

Define Your Career Engineering and Manufacturing

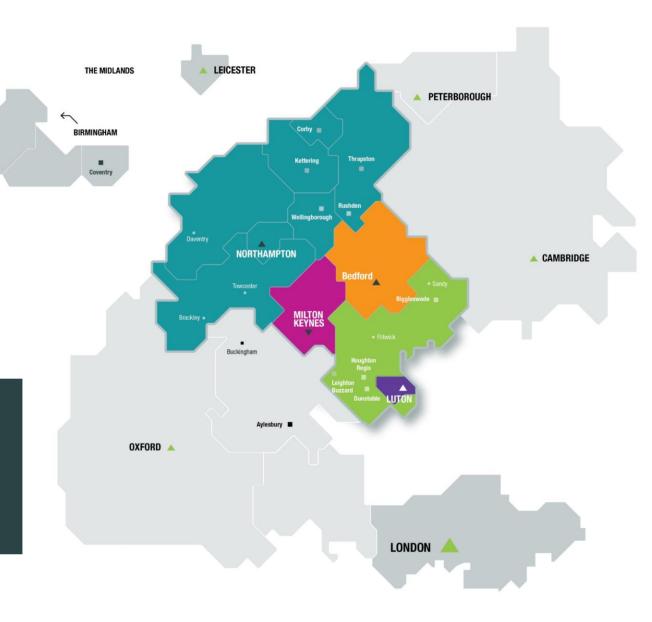
November 2021



South East Midlands

- Bedfordshire
- Luton
- Milton Keynes
- Northamptonshire

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



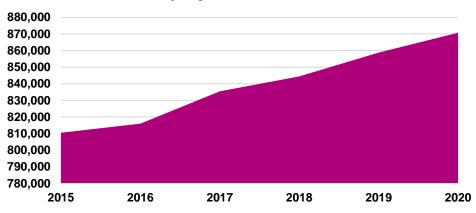




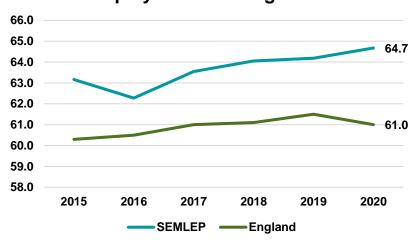


The Labour Market

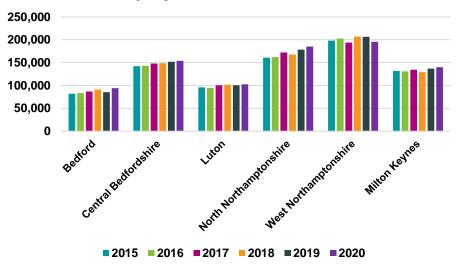




Employment rate - aged 16+



Employment - SEMLEP Area



Job Density (2019) Ratio of total jobs to population aged 16-64



Over 1 indicates more jobs than 16-64 population

High levels of employment

Source: ONS, Annual population survey, ONS/ONS Job Density

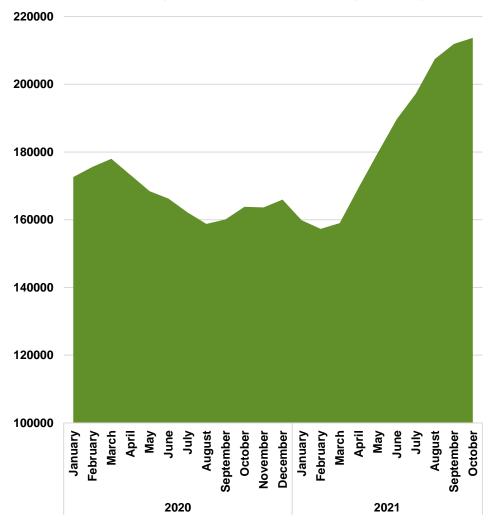






Job Posting Trends

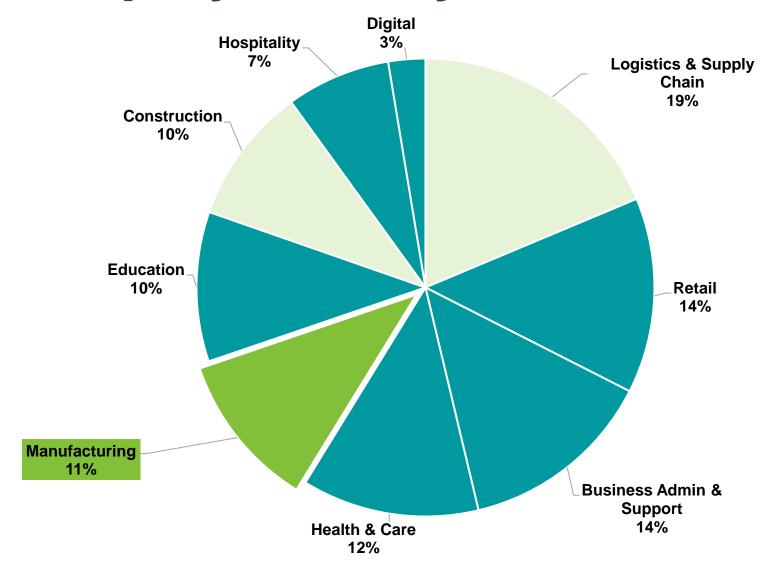
Job Postings - 12 Months Moving Average



- 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

Source: Labour Insight (Burning Glass Technologies)

Employment by Sector





Job Vacancies - Engineering and Manufacturing



Positive factors

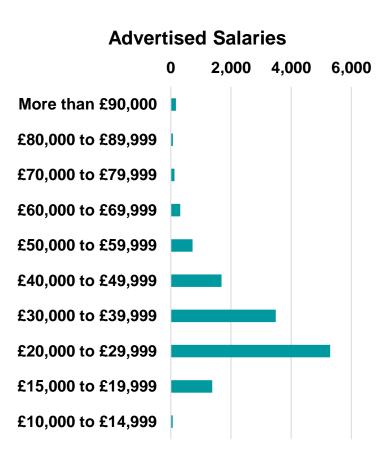
- Hub of R&D
- Green economy and construction
- Growth of food production
- Innovation
 - Space
 - Agri-tech
 - Motorsport
- Increasing automation
- Ageing workforce



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

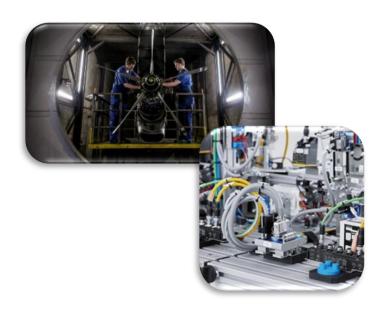


Job Vacancies – Employability Skills

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





Specialist Skills

- I 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

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 Computer Aided Draughting/Design
- 9 (CAD)
- 10 Software Development



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







More information at

www.semlep.com/school-labour-market-information/

#DefineYourCareer