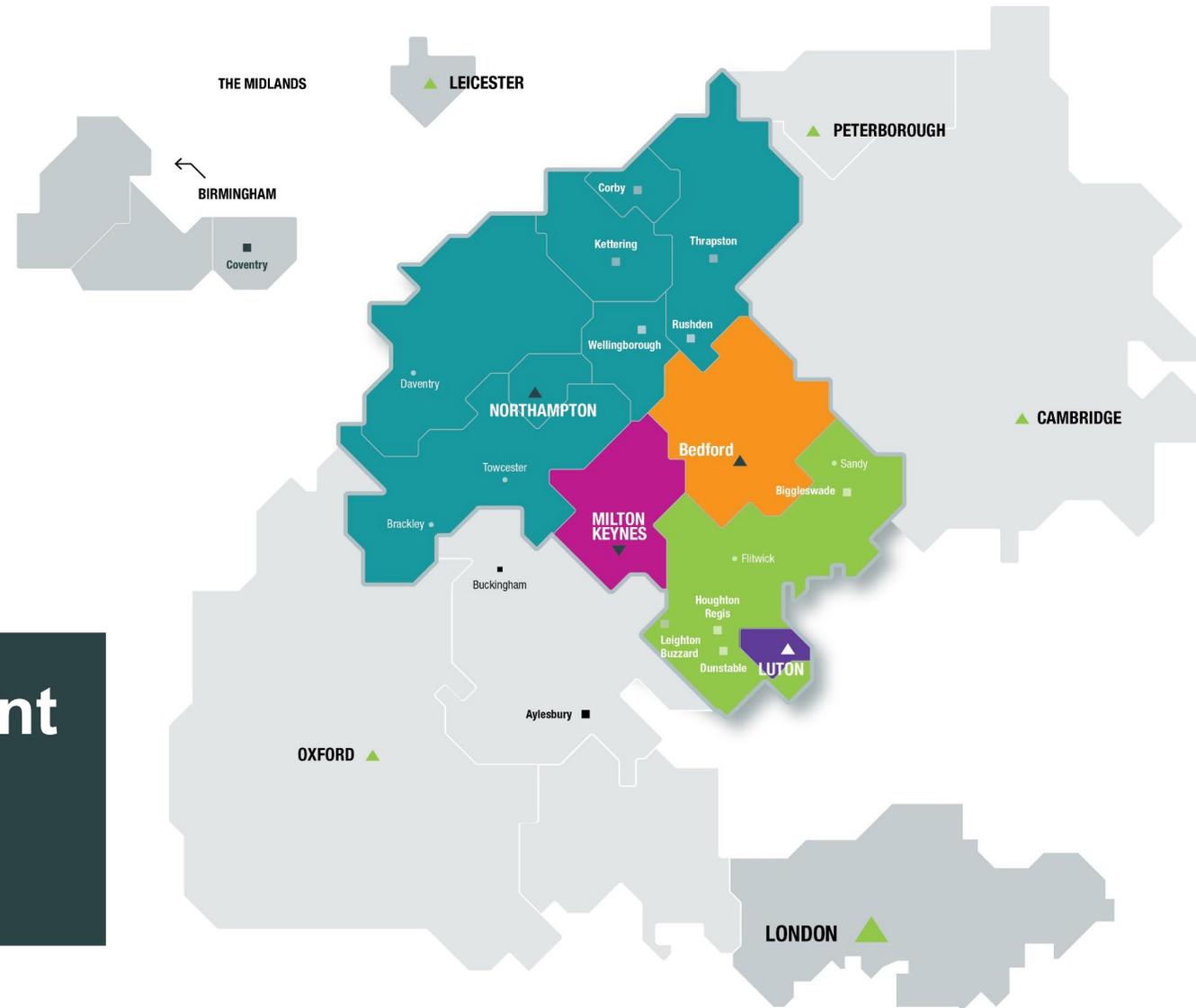
## Engineering and Manufacturing

November 2021

# South East Midlands

- Bedfordshire
- Luton
- Milton Keynes
- Northamptonshire

**870,000 people in employment**  
**213,000 job postings**  
**(vacancies) per year**



# The Labour Market



Growing people

