



Buckinghamshire's Local Skills Improvement Plan

June 2026

Annex A: Further explanatory information on Skills Needs



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Annex A: Further explanatory information on Skills Needs

This section provides further evidence and analysis used to inform our reasoning of priority local skills needs and actions for the Buckinghamshire labour market, organised by priority sector. For more information on criteria and initial analysis to determine these priority sectors, please refer to Annex C.

Please note that sector definitions have been revised, compared to the Buckinghamshire LSIP 2023, to minimise overlap between sectors. Furthermore, we have included SOC codes for core occupations relevant to each sector, but it should be noted that businesses will demand a wide range of occupations not exclusive to their sector (such as managers, administrators, drivers etc.) Similarly, roles relevant for one priority sector may be employed outside that sector (for example, a data analyst may be employed in professional services business). Please refer to Annex C for lists of SIC codes used to define the priority sectors, and SOC codes used to define core occupations for those sectors.



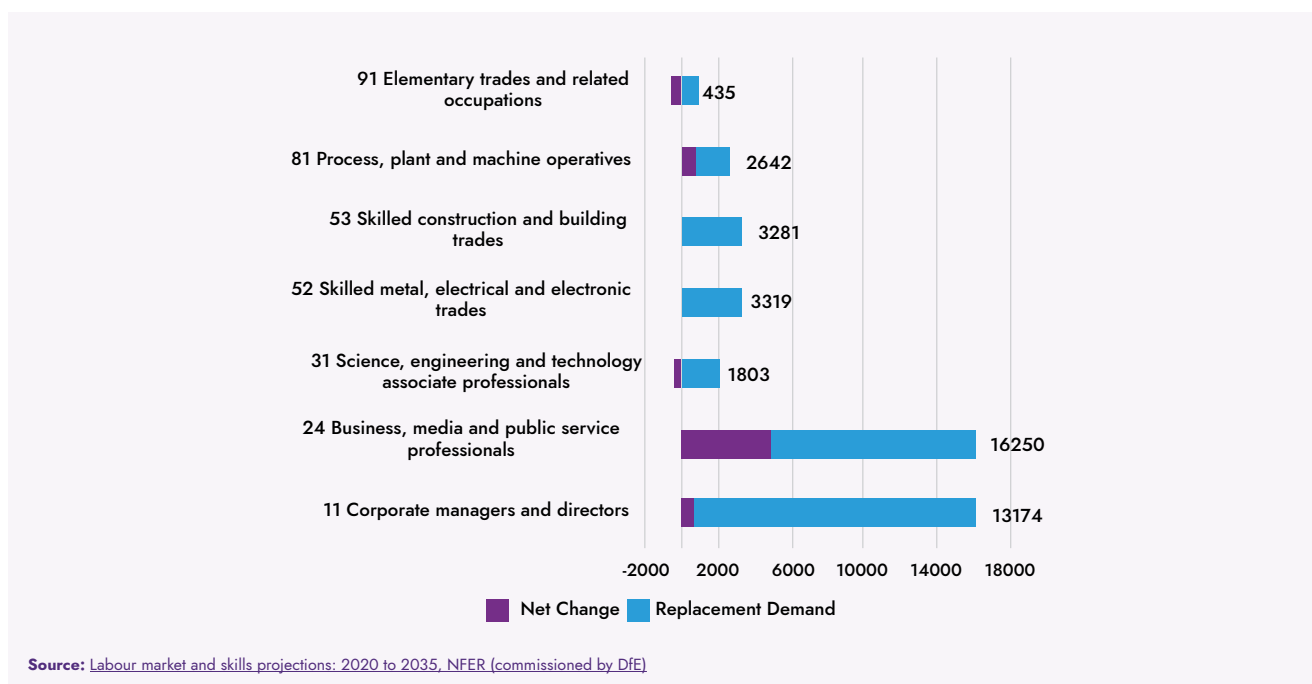


Construction

Headline statistics – Construction

- **16,000+ people** work in Buckinghamshire's construction sector ($\approx$ 7% of local employment).
- Approximately **9,500 people** (between 5,600 - 13,400) **self-employed** construction workers also contribute to local employment but are not counted in PAYE/VAT data.
- The sector contributes **9.2% of Buckinghamshire's GVA**.
- Workforce broadly stable **2019–2024**, with a dip in 2022 due to rising material costs and global trade disruption.
- Fastest-growing subsectors (2019–2024) include: **Electrical installation; Plumbing, heat & air-conditioning installation; Specialised repair and maintenance activities; Site preparation; Roofing**
- Buckinghamshire has several large infrastructure projects, with high demand for labour: **HS2, East West Rail**, and extensive housebuilding programmes.
- Draft Buckinghamshire Local Plan requires **95,000 new homes by 2045**.
- Local skills shortage occupations include: **Civil engineers; Mechanical engineers; Quantity surveyors; Plant operators & control managers; Fence erectors, cost controllers; Plant drivers; Specialist craft roles** and more
- Overall occupational demand, in 2024, was highest for: **Quantity Surveyors; Elementary Construction Occupations n.e.c.; Construction and Building Trades n.e.c.; Electricians and Electrical Fitters; Carpenters and joiners**.
- **High turnover** in building services intensifies recruitment demand.
- Providers struggle to recruit **construction lecturers and assessors**, as industry salaries are higher.
- Growth is expected in roles aligned to Net Zero, such as: **Energy-efficient construction; Retrofit assessment; Heat-pump installation; Insulation installation; Project management for retrofit**
- Evidence of high starts by residents in **Level 1–2 diplomas** in plumbing, carpentry, bricklaying, and construction skills, but **lower take-up of Level 3 courses** (except in electrical installation).
- Apprenticeship starts are currently strongest in trades such as carpentry, plumbing, bricklaying, and electrical installation.
- Employment expected to rise notably in: **Professional occupations** (e.g., surveyors, planners) and **Skilled trades occupations** (e.g., plumbers, carpenters)
- **Replacement demand** will be the major driver of future workforce needs due to the ageing workforce.

