Greater Cambridge Digital Labour Market Summary

For Cambridgeshire Chambers of Commerce

Mike Spicer and Hannah Lazarus, January 2025

Background to the Cambridgeshire Chambers of Commerce labour market analysis programme

UNDERSTANDING EMPLOYER NEEDS

Cambridgeshire Chambers of Commerce is the designated Employer Representative Body for the area's Local Skills Improvement Plan. Digital skills are a key theme of the LSIP, and making the plan and implementing it requires an in-depth and current understanding of business recruitment and skills needs.

GATHERING IN-DEPTH LABOUR MARKET DATA

We analyse standard metrics like participation rates and job growth, alongside recruitment difficulties, skills gaps, and educational trends. We are working with partners to expand the range of datasets included in reports, such as company-level data on employment.

PROMOTE COMMON UNDERSTANDING OF TRAINING AND EDUCATION NEEDS

We share quarterly and annual reports with education and training providers, the Department for Education, and local government partners. We want all parties to have access to the latest labour market intelligence relevant to employer-led skills planning.

What we will cover today

An overview of Greater Cambridge's labour market, as it relates to digital roles, broken down into strengths, weaknesses, opportunities and threats, and the future priorities for research by Cambridgeshire Chambers of Commerce.

Strengths

The share of Greater Cambridge's workforce employed in digital roles is well above the regional and national averages. The area is a hotspot for specialised skills and the jobs that need them. It is home to most of the region's largest employers of 'digital workers' including the University of Cambridge and ARM.

Opportunities

Technological change will drive demand for high-skilled jobs in C&P over the longer term, with digital skills essential for most job openings and online training becoming increasingly popular.

Weaknesses

Despite the relatively large number of jobs in the digital and IT sector in Greater Cambridge, the total fell over the last two years against a backdrop of growth nationally. Recruitment is also declining, and the incidence of training has fallen - especially in the use of new technologies.

Threats

Advanced digital skills gaps are common with nearly a third of C&P's employers reporting a lack of advanced digital skills proficiency among their workforces. Despite a weakening labour market recruitment difficulties persist, especially for engineers, IT professionals, and teaching staff.

Strengths

High digital employment

11% of the Greater Cambridge workforce is employed in digital occupations compared to 7% across the rest of C&P and England. Digital employment across Greater Cambridge grew by 15% in the past five years. Programmers and Software Development Professionals are the most common digital occupations in Greater Cambridge and the most in-demand across the entire labour market.

Hotspot for specialised digital skills

Unlike the rest of the region, the most in-demand digital skills in Greater Cambridge over the past five years have been specialised digital skills (Python and Software Engineering). Basic digital skills have been the most in-demand digital skills elsewhere in the region (Microsoft Excel, Microsoft Office, Computer Literacy and Microsoft Outlook).
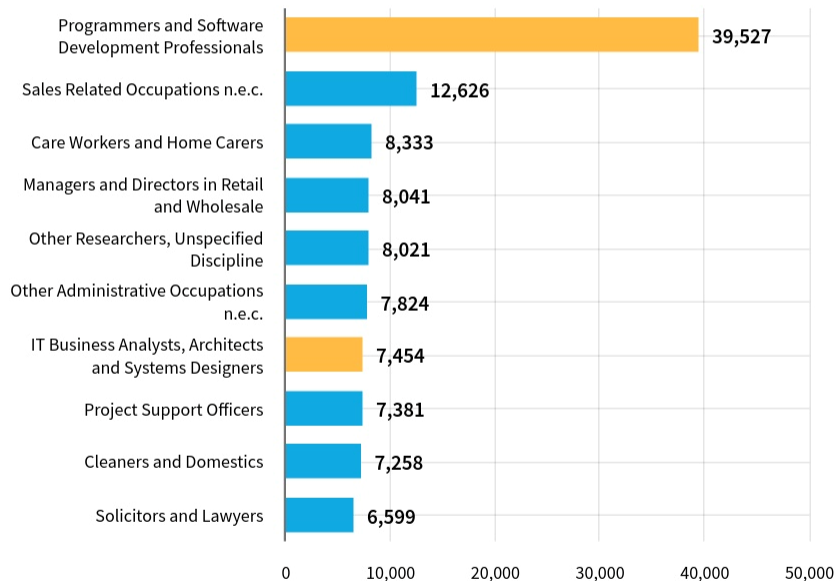
Hotbed for digital recruitment