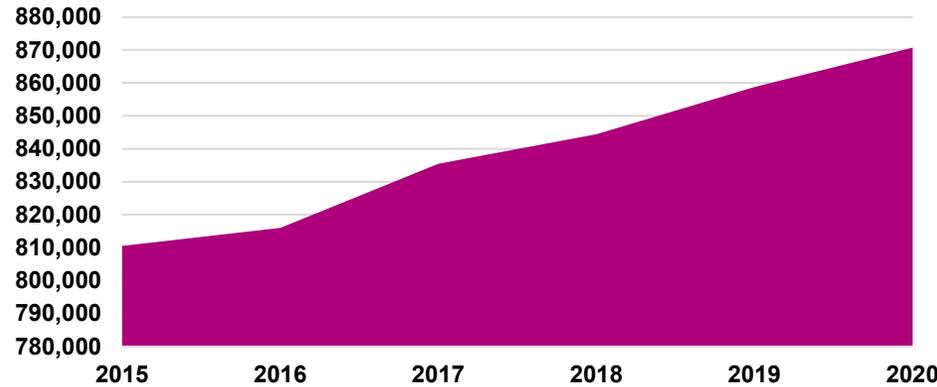


Growing business

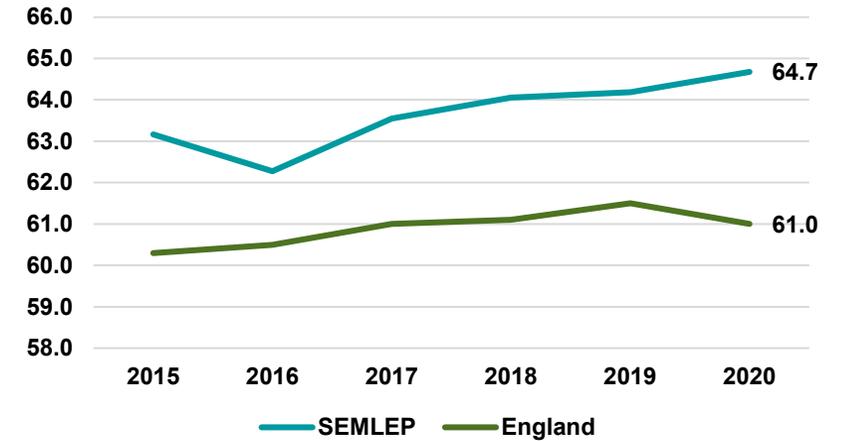


Growing places

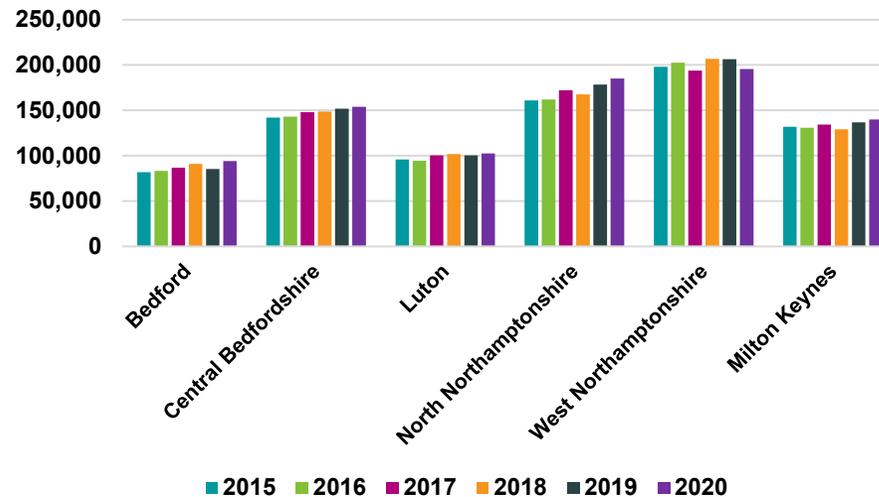
Total Employment - SEMLEP Area



Employment rate - aged 16+



Employment - SEMLEP Area



Job Density (2019)