Occupational Requirements summary - Construction

Forecast occupational requirements, Construction, Buckinghamshire, 2020-2035
(Labels indicate total requirement from 2020-2035)

- **3,824** net growth in Construction employment is forecast from 2020-2035. However, this masks significant replacement demand.
- The county will require some **6,600 additional people** employed in skilled construction trades (SOC 52 and 53 only) from 2020-2035, to meet new demand and replace leavers, or some 440 per year on average.
- However, in 2023/24, only **57** Bucks residents achieved a construction apprenticeship, with 379 completing at least one relevant 16-19 funded course, according to DfE data. These figures likely overestimate achievements, as they also include higher level occupations, such as architecture and civil engineering, and lower level occupations such as plant machinery drivers.
- While it is difficult to isolate demand for higher level occupations, evidence of high demand for Quantity Surveyors and Civil Engineers, and low levels coming through education, indicates a need to increase supply.
- In 2024, there were some **1,738 job vacancies for core construction occupations**, posted online. While some of these roles may be filled by residents outside the area, and by reallocation between occupations, this level of demand remains high relative to the local pipeline of some 400-500 per year.
- Evidence suggests high demand relative to employment, in the short term, for: **Quantity Surveyors; Elementary Construction Occupations n.e.c.; Construction and Building Trades n.e.c.; Electricians and Electrical Fitters; Carpenters and joiners.**
- The CITB Construction Workforce Outlook 2025¹ projects some 7,090 workers will be required per year, across the South East to 2029, to meet employer demand. The report expects demand, relative to current employment, for plant operative, project managers, and logistics roles, although demand is expected to be significant across all occupations in the sector.
- To conclude, to avoid reliance on skills provision from outside the county, learner numbers on construction courses should be increased at all levels, with a focus on priority skills shortages occupations identified by employers.
- **NB:** these estimates of requirements are based on NFER forecasts produced in 2023, current labour market demand indicators, and DfE and HESA data on post-16 education and training starts and achievements. Full details are presented in Annex A of the Buckinghamshire LSIP 2.0. As a result, these estimates are indicative, not prescriptive, and should not be used as comprehensive estimates of learner numbers required, particularly given high levels of uncertainty in the national and local labour market.

¹ CITB Construction Workforce Outlook 2025

Skills and labour market profile

In total, over 16,000 people work in the Buckinghamshire construction sector. However, this does not include self-employed construction workers not registered for PAYE or VAT. Reliable estimates are not currently available for this, but this is estimated at between 5,600 and 13,400, or approximately 9,500 people.² Overall, the sector accounts for some 7% of employment within the county, and the sector contributes some 9.2% of Buckinghamshire's annual Gross Value Added (GVA).

The number of people working in the construction sector locally has increased over the last five years. Between 2019 and 2024, the number of construction sector employees remained broadly stable, although employment decreased significantly in 2022, likely as a response to escalating raw material costs, due to global trade disruption, reducing demand for labour. Subsectors experiencing significant growth in employment, between 2019 and 2024, included: **Electrical installation; Plumbing, heat and air-conditioning installation; Other specialised construction activities n.e.c.** (such as repair and maintenance services, scaffolding, and businesses specialising in unique construction projects); **Site preparation;** and **Roofing activities.** Core construction occupations experiencing growth in the past 5 years include: **Bricklayers; Roofers, Roof Tilers and Slaters; Glaziers, Window Fabricators and Fitters.**

The sector continues to employ a significant proportion of the Buckinghamshire workforce, linked to large infrastructure projects in the county such as HS2, East West Rail and house building programmes. Indeed, the draft Buckinghamshire local plan includes a requirement, set by central government, to deliver 95,000 homes by 2045 (including a 5% buffer). The HS2 project has employed some 33,000 workers nationally, and the EKFB Brackley Skills Centre, set up by HS2's construction partner, has provided courses to 77 apprentices. 130 pre-employment courses have been completed at the centre, with 55 going on to secure jobs with the HS2 project.³

We can expect strong employment growth to continue both short and long term in the county, linked to large scale developments including the Pinewood Studios expansion, with plans submitted in June 2025 proposing a 55,030 square metre state-of-the-art data centre, a 60-acre nature reserve, and a six-acre community garden and learning space⁴; the construction of Marlow Film Studios, which was recently awarded planning permission; the continued EWR and HS2 activity; and finally the drive to net zero. Indeed, forecasts by the Greater South East Net Zero Hub indicate that, in a policy-off scenario, employment in the domestic energy efficiency sector would be required to increase from 4,573 in 2021/22 to 76,988 (16.8x) to reach net zero by 2030, or 15,061 (3.3x) to reach net zero by 2050.⁵ Finally, the draft Buckinghamshire local plan includes a requirement, set by central government, to deliver 95,000 homes by 2045, including a 5% buffer.

Continued high demand for labour in this sector has led to persistent skills shortages – nationally, some 45% of construction vacancies were hard to fill due to skills shortages⁶. The CITB Construction Workforce Outlook 2025⁷ projects some 7,090 workers will be required per year, across the South East to 2029, to meet employer demand. The report expects demand, relative to current employment, for plant operative, project managers, and logistics roles, although demand is expected to be significant across all occupations in the sector. Meeting the additional future demand could be a challenge given existing skills shortages are rife across the sector locally, and at all levels, according to insight from the Buckinghamshire Construction Sector Employer Group. However, with the UK government providing a £600m investment in construction skills nationally, there are opportunities to provide additional training and education to address these challenges.