Nine of the 10 top employers of digital workers in Cambridgeshire and Peterborough over the past five years are located in Greater Cambridge: University Of Cambridge, ARM, AstraZeneca, Thermo Fisher Scientific, Amazon, Embl European Molecular Biology Laboratory, Cambridge University Press & Assessment, AVEVA, and Microsoft.
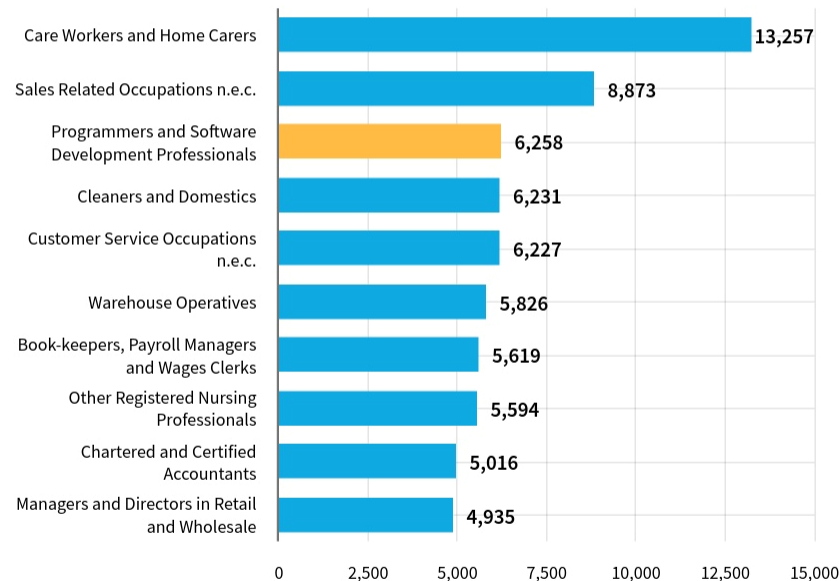
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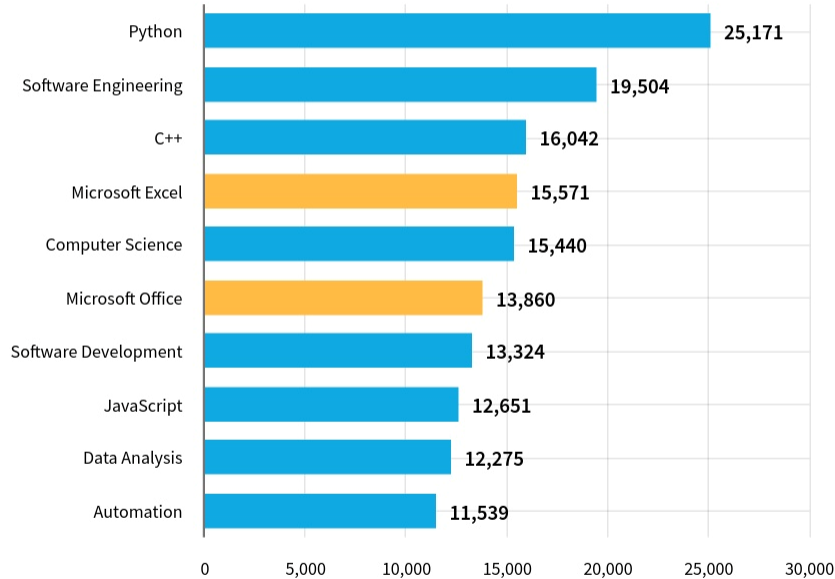# 10 most in-demand *occupations* in job postings, 2020-2024

Greater Cambridge

Occupation	Postings
Programmers and Software Development Professionals	39,527
Sales Related Occupations n.e.c.	12,626
Care Workers and Home Carers	8,333
Managers and Directors in Retail and Wholesale	8,041
Other Researchers, Unspecified Discipline	8,021
Other Administrative Occupations n.e.c.	7,824
IT Business Analysts, Architects and Systems Designers	7,454
Project Support Officers	7,381
Cleaners and Domestics	7,258
Solicitors and Lawyers	6,599

Rest of Cambridgeshire & Peterborough

Occupation	Postings
Care Workers and Home Carers	13,257
Sales Related Occupations n.e.c.	8,873
Programmers and Software Development Professionals	6,258
Cleaners and Domestics	6,231
Customer Service Occupations n.e.c.	6,227
Warehouse Operatives	5,826
Book-keepers, Payroll Managers and Wages Clerks	5,619
Other Registered Nursing Professionals	5,594
Chartered and Certified Accountants	5,016
Managers and Directors in Retail and Wholesale	4,935

Source: Lightcast

10 most in-demand digital *skills* in job postings, 2020-2024

Greater Cambridge

Skill	Value
Python	25,171
Software Engineering	19,504
C++	16,042
Microsoft Excel	15,571
Computer Science	15,440
Microsoft Office	13,860
Software Development	13,324
JavaScript	12,651
Data Analysis	12,275
Automation	11,539