Ratio of total jobs to population aged 16-64

▶ Milton Keynes	1.21
▶ West Northamptonshire	0.98
▶ SEMLEP	0.91
▶ England	0.88

Over 1 indicates more jobs than 16-64 population

**High levels of employment**

# Job Posting Trends



Growing people

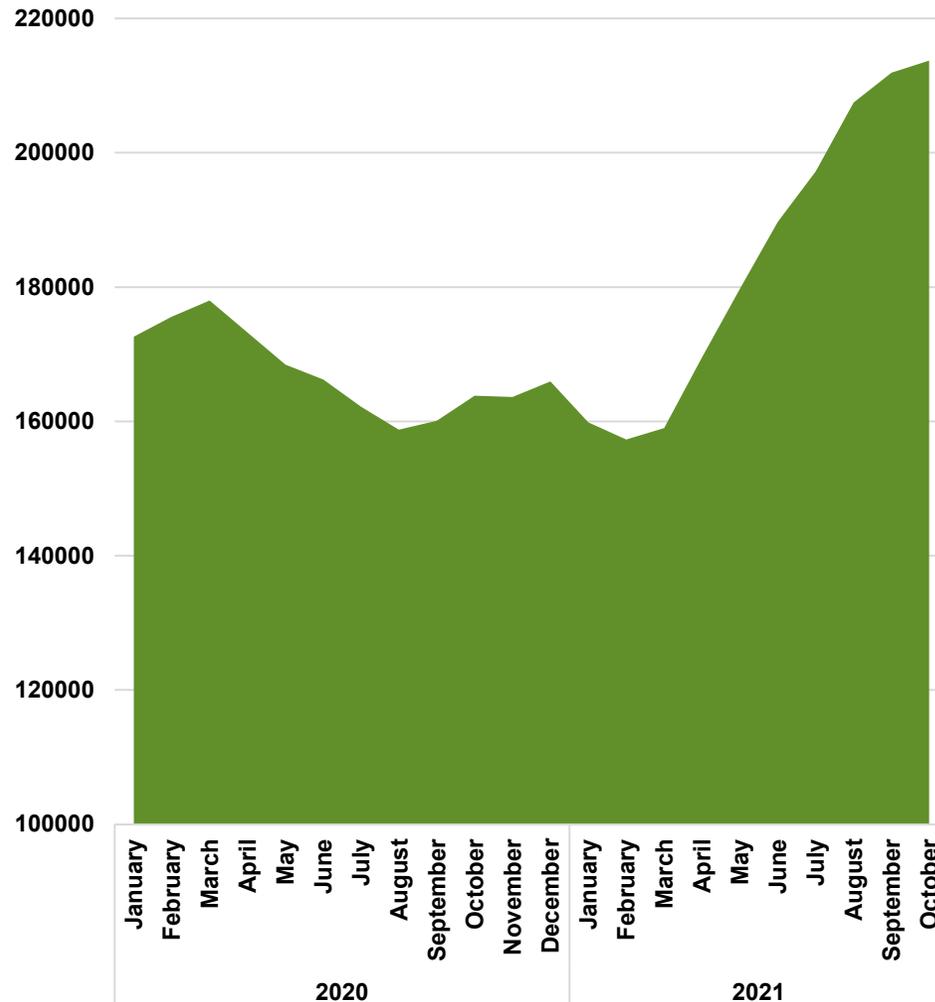


Growing business



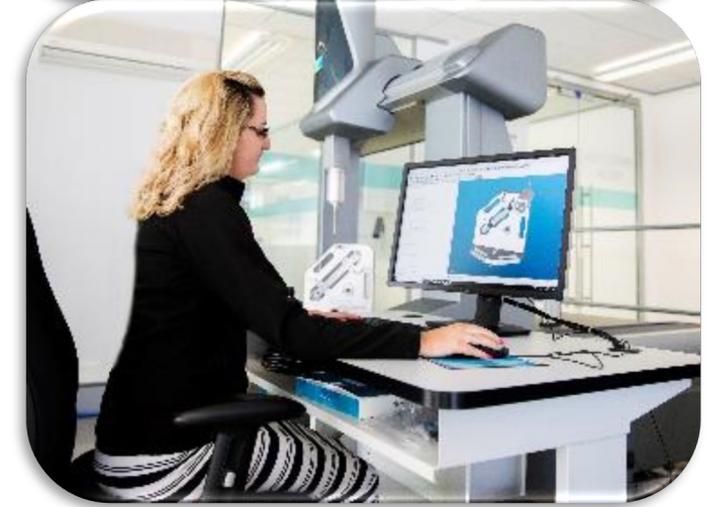
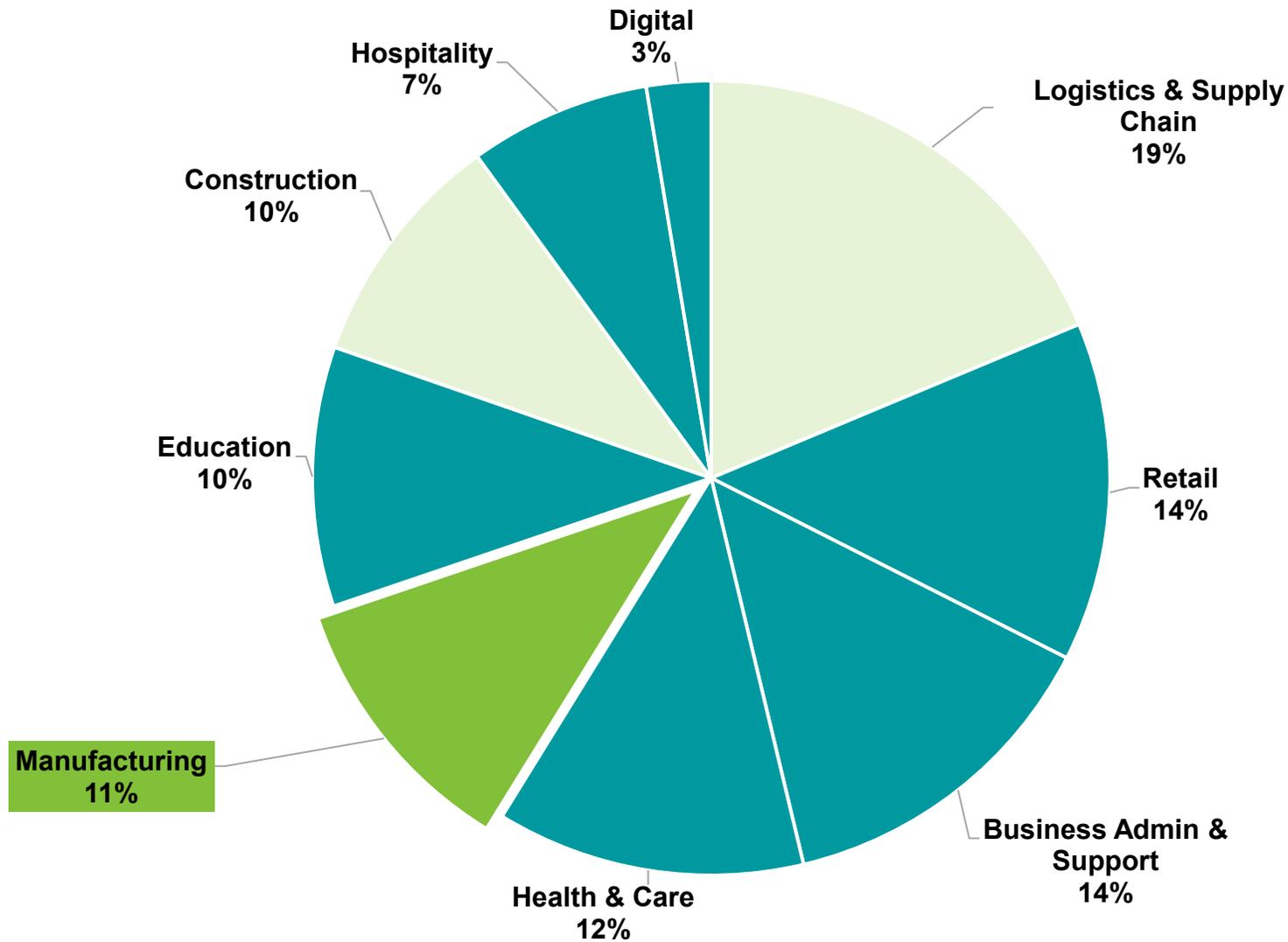
Growing places