AI and digital literacy continue to be highly relevant for this sector, both in terms of using digital apps for monitoring and recording work in building trades, using AI to support administrative and compliance tasks, digital skills within document controlling, and demand for digital skills to use CAD effectively in design, as well as using AI responsibly to automate design tasks. As a result, ensuring that digital literacy and AI skills are incorporated into courses will be vital for improving the quality and work-readiness of education leavers.

Other issues affecting the sector include the ageing workforce⁸ increasing demand for new recruits; certain groups, particularly women, being under-represented within the workforce; the perception of construction as 'mud and boots' making it difficult to attract talented young people; and difficulties recruiting and retaining construction lecturers, trainers and assessors at education and training providers due to much higher salaries being on offer in industry.

² Business Register and Employment Survey, ONS, 2024 / Annual Population Survey, ONS (12 months to December 2024, 95% confidence interval)

³ Mind the skills gap: How HS2 is building a workforce for Britain's future (HS2, 2026)

⁴ Pinewood Group Submits Outline Planning Application for Proposed Data Centre, June 2025

⁵ Domestic Energy Efficiency Supply Chain Market Intelligence, Buckinghamshire (GSEnz Hub, January 2023)

⁶ Employer Skills Survey 2024

⁷ CITB Construction Workforce Outlook 2025

⁸ The Chartered Institute of Building. CIOB research - The Impact of the Ageing Population on the Construction Industry_0.pdf

In addition, more recent evidence suggests that, alongside a continuously ageing workforce, retention of workers has also diminished, due to career changes and emigration.⁹ As a result, replacement demand is expected to be high for the sector, adding to skill shortages and increasing demand for new entrants. This is particularly relevant for leadership and management capability, as experienced individuals leave the workforce, increasing the importance of providing these skills in the current workforce.

According to research from the CITB,¹⁰ the Future Homes Standard and new 'smart' requirements are also likely to accelerate a shift in demand away from traditional skills towards digital skills, especially in installing electrical engineering controls. The installer network of heating systems will also need effectively to translate information on emerging heating technology to the customer. Skills requirements will also increasingly focus on highly skilled software engineering expertise, which will require changes in recruitment tactics to wider regions.

In addition to increased demand for construction workers, demand for skills in greener, energy-efficient construction methods and retrofit assessment is also expected to grow, if the UK is to meet its legally binding commitment to net zero carbon emissions by 2050. Research suggests that there are 220,300 households that could benefit from retrofit services in the county. The mean cost of each retrofit is £12,982 and the total cost across Buckinghamshire would be £3.7bn.¹¹ The same research estimates that the total number of days work to fulfil the retrofit work required is in the region of 7,191,765 days.

Since publication of the Buckinghamshire LSIP 2023, new policy announcements and funding have been made available to support the transition to green jobs. The Clean Energy Jobs plan¹², published in 2025, includes a range of policies with implications for future construction skills. As part of this, the Warm Homes Skills Programme includes £8m in funding for 9,000 training places, up to July 2026, to deliver skills in solar panel installation, heat pump installation, and retrofit coordination. The plan also proposes to develop new apprenticeship frameworks for retrofit occupations. The implications of this plan for the local Construction sector have been considered, chiefly the opportunities to use funding for training programmes to reskill existing construction workers, and availability of funding for new construction workers skilled in greener construction methods. Indeed, the Warm Homes Plan, published in January 2026, aims to create 180,000 additional high quality, well-paid, future-proofed jobs in energy efficiency and clean heating by 2030. The plan aims to unlock £38 billion in total investment across the Parliament, with additional funding for skills, innovation and UK manufacturing to support growth in the sector.¹³ We have incorporated this intelligence into our assessment of skill shortages in the local construction sector.

Furthermore, while demand for housing retrofit has been reduced in recent years, the Warm Homes Plan, published in January 2026, aims to create 180,000 additional high-quality, well-paid, future-proofed jobs in energy efficiency and clean heating by 2030. The plan aims to unlock £38 billion in total investment across the Parliament, with additional funding for skills, innovation and UK manufacturing to support growth in the sector.¹⁴

Key occupations required for this include energy assessors, retrofit coordinators, project managers with retrofit expertise, insulation installers and heat-pump installers. Local challenges include low awareness of retrofit opportunities, limited training capacity, and a weak pipeline of new entrants. Activities to address gaps include employer engagement, promoting retrofit careers, and using LSIF-funded facilities for training. National initiatives, such as the Clean Energy Jobs Plan, expand funding for solar, heat-pump and retrofit training. STEM, digital, data, project-management and leadership skills will also be essential. For more detail on our analysis of green skills in the context of construction, please refer to Annex C.

The following sections have been divided into broad categories of the local construction sector.

⁹ UK Construction: Industry Picture, 2026, CITB

¹⁰ Building Skills for Net Zero (citb.co.uk)

¹¹ Domestic Retrofit Market Intelligence and Skills Assessment (January 2023), Greater South East Net Zero Hub

¹² Clean Energy Jobs Plan, DESNZ, 2025

¹³ Warm Homes Plan, DESNZ, 2026

¹⁴ Warm Homes Plan, DESNZ, 2026

Sector and occupation definitions

The following table sets out the SIC code definitions for the construction sector, alongside employment levels and growth for the Buckinghamshire economy.