Rest of Cambridgeshire & Peterborough

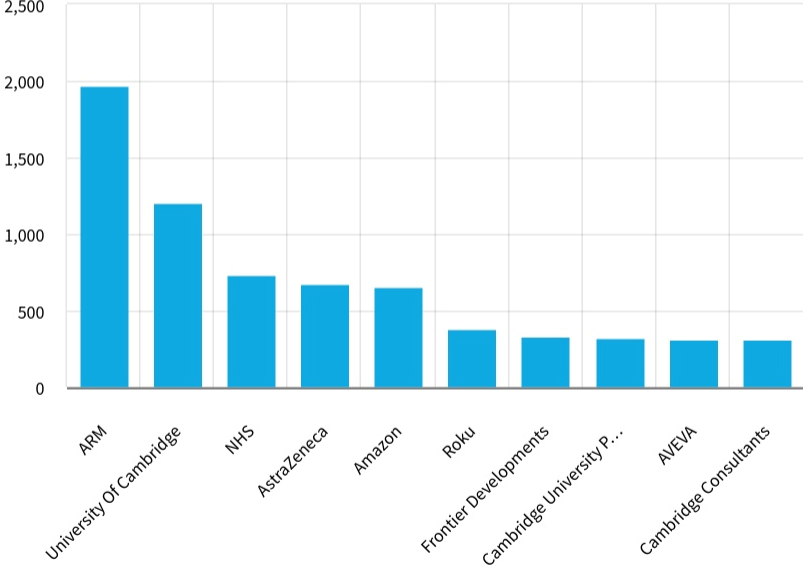| Skill	Value
Microsoft Excel	12,832
Microsoft Office	11,053
Computer Literacy	9,948
Microsoft Outlook	7,327
Data Analysis	5,336
Microsoft PowerPoint	4,811
Automation	3,132
SAP Applications	2,862
Technical Support	2,789
Microsoft Teams	2,612

Source: Lightcast

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Biggest digital recruiters, Greater Cambridge, 2020-2024

Online Job Postings - digital occupations

Online Job Postings - digital skills
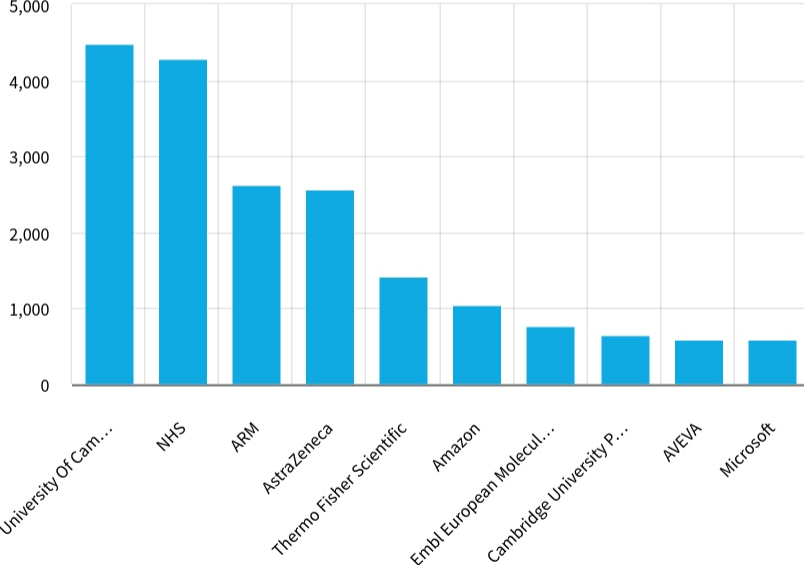
Source: Lightcast

Weaknesses

Falling employment in the Digital and IT growth sector

Though Greater Cambridge has a higher share of jobs in the Digital and IT sector than nationally, the total has declined by 6% over the past two years, compared to 7% growth across England. The decline has been driven by 'Computer Programming, Consultancy and Related Activities' (-1,000 jobs).

Recent fall in digital recruitment

Recruitment of digital workers in Greater Cambridge in 2024 was at its lowest since the earliest year of data (2012) and 34% lower than the long-term annual average, driven by a sharp drop in recruitment of Programmers and Software Development Professionals.

### Weaker environment for job-related training

Employer training has fallen to record low levels. Across C&P, 62% of establishments provided training to their employees in 2022, the lowest level since 2013 (the earliest year of data, when 73% provided employee training). Of those providing training, incidence of new technology training decreased the most from 49% in 2019 to 44% in 2022.