Job Postings - 12 Months Moving Average

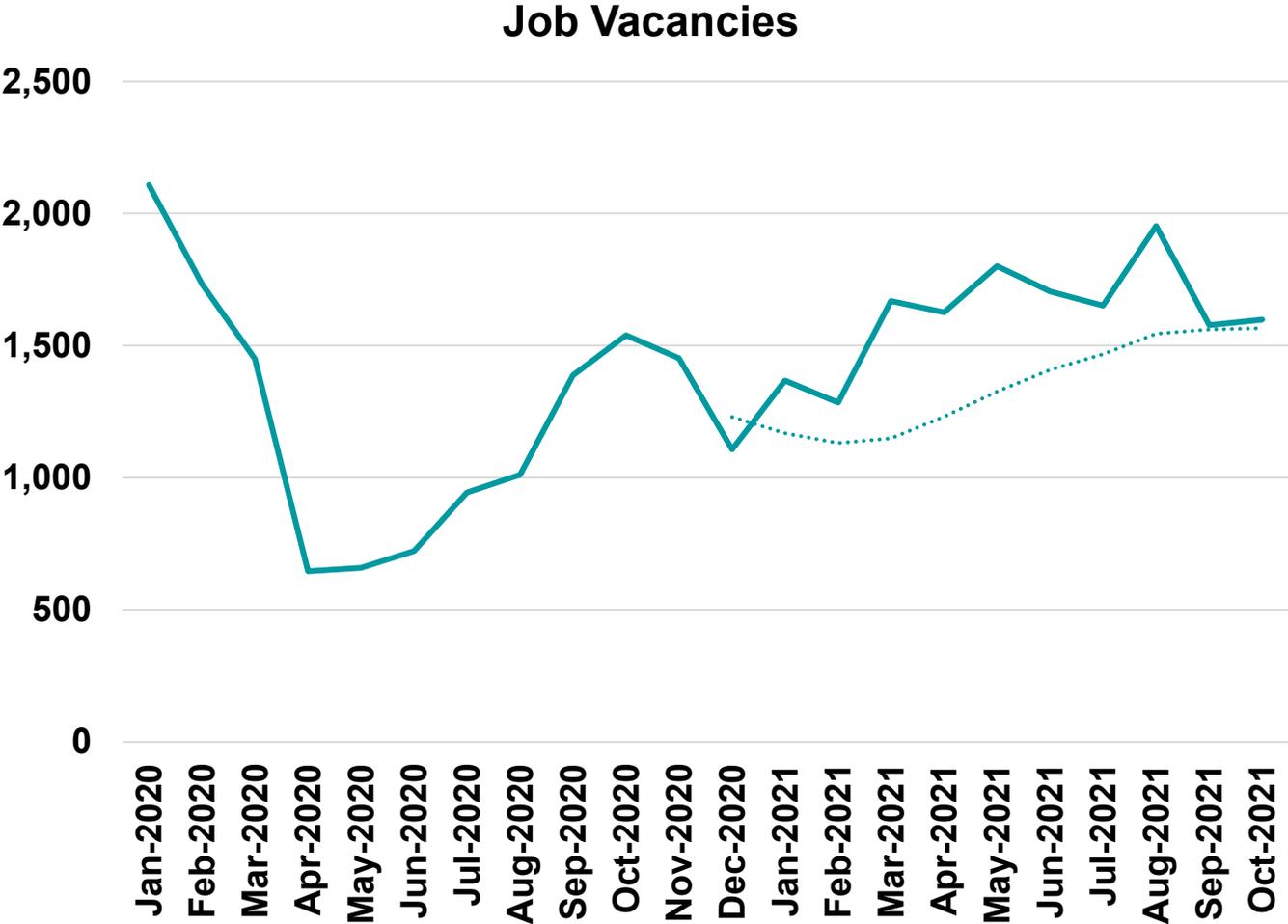


- ▶ There has been a decline in line with the national picture for over two years until the beginning of 2020 where we started to see a consistent increase
- ▶ The impact of COVID-19 has stalled this growth but there is a large increase from Easter 2021
- ▶ Currently, job vacancies are 53% higher than the peak prior to COVID-19
- ▶ Some sectors have a large number of vacancies such as health, care, construction, education, digital, manufacturing and logistics
- ▶ SEMLEP Business Survey – Most employers advertise on websites, social media and through word of mouth