4-digit SIC	Industry description	2019	2020	2021	2022	2023	2024	Change (2019-2024)	% change (2019-2024)
4110	Development of building projects	1250	1250	2000	1500	2000	1250	0	0%
4120	Construction of residential and non-residential buildings	4500	3500	3500	4000	3500	4500	0	0%
4211	Construction of roads and motorways	600	1000	500	600	350	350	-250	-42%
4212	Construction of railways and underground railways	75	75	30	25	30	20	-55	-73%
4213	Construction of bridges and tunnels	0	0	0	0	0	0	0	-
4221	Construction of utility projects for fluids	5	10	0	5	10	10	5	100%
4222	Construction of utility projects for electricity and telecommunications	10	45	30	15	40	40	30	300%
4291	Construction of water projects	15	45	15	10	15	10	-5	-33%
4299	Construction of other civil engineering projects n.e.c.	1250	2000	1500	1250	700	600	-650	-52%
4311	Demolition	0	0	5	10	10	20	20	-
4312	Site preparation	30	30	75	125	75	350	320	1067%
4313	Test drilling and boring	5	0	5	10	0	10	5	100%
4321	Electrical installation	2500	2500	2500	2500	2250	3000	500	20%
4322	Plumbing, heat and air-conditioning installation	2000	1750	1750	1750	1750	2500	500	25%
4329	Other construction installation	450	400	350	400	400	450	0	0%
4331	Plastering	150	125	150	125	100	100	-50	-33%
4332	Joinery installation	900	1000	1250	1250	700	800	-100	-11%
4333	Floor and wall covering	225	250	350	250	200	200	-25	-11%
4334	Painting and glazing	500	500	700	350	300	350	-150	-30%
4339	Other building completion and finishing	700	1000	900	700	500	500	-200	-29%
4391	Roofing activities	100	200	400	200	300	300	200	200%
4399	Other specialised construction activities n.e.c.	500	800	1250	700	1000	900	400	80%

Source: Business Register and Employment Survey, 2024

The following table sets out the core occupations relevant for the construction sector, alongside employment, labour demand, and relevant technical education starts by local learners.

Occupations where 2024 job posting were particularly high relative to employment, included: **Quantity Surveyors; Air-conditioning and Refrigeration Installers and Repairers; Steel Erectors; Stonemasons and Related Trades; Rail Construction and Maintenance Operatives**. Overall occupational demand was highest for: **Quantity Surveyors; Elementary Construction Occupations n.e.c.; Construction and Building Trades n.e.c.; Electricians and Electrical Fitters; Carpenters and joiners**.

Occupations		Demand Indicators			Relevant technical education provision		
Occupation (SOC)	SOC Code	Employees in employment (SOC4 local)	'Occupations in demand' category (SOC4 national)	Vacancies posted, 12 months, 2024 (SOC4 local)	T Level Starts (2023/24)	Apprenticeship starts (2023/24)	Apprenticeship starts (2024/25)
Production Managers and Directors in Construction	1122	1292	Higher Skilled	37	0	-	-
Architects	2451	87	Higher Skilled	10	0	3	4
Chartered Architectural Technologists, Planning Officers and Consultants	2452	208	Higher Skilled	41	0	5	1
Quantity Surveyors	2453	348	Higher Skilled	282	0	8	8
Chartered Surveyors	2454	411	Higher Skilled	104	0	0	1
Construction Project Managers and Related Professionals	2455	698	Higher Skilled	29	0	5	4
Building and Civil Engineering Technicians	3114	100	Medium Skilled	7	3	5	16
Air-conditioning and Refrigeration Installers and Repairers	5225	140	Medium Skilled	77	0	2	0
Electricians and Electrical Fitters	5241	1722	Medium Skilled	186	0	70	74
Steel Erectors	5311	29	Medium Skilled	27	0	-	-
Stonemasons and Related Trades	5312	60	Medium Skilled	26	0	0	0
Bricklayers	5313	202	Medium Skilled	2	0	10	8
Roofers, Roof Tilers and Slaters	5314	199	Medium Skilled	46	0	0	0
Plumbers and heating and ventilating installers and repairers	5315	1079	Medium Skilled	82	0	33	29
Carpenters and joiners	5316	1005	Medium Skilled	113	0	33	35
Glaziers, Window Fabricators and Fitters	5317	372	Medium Skilled	13	0	0	2
Construction and Building Trades n.e.c.	5319	807	Medium Skilled	213	0	6	5
Plasterers	5321	148	Medium Skilled	10	0	0	0
Floorers and Wall Tilers	5322	122	Medium Skilled	48	0	0	0
Painters and Decorators	5323	309	Medium Skilled	52	0	0	2
Road Construction Operatives	8152	68	Ineligible	-	0	0	3
Rail Construction and Maintenance Operatives	8153	37	Ineligible	34	0	0	0
Construction Operatives n.e.c.	8159	471	Ineligible	10	0	4	6
Crane Drivers	8221	63	Ineligible	4	1	0	0
Mobile Machine Drivers and Operatives n.e.c.	8229	320	Ineligible	16	2	4	11
Groundworkers	9121	169	Ineligible	10	1	1	2
Elementary Construction Occupations n.e.c.	9129	746	Ineligible	259	0	-	-

Vacancy and employment information has been sourced from Lightcast for 2024. T Level and Apprenticeship starts have been calculated by matching 4-digit SOC occupations to relevant courses and frameworks using [Skills England | Occupational Maps](#), and using Individual Learner Record for starts for Buckinghamshire-based learners in the 2023/24 academic year.

Employment Projections: Construction

In this section, we aim to provide forecast employment requirements for the sector, using National Foundation for Education Research projections for Buckinghamshire, from 2020-2035, published in 2023. Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area, in a policy-off scenario, and should not be interpreted as precise future requirements.

Projected employment in the construction sector (2020-2035)

SOC Group	Forecast Construction employment growth, 2020 to 2035
Managers, directors and senior officials	680
Professional occupations	1,188
Associate professional occupations	258
Administrative and secretarial occupations	-36
Skilled trades occupations	901
Caring, leisure and other service occupations	17
Sales and customer service occupations	113
Process, plant and machine operatives	581
Elementary occupations	122

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area and should not be interpreted as precise future requirements.