Despite the relatively large number of jobs in the digital and IT sector in Greater Cambridge, the total fell over the last two years against a backdrop of growth nationally. Recruitment is also declining, and the incidence of training has fallen - especially in the use of new technologies.
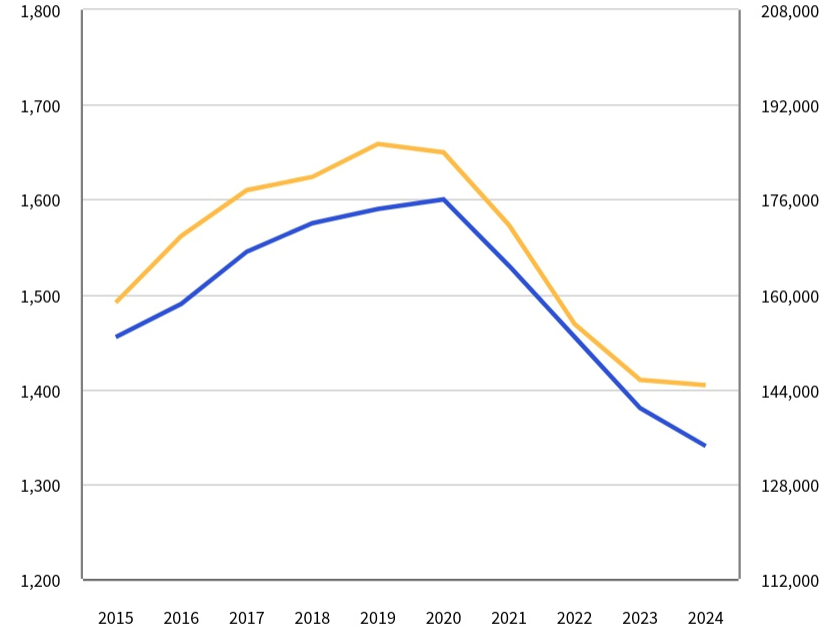
Employment in Digital and IT Sector

- Greater Cambridge (left axis)
- England (right axis)
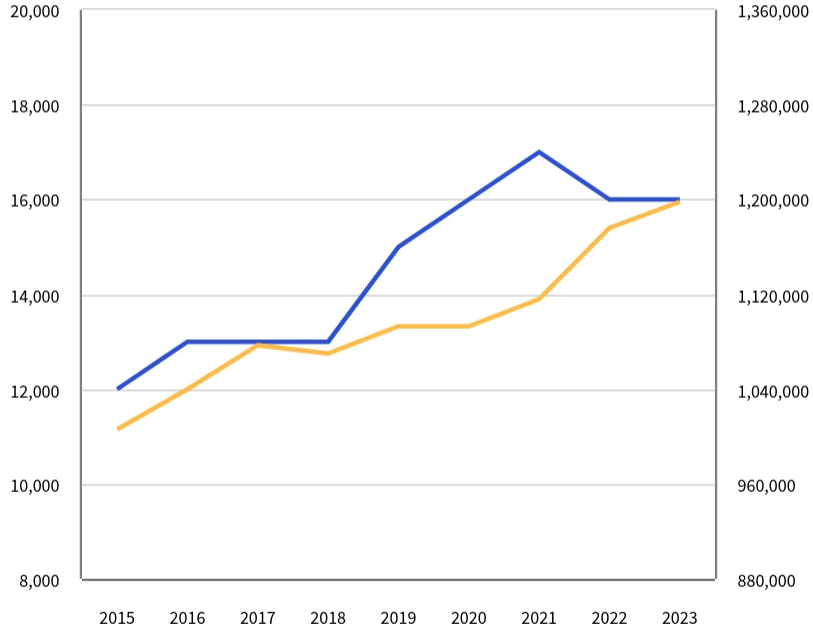
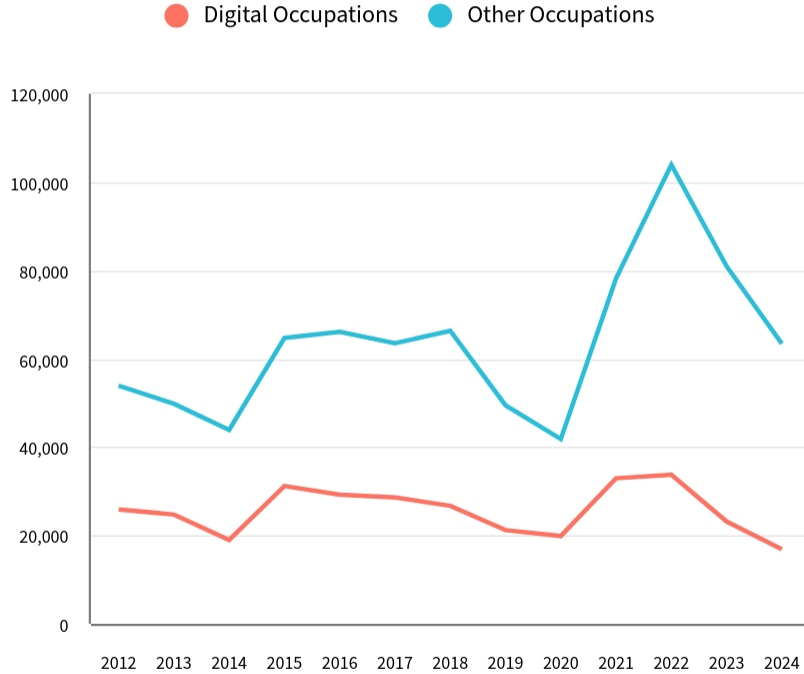# Businesses in Digital and IT Sector