# Employment by Sector



# Job Vacancies – Engineering and Manufacturing



## Positive factors

- Hub of R&D
- Green economy and construction
- Growth of food production
- Innovation
  - Space
  - Agri-tech
  - Motorsport
- Increasing automation
- Ageing workforce



# Job Vacancies – Engineering and Manufacturing

Rank	Occupations
1	Production Worker
2	Mechanical Engineer
3	Manufacturing Machine Operator
4	CNC Operator
5	Electrical Engineer
6	Quality Inspector / Technician
7	Production Supervisor
8	Industrial Engineer
9	Validation Engineer
10	Production Plant Manager
11	Engineering Manager
12	Product Development Engineer
13	Electrical / Electronic Engineering Technician
14	Electronics Engineer
15	Test Technician
16	Electronic / Electrical Assembler
17	CAD Designer / Draughtsperson/Draughtsman
18	Researcher / Research Associate
19	Manufacturing Engineer
20	Machinist
21	Chemist
22	Coating / Painting Worker
23	Manufacturing / Production Technician
24	Quality Control Analyst
25	Chemical / Process Engineer

Rank	Occupations
26	Industrial / Mechanical Engineering Technician
27	CNC Programmer
28	Assembler / Fabricator
29	Quality Control Systems Managers
30	Operations and Maintenance Specialist
31	Health and Safety Engineer
32	Heating Engineer / General Engineer
33	Moulding / Casting Worker
34	Environmental Scientist / Specialist
35	Hardware Engineer
36	Mechatronics Engineer
37	Press / Press Brake Operator
38	Civil Engineering Technician
39	Tool Maker
40	Chemical Operator
41	Textile production worker
42	Printers and Print Process Worker
43	Food and Agricultural Scientist / Technologist
44	Environmental Engineer
45	Grinder / Sharpener
46	Research and Development Manager
47	Microbiologist
48	Robotics Engineer
49	Plant Operator
50	Laboratory Manager



# Job Vacancies – Engineering and Manufacturing

Links to other occupational groups

Business Operations

- Sales and marketing
- Purchasing

Digital

- Software developers/programmers



# Job Vacancies – Employability Skills

## Core Competencies

- 1 Communication Skills
- 2 Detail-Orientated
- 3 Teamwork / Collaboration
- 4 Problem Solving
- 5 Planning
- 6 Organisational Skills
- 7 Microsoft Excel
- 8 Computer Literacy
- 9 Microsoft Office
- 10 Research



## Digital Skills

- 1 Microsoft Excel
- 2 Microsoft Office
- 3 AutoCAD
- 4 SolidWorks
- 5 SAP
- 6 Microsoft Word
- 7 Enterprise Resource Planning (ERP)
- 8 Microsoft Powerpoint
- 9 Computer Aided Draughting/Design (CAD)
- 10 Software Development



## Specialist Skills

- 1 Computer Numerical Control (CNC)
- 2 Quality Assurance and Control
- 3 Mechanical Engineering
- 4 Machining
- 5 Project Management
- 6 Budgeting
- 7 Quality Management
- 8 Packaging
- 9 Engineering Drawings
- 10 Scheduling



# Great places to explore the opportunities

- **This is Engineering** - An introduction to the sector and the opportunities it offers <https://www.thisisengineering.org.uk/>
- **Prospects** - Engineering and Manufacturing Information on jobs, work experience and pathways <https://www.prospects.ac.uk/jobs-and-work-experience/job-sectors/engineering-and-manufacturing>
- **Youth Employment Careers** and pathways into engineering <https://www.youthemployment.org.uk/careers-hub-sector/engineering-and-manufacturing/>
- **icould** - video and careers information for roles in engineering <https://icould.com/explore/categories/subject/engineering>
- **Motorsport Industry Association** - education pathways into a career in motorsport <https://the-mia.com/page/Education>
- **National Careers Service** - <https://nationalcareers.service.gov.uk/explore-careers>



**Growing people**



**Growing business**



**Growing places**

**More information at**

[www.semlep.com/school-labour-market-information/](http://www.semlep.com/school-labour-market-information/)

**#DefineYourCareer**