- Employment growth in construction is expected to be highest in Professional Occupations, covering Quantity and Chartered Surveyors and Planning Officers.
- Employment in Skilled trades occupations, including plumbing and carpentry, are also expected to grow.

Projected employment in the construction sector by occupation (2020-2035)

	2020-2035		
	Net Change	Replacement Demand	Total Requirement
11 Corporate managers and directors	485	12,689	13,174
24 Business, media and public service professionals	4,917	11,333	16,250
31 Science, engineering and technology associate professionals	-338	2,141	1,803
52 Skilled metal, electrical and electronic trades	-73	3,392	3,319
53 Skilled construction and building trades	-48	3,329	3,281
81 Process, plant and machine operatives	815	1,827	2,642
91 Elementary trades and related occupations	-554	989	435

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area and should not be interpreted as precise future requirements.

- This table shows the occupation forecasts, in levels, two-digit SOC codes associated with core construction occupations. It also includes a breakdown by net change (reflecting growth due to new businesses) and replacement demand (workers retiring or becoming otherwise economically inactive).
- The majority of future requirement is expected to be replacement demand, reflecting the challenge of an aging construction workforce. This is particularly an issue in higher level occupations.
- Indeed, while skilled construction trades are forecasted to see reduced employment, the replacement demand remains significant.

Skills supply: Construction

Using Individual Learner Record Data, we have assessed the uptake of post-16 education by Buckinghamshire residents related to the Construction, Planning, and Built Environment sector subject area.

Using Individual Learner Record Data, we have prepared a PowerBI report of current provision of learning to Buckinghamshire residents for the 2023/24 academic year. Copies of these detailed dashboards, containing detailed ILR information, are available on request for stakeholders who require access to detailed information.

A summary of key findings is given below.

Participation of Technical education programmes, Buckinghamshire Residents, Construction sector, 2023/24



Source: Individual Learner Record, DfE, 2023/24 academic year.

Achievement of Technical education programmes, Buckinghamshire Residents, Construction sector, 2023/24



Source: Individual Learner Record, DfE, 2023/24 academic year.

16-19 Funded Courses

- Majority of provision is at NVQ levels 1 and 2, with diplomas in plumbing, carpentry, bricklaying, and skills for employment in the construction industry being the most popular.
- Limited take-up of provision at level 3, the most popular being an Advanced Technical Diploma in Electrical Installation.
- However, persistent challenges with workforce retention and high replacement demand underline the continued importance of robust training provision in plumbing, electrical, and other building trades.

T Levels

- Low take-up in 2023/24, with only 3 unique learners starting a T Level, mainly in courses related to design and planning. Furthermore, there were no recorded achievements in construction related T levels in 2023/24.
- Employer feedback suggests this is linked to challenges provided suitable work experience for T Level learners, as well as apprenticeships being a preferable route.

Apprenticeships

- The most popular frameworks are closely aligned with popular 16-19 funded courses (carpentry, plumbing, bricklayer etc.).
- However, degree-level chartered surveyor apprenticeships are also popular, with 14 starts. This is closely aligned with quantity surveyor role, which is also in high demand.
- With only 164 apprenticeship starts, and some 57 achievements in 2023/24, overall take-up of these courses is low, despite popularity being somewhat correlated with demand.

Skills Bootcamps

- Some take-up of bootcamps, with 18 starts, with uptake mainly in level 2 construction and built environment delivered by P. Flannery Plant Hire.
- There were some achievements of level 3 construction bootcamps in 2023/24, but again, very low numbers.
- However, take-up and achievements for Construction Skills Bootcamps improved significantly in later waves. According to final summary of Wave 5 Buckinghamshire Skills Bootcamps to 30th September 2025:
 - Flannery's Plant Operator Bootcamp achieved 142 starts, with:
 - 90% completion of milestone 2
 - 79% achievement of milestone 3 job outcomes
 - 3TG Groundworker Bootcamp did not recruit any starts.
 - Buckinghamshire College Group's Brickwork Bootcamp did not recruit any starts.
 - Buckinghamshire College Group Property Maintenance Bootcamp recruited 8 starts, with:
 - 62.5% completion
 - 0 milestone 3 job outcomes
- Construction Site Manager Bootcamp was not commissioned due to a lack of provider.
- Specialist Plant Operator Bootcamp was not commissioned due to a lack of provider.
- It may be necessary to design or provide more bootcamps, as a mechanism for upskilling construction workers, and quickly respond to demand.

Higher Education

According to the Higher Education Statistics Authority, there were no learners achieving a HE qualification in 'Architecture, building and planning' in a Buckinghamshire University, from 2021/22 to 2023/24. While existing routes exist for training for degree level (NVQ level 4+), such as degree apprenticeships, it may be necessary to explore improving local HE provision to deliver increased supply of degree level qualifications, relevant for civil engineering, town planning, and quantity surveying.