- Greater Cambridge (left axis)
- England (right axis)

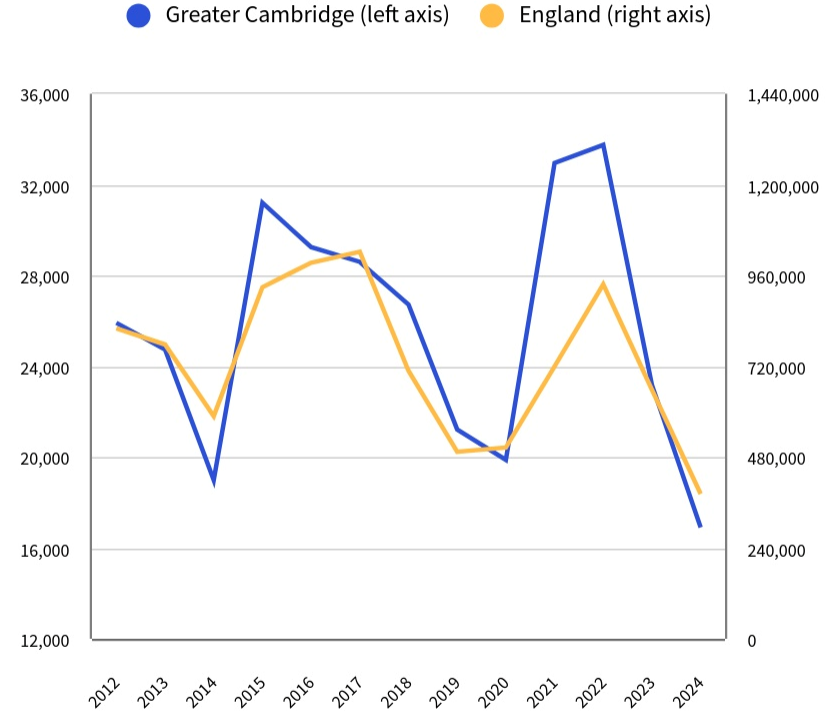*Source: Office for National Statistics*

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Job Postings by Digital/Non-Digital Occupations, Greater Cambridge

● Digital Occupations   ● Other Occupations

Job Postings for Digital Occupations

● Greater Cambridge (left axis)   ● England (right axis)

Source: Office for National Statistics

Opportunities

Technological change will shape C&P labour demand over the next decade

Science, Engineering and Technology Professionals are projected to account for one of the highest shares of new job opportunities across C&P: 6,800 net new workers and 16% of all net employment growth to 2035. Technology will reduce demand for some roles, most sharply for Administrative (-5,800), Sales (-3,000) and Secretarial (-2,800).

Growth of digital skills demand across the workforce

Digital skills are now essential entry requirements for more than four-fifths of all job openings. Over the past five years, 40% of the most requested 'specialised skills' within Greater Cambridge job postings have been digital skills. Five of the 50 most requested 'common skills' were also digital skills such as Microsoft Office.

Increased popularity of digital modes of training

Online training has increased in popularity, with 67% employers that provided training in 2022 providing online training or e-learning opportunities, the highest on record (since 2015). The latest Cambridgeshire Chambers' Quarterly Economic Survey also showed that local employers were more likely to have provided online training activities (70%) than any other type of training.

Technological change will drive demand for high-skilled jobs in C&P over the longer term, with digital skills essential for most job openings and online training becoming increasingly popular

Employment Projections by Occupational Group, Cambridgeshire and Peterborough, 2020-2035