Construction: Skills Shortage Occupations – Infrastructure

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
Document controllers	4159	Other Administrative Occupations n.e.c.	1	Future Skills: Construction (22/01/2026)
Plant machinery operators	8229	Mobile Machine Drivers and Operatives n.e.c.	1	Future Skills: Construction (22/01/2026)
Quantity surveyors	2453	Quantity Surveyors	2	Future Skills: Construction (22/01/2026); supported by evidence of high demand (Lightcast) relative to local provision (ILR, DfE)
Mechanical engineers	2122	Mechanical Engineers	2	Future Skills: Construction (22/01/2026); also reported as a skills shortage for Engineering
Civil engineers	2121	Civil Engineers	2	Future Skills: Construction (22/01/2026)
Cost controllers	4122	Bookkeepers, Payroll Managers and Wages Clerks	2	Future Skills: Construction (22/01/2026)
Machine fitters	5223	Metal Working Production and Maintenance Fitters	1	Future Skills: Construction (22/01/2026)
Maintenance engineers	8153	Rail Construction and Maintenance Operatives	1	Future Skills: Construction (22/01/2026)

Construction: Skills Shortage Occupations – Building Construction

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
Document controllers	4159	Other Administrative Occupations n.e.c.	1	Future Skills: Construction (22/01/2026)
Plant operators	8229	Mobile Machine Drivers and Operatives n.e.c.	1	Future Skills: Construction (22/01/2026)
Quantity surveyors	2453	Quantity Surveyors	2	Future Skills: Construction (22/01/2026); supported by evidence of high demand (Lightcast) relative to local provision (ILR, DfE)
Cost controllers	4122	Bookkeepers, Payroll Managers and Wages Clerks	2	Future Skills: Construction (22/01/2026)
Machine fitters	5223	Metal Working Production and Maintenance Fitters	1	Future Skills: Construction (22/01/2026)

Construction: Skills Shortage Occupations – Building Services

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
Bathroom fitters	5319	Construction and Building Trades n.e.c.	1	Future Skills: Construction (22/01/2026)
Document controllers	4159	Other Administrative Occupations n.e.c.	1	Future Skills: Construction (22/01/2026)
Quantity surveyors	2453	Quantity Surveyors	2	Future Skills: Construction (22/01/2026); supported by evidence of high demand (Lightcast) relative to local provision (ILR, DfE)
Cost controllers	4122	Bookkeepers, Payroll Managers and Wages Clerks	2	Future Skills: Construction (22/01/2026)
Machine fitters	5223	Metal Working Production and Maintenance Fitters	1	Future Skills: Construction (22/01/2026)

Construction: Skills Gaps

Skill gap	Occupational area
Digital skills	Current trade roles, including use of specific apps for HR (requesting leave etc.) and project management (tracking progress, completing forms, requesting supplies etc.)
Resilience	All
Communication	All
Emotional Intelligence	All
Leadership and management capability	All – particularly within small businesses



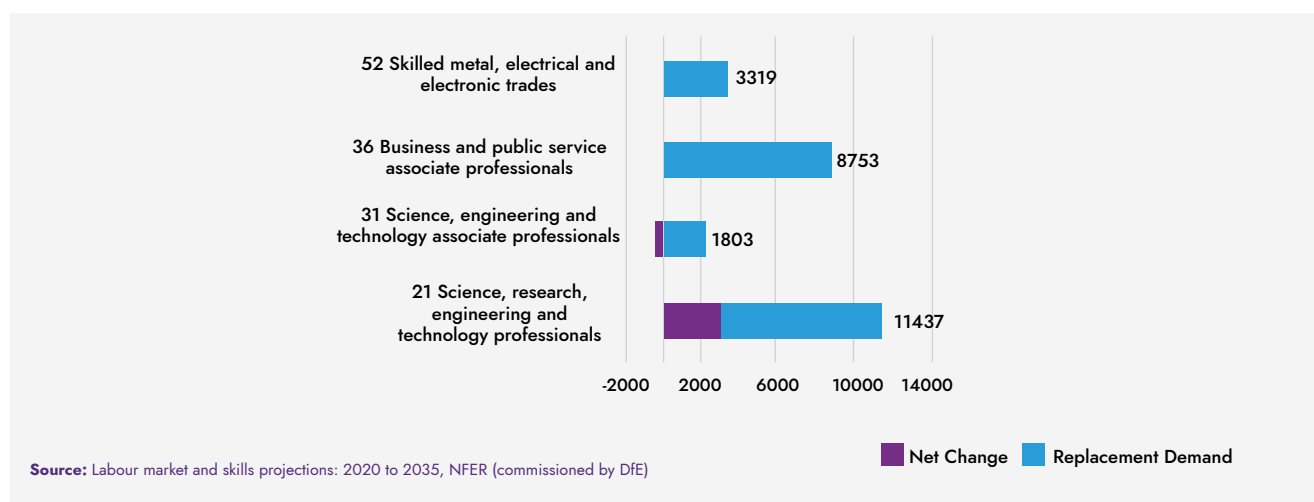
Digital Technology

Headline figures – Digital Technology

- **14,000+ people** employed in core digital occupations in Buckinghamshire.
- Sector is **locally specialised** with a **location quotient (LQ) of 1.2**, meaning a higher concentration of digital activity than the national average.
- Dominated by **small and microbusinesses**, mainly B2B firms offering cyber, cloud, development, and technical support services, with some large businesses (e.g.: Softcat).
- Roles with highest demand relative to employment include: **IT Network Professionals; Science, Engineering & Production Technicians (n.e.c.); Web Designers; Data Analysts; IT Quality & Testing Professionals**
- Common hard-to-fill areas: **Software development**, incl. automation & robotics; **Cybersecurity; Data Analysts / Architects; sales roles**
- Strong uptake for Data Analyst and Data Technician apprenticeships.
- **84 starts** in digital bootcamps—mostly Level 3 and focused on general digital literacy, not specialist roles.
- Computing courses account for only **3% of Buckinghamshire HE qualifiers**, compared with 7% nationally.
- Projected **+1,370 new jobs by 2035** in the information & communication (digital) sector.
- Most growth expected in **professional occupations** (e.g., data, AI, cyber, advanced software roles).
- Difficulty **recruiting digital teaching staff**, especially those with industry backgrounds.
- High **competition for digital talent** across many sectors, not just tech.
- Strong employer need for **workreadiness, flexibility, and critical thinking** alongside technical skills.