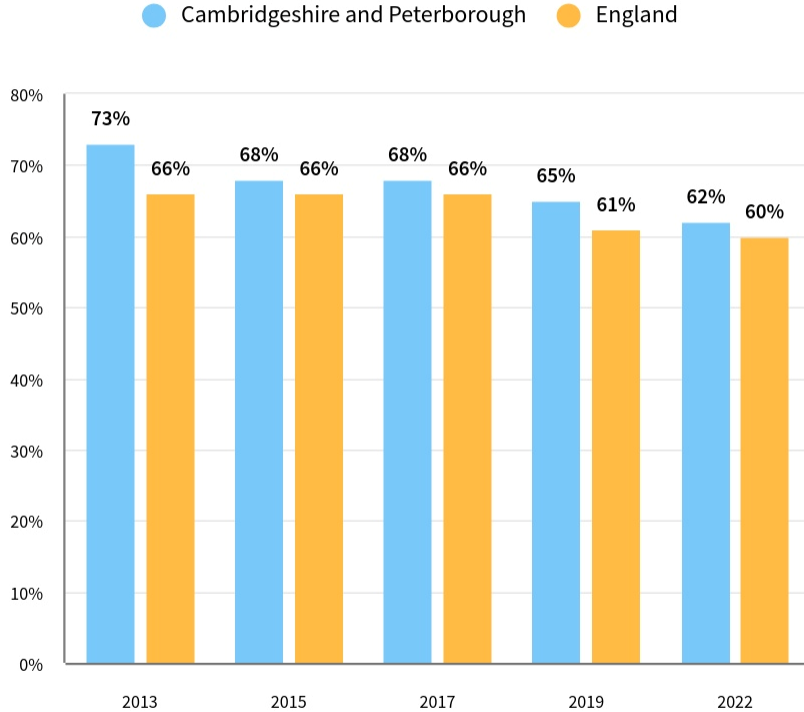| Occupational Group	Value
Business, media and public service professionals	10,045
Caring personal service occupations	8,793
Other managers and proprietors	7,508
Science, research, engineering and technology professionals	6,583
Health professionals	4,421
Customer service occupations	3,576
Teaching and other educational professionals	3,486
Protective service occupations	2,450
Transport and mobile machine drivers and operatives	2,361
Process, plant and machine operatives	1,978
Corporate managers and directors	1,573
Health and social care associate professionals	1,386
Business and public service associate professionals	940
Skilled agricultural and related trades	871
Culture, media and sports occupations	559
Leisure, travel and related personal service occupations	542
Textiles, printing and other skilled trades	265
Community and civil enforcement occupations	-53
Elementary administration and service occupations	-276
Science, engineering and technology associate professionals	-440
Skilled metal, electrical and electronic trades	-704
Skilled construction and building trades	-721
Elementary trades and related occupations	-1,129
Secretarial and related occupations	-2,802
Sales occupations	-2,995
Administrative occupations	-5,847

Source: The Skills Imperative 2035

Percentage of Establishments Providing Training

Legend: ● Cambridgeshire and Peterborough ● England

Year	Cambridgeshire and Peterborough	England
2013	73%	66%
2015	68%	66%
2017	68%	66%
2019	65%	61%
2022	62%	60%

Percentage of Establishments Providing Training by Mode of Training, Cambridgeshire and Peterborough

Legend: ● On-the-job ● Off-the-job ● Online/e-learning

Year	On-the-job	Off-the-job	Online/e-learning
2015	55%	50%	43%
2017	57%	50%	52%
2019	52%	45%	56%
2022	49%	39%	67%
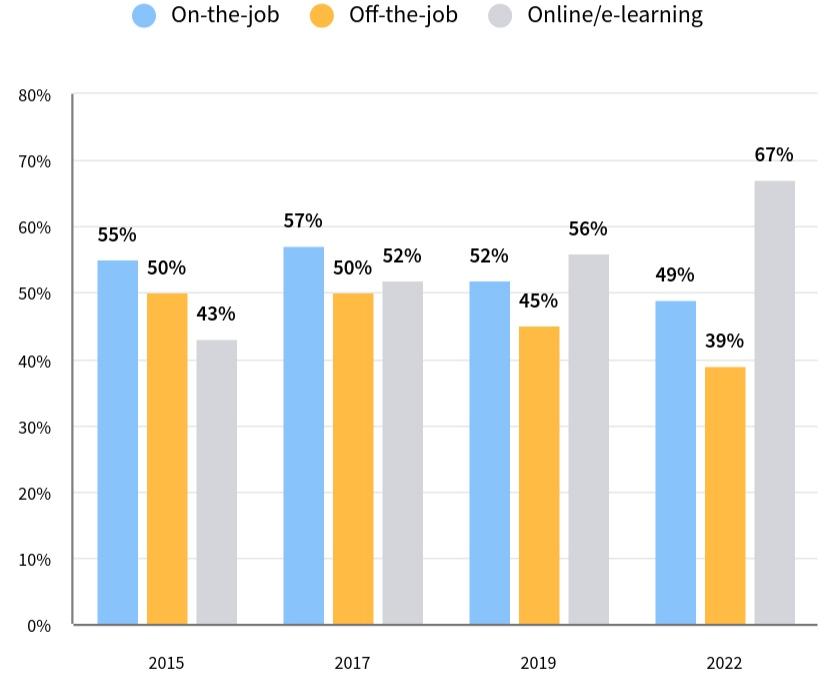
Source: Employer Skills Survey

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Threats

Skills gaps and shortages

The 2023 LSIP Skills Survey captured a sharp increase in advanced digital skills gaps with 32% of employers reporting that their workforces lacked advanced digital skills, up from 19% in 2019. Most local businesses participating in a recent Chamber survey responded that AI would make their business more competitive, but only 7% believed that they had the skills to work with or implement it.

Ongoing recruitment difficulties

In 2024 Q4, 56% of respondents to Cambridgeshire Chambers' Quarterly Economic Survey reported difficulty in finding suitable staff. Just over half of those experiencing recruitment problems found it hardest to recruit skilled manual/technical staff, with more than two-fifths struggling to recruit professional/managerial staff.
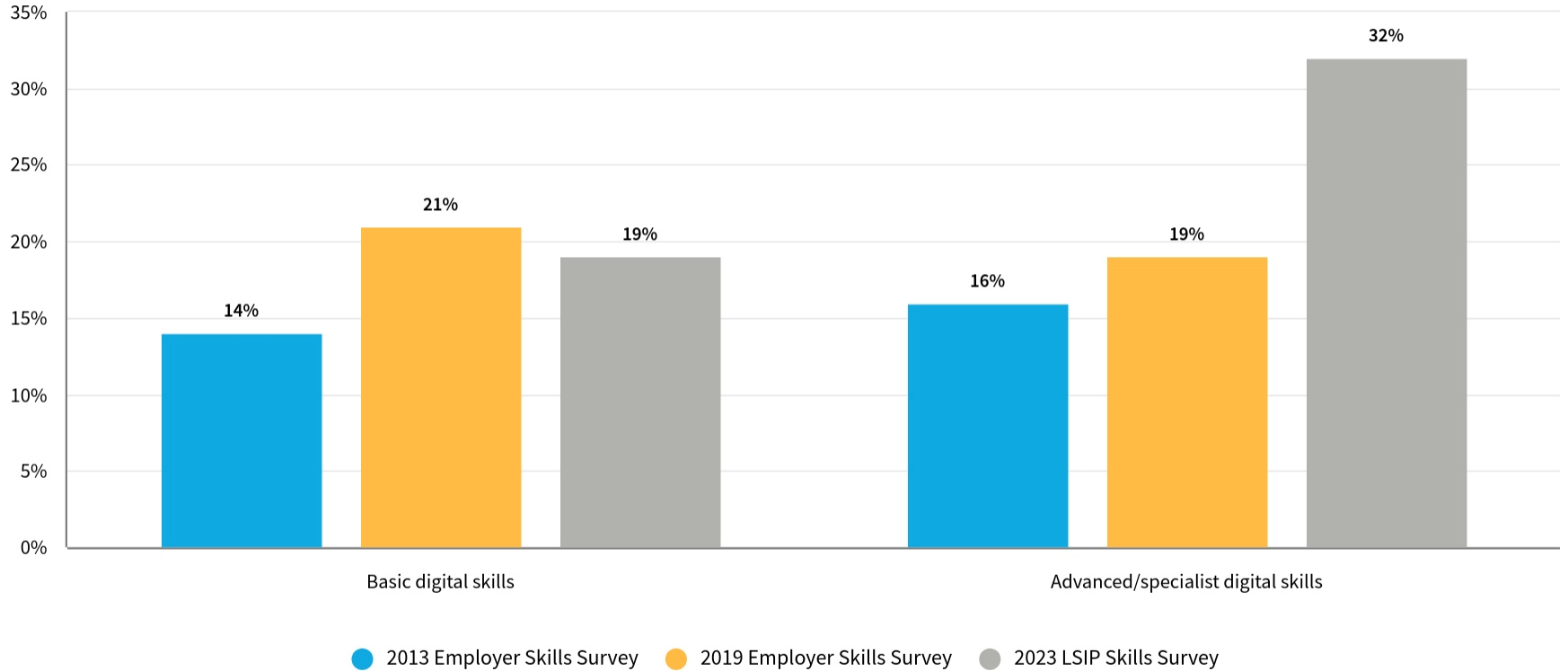
Recruitment and retention issues among the teaching workforce