Occupational Requirements summary - Digital

Forecast occupational requirements, Digital occupations, Buckinghamshire, 2020-2035
(labels indicate total requirement)



- **1,370** net growth in Digital employment is forecast from 2020-2035, driven by professional occupations. However, this applies to Information and Communication sector employment and may not include digital occupations relevant to engineering or creative industries, and excludes replacement demand.
- The county will require some **11,400 additional people** employed in science, research, engineering, and technology roles (SOC 21) from 2020-2035, to meet new demand and replace leavers, or some 760 per year on average. Many of these roles will be relevant for life sciences and engineering, however.
- For medium-skilled IT technicians and Data Analyst roles (SOC 31 and 35) the county is expected to require some 10,500 additional workers between 2020-2035, or some **700 entrants per year**.
- In 2023/24, according to DfE ILR data, 120 Bucks residents started an apprenticeship relevant to a Data Analyst occupation, with 147 in 2024/25, high relative to the 115 recorded online job postings in 2024. However, this may reflect the broad use of the Data Analyst apprenticeship framework, highlighting the importance of bespoke workplace training.
- While there were **770 online job postings for 'Programmers and Software Development Professionals' in Buckinghamshire**, there were only 3 starts on relevant apprenticeships in 2023/24, and 7 starts in 2024/25 – focus on professional occupations within digital will be key.
- In 2024, there were some **2,306 job vacancies for core digital occupations**, posted online according to Lightcast. While some of these roles may be filled by residents outside the area, and by reallocation between occupations, this level of demand remains high relative to the local pipeline of some 100 apprenticeship achievements per year, and the approximate 220 HE qualifiers per year. Indeed, digital employers report recruiting from other disciplines for their research roles.
- Roles with highest demand relative to employment include: **IT Network Professionals; Science, Engineering & Production Technicians (n.e.c.); Web Designers; Data Analysts; IT Quality & Testing Professionals**
- To conclude, there is a clear need for an increased supply of learners in digital subjects, particularly in priority occupations such as software development.
- **NB:** these estimates of requirements are based on NFER forecasts produced in 2023, current labour market demand indicators, and DfE and HESA data on post-16 education and training starts and achievements. Full details are presented in Annex A of the Buckinghamshire LSIP 2.0. As a result, these estimates are indicative, not prescriptive, and should not be used as comprehensive estimates of learner numbers required, particularly given high levels of uncertainty in the national and local labour market.

Skills and labour market profile

Over 14,000 people work in core digital occupations in Buckinghamshire.¹⁵ The county is home to several large digital sector employers, such as Softcat, Arqiva, and Causeway. Digital occupations are relevant across a wide range of sectors (creative industries, engineering, financial services etc.) such that it is difficult to create a robust sectoral definition using SIC codes. Nevertheless, employment in core digital sectors decreased by some 1,000 jobs from 2019-2024 with occupational employment down some 270 jobs. This may be linked to several large employers leaving or reducing operations in the area (McAfee, ESRI etc).

Nevertheless, Buckinghamshire still has a specialised digital sector, with an employment location quotient of 1.2.¹⁶ Furthermore, digital literacy and AI skills are frequently reported as in short supply across multiple priority sectors, indicating high demand for skills. Indeed, nationally, the information and communication industry has the highest proportion of workers in high demand occupations (66.8%) compared to all other broad sectors.¹⁷

Digital and data skills are also expected to be critical for the workforce to embrace opportunities in AI across all sectors, as well as ability for staff to experiment with AI technologies to develop new products, according to qualitative stakeholder feedback. Furthermore, recent cyber attacks on major companies have increased awareness of the benefits of cyber security, both in terms of demand for professional support and upskilling current staff to be aware of cyber threats. As a result, supporting digital professionals to reskill into cyber security professions will be as important as providing courses to upskill staff in cyber security.

In terms of skills issues and gaps, employers in Buckinghamshire find it difficult to obtain applicants with software development skills, software testing skills, and programming skills in engineering contexts, such as robotics and automation. Plus, particularly among smaller businesses, there was demand for software developers to have a broad range of commercial-facing skills, such as IT user support skills, sales, and general commercial awareness. Challenges with recruiting mentors and instructors for digital skills were also raised by stakeholders. Furthermore, insights from the Cressex and Globe Business Park employer Survey 2025 suggests some digital employers struggle to recruit developers for bespoke software products, or the ability to apply their coding skills in unique or specialised contexts.

Moreover, because digital skills, and advanced digital skills, are transferrable across a variety of sectors, competition for digital talent is high. This is partly because employers across a variety of sectors look to recruit individuals with advanced digital skills who can carry out a variety of tasks, including those related to data analysis and the ability to use software tools and applications, as the adoption of digital technology has become more common. The growing opportunities within AI, and demand for workers able to prompt effectively and review outputs, has added to this demand for digital literacy across sectors. Employers are increasingly demanding a more flexible, work ready recruits, in addition to technical skills.

Similarly, education providers have mentioned difficulties in recruiting and retaining teaching staff for digital courses, particularly for those with industry experience. Further advances in digital technology are also likely to make it more difficult for education and training providers to have the facilities and resources needed to upskill existing teaching staff and ensure the quality of teaching matches employer needs.

¹⁵ Lightcast, 2022.

¹⁶ The Buckinghamshire Economy – Industry, cluster and innovation strengths – 2025, Buckinghamshire Council

¹⁷ DfE, 2025

Sector and occupation definitions

The following table sets out the SIC code definitions for the Digital Technology sector, alongside employment levels and growth for the Buckinghamshire economy.