More teachers are now leaving the profession and it is growing harder to recruit them. In 2024, it took much longer than average (26 days) to recruit for a number of teaching occupations in Greater Cambridge, particularly Information Technology Trainers.
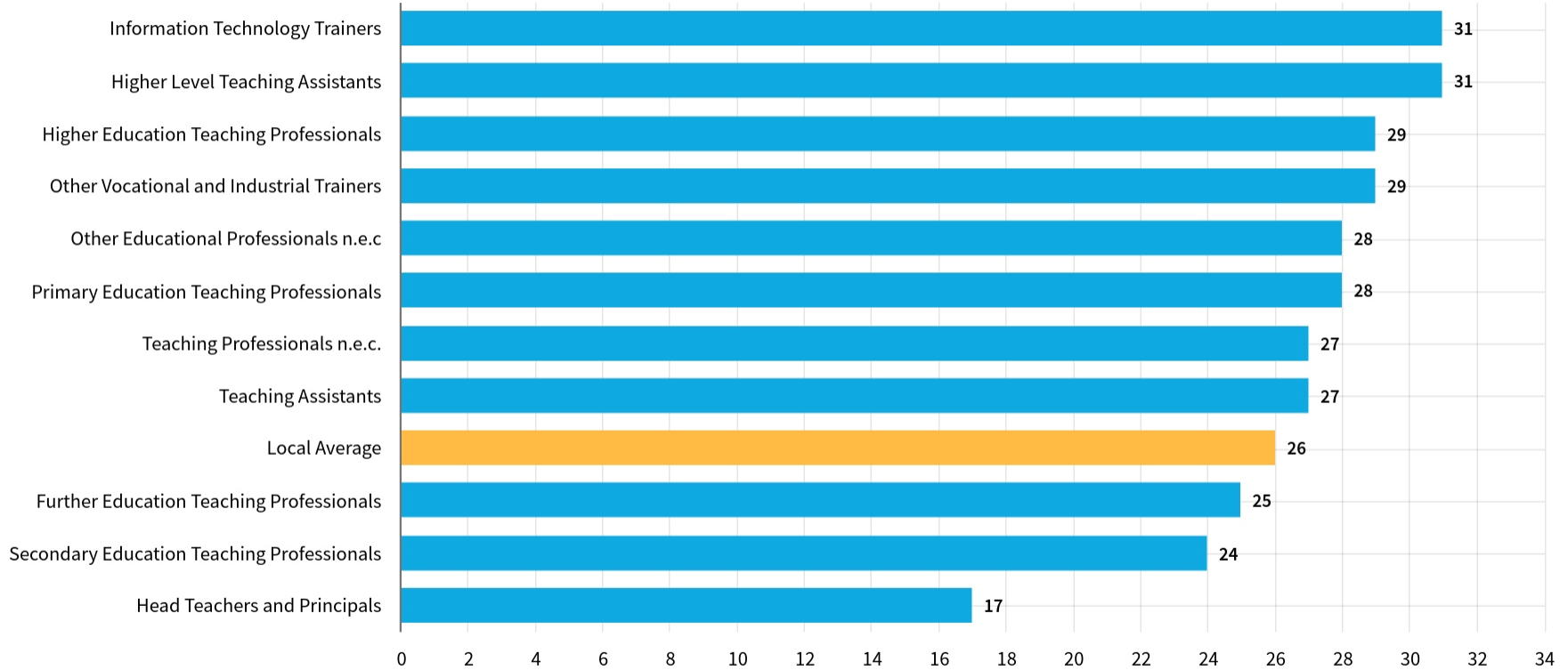
Advanced digital skills gaps are common with nearly a third of C&P's employers reporting a lack of advanced digital skills proficiency among their workforces. Despite a weakening labour market recruitment difficulties persist, especially for engineers, IT professionals, and teaching staff.

Percentage of Cambridgeshire and Peterborough employers attributing skills gaps to a lack of digital skills

Basic digital skills
- 2013 Employer Skills Survey: 14%
- 2019 Employer Skills Survey: 21%
- 2023 LSIP Skills Survey: 19%

Advanced/specialist digital skills
- 2013 Employer Skills Survey: 16%
- 2019 Employer Skills Survey: 19%
- 2023 LSIP Skills Survey: 32%

Legend:
- 2013 Employer Skills Survey
- 2019 Employer Skills Survey
- 2023 LSIP Skills Survey

Median Posting Duration (Days), Online Job Postings for Teaching Occupations, Greater Cambridge

Occupation	Days
Information Technology Trainers	31
Higher Level Teaching Assistants	31
Higher Education Teaching Professionals	29
Other Vocational and Industrial Trainers	29
Other Educational Professionals n.e.c	28
Primary Education Teaching Professionals	28
Teaching Professionals n.e.c.	27
Teaching Assistants	27
Local Average	26
Further Education Teaching Professionals	25
Secondary Education Teaching Professionals	24
Head Teachers and Principals	17

Source: Lightcast

Working with employers, education and training providers, the Chamber will seek to better understand these issues

1 | The changes to job numbers across priority sectors for economic development strategies

2 | The decline in employer training to record low levels, especially for instruction in new technology

3 | The likely impact on future digital skills demand from recent advances in AI and other industry developments

POLICY DEPARTMENT
KNOWLEDGE | ANALYSIS | STRATEGY

Contact us

🌐 www.policydepartment.com

📞 020 7459 4362

@ info@policydepartment.com