4-digit SIC	Industry description	2019	2024	Change (2019-2024)	% change (2019-2024)
5821	Publishing of computer games	0	10	10	-
5829	Other software publishing	100	100	0	0%
6110	Wired telecommunications activities	75	40	-35	-47%
6120	Wireless telecommunications activities	75	350	275	367%
6130	Satellite telecommunications activities	10	10	0	0%
6190	Other telecommunications activities	1500	700	-800	-53%
6201	Computer programming activities	1750	2000	250	14%
6202	Computer consultancy activities	6000	5000	-1000	-17%
6203	Computer facilities management activities	30	15	-15	-50%
6209	Other information technology and computer service activities	1500	1750	250	17%
6311	Data processing, hosting and related activities	300	300	0	0%
6312	Web portals	35	20	-15	-43%

Source: Business Register and Employment Survey, 2024

The following table sets out the core occupations relevant for the Digital Technology sector, alongside employment, labour demand, and relevant technical education starts by local learners.

Occupations where 2024 job posting were particularly high relative to employment, included: **IT Network Professionals; Science, Engineering and Production Technicians n.e.c.; Web Design Professionals; Data Analysts; IT Quality and Testing Professionals**. Note that, in the table below, apprenticeship starts for Data Analyst occupations by Buckinghamshire learners is very high relative to job postings. However, feedback from the sector indicates that this may be due to the data analyst apprenticeship framework being used as a generic terms for digital roles involving data, such that the Skills England Occupational Maps may not match these apprenticeships with relevant digital occupations.

Occupations		Demand Indicators			Relevant technical education provision		
Occupation (SOC)	SOC Code	Employees in employment (2024, Bucks)	'Occupations in demand' category (SOC4 national)	Vacancies posted, 12 months, 2024 (SOC4 local)	T Level Starts (2023/24)	Apprenticeship starts (2023/24)	Apprenticeship starts (2024/25)
Information Technology Directors	1137	1005	Higher Skilled	59	-	-	-
IT Project Managers	2131	579	Higher Skilled	45	-	-	-
IT Managers	2132	1940	Higher Skilled	63	0	0	4
IT Business Analysts, Architects and Systems Designers	2133	1443	Higher Skilled	243	0	1	6
Programmers and Software Development Professionals	2134	3278	Higher Skilled	770	0	3	7
Cyber Security Professionals	2135	290	Higher Skilled	63	0	3	0
IT Quality and Testing Professionals	2136	314	Higher Skilled	77	0	2	0
IT Network Professionals	2137	211	Higher Skilled	159	0	4	1
Information Technology Professionals n.e.c.	2139	1232	Higher Skilled	1	0	3	2
Web Design Professionals	2141	116	Higher Skilled	40	0	1	2
Science, Engineering and Production Technicians n.e.c.	3119	316	Medium Skilled	140	-	2	7
IT Operations Technicians	3131	680	Medium Skilled	131	18	9	2
IT User Support Technicians	3132	1160	Medium Skilled	227	16	0	1
Database Administrators and Web Content Technicians	3133	366	Medium Skilled	85	-	0	0
Data Analysts	3544	440	Medium Skilled	115	0	120	147
Information Technology Trainers	3573	45	Medium Skilled	5	-	-	-
Computer System and Equipment Installers and Servicers	5244	773	Medium Skilled	83	0	0	0

Vacancy and employment information has been sourced from Lightcast for 2024. T Level and Apprenticeship starts have been calculated by matching 4-digit SOC occupations to relevant courses and frameworks using Skills England Occupational Maps, and using Individual Learner Record for starts for Buckinghamshire-based learners in the 2023/24 academic year. Given that individual T Levels and apprenticeship framework may be relevant to multiple occupations, and vice-versa, please interpret column totals with caution.

Employment Projections: Digital technology

In this section, we aim to provide forecast employment requirements for the sector, using National Foundation for Education Research projections for Buckinghamshire, from 2020-2035, published in 2023. Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area, in a policy-off scenario, and should not be interpreted as precise future requirements.

Projected employment in the digital sector (2020–2035)

Broad Occupation	Forecast Information and Communication (Digital) employment growth, 2020 to 2035, Buckinghamshire
Managers, directors and senior officials	199
Professional occupations	1,012
Associate professional occupations	114
Administrative and secretarial occupations	-141
Skilled trades occupations	-12
Caring, leisure and other service occupations	76
Sales and customer service occupations	92
Process, plant and machine operatives	33
Elementary occupations	-2
Total	1,370

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

- Despite recent limited growth in higher skill occupations, it is projected that employment will grow for professional occupations in the information and technology sector in Buckinghamshire. This will account for most of the growth in this sector.
- However, it should be noted that these forecasts may not take account of occupations which apply digital technology in other sectors, such as engineering, such that these projections underestimate employment at the 'skilled trades occupations' level.

Future occupational employment

Occupation (2-digit SOC)	2020-2035		
	Net Change (thousands)	Replacement Demand (thousands)	Total Require- ment (thousands)
21 Science, research, engineering and technology professionals	3.027	8.410	11.437
31 Science, engineering and technology associate professionals	-0.338	2.141	1.803
35 Business and public service associate professionals	0.022	8.731	8.753
52 Skilled metal, electrical and electronic trades	-0.073	3.392	3.319

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area and should not be interpreted as precise future requirements.

- Occupations expected to have the highest future requirement, which are aligned with the digital technology sector, include SOC 21 and SOC 31. Both are also relevant for the engineering sector.
- However, it should be noted that much of this change is forecast to be driven by replacement demand, such that overall changes in employment may not reflect overall labour demand.
- As SOC 52 covers a broad range of occupations other than Computer System and Equipment Installers and Servicers, it may not capture the growing demand for these occupations, particularly in the engineering sector.

Skills supply: Digital technology

Using Individual Learner Record Data, we have assessed the uptake of post-16 education by Buckinghamshire residents related to the Digital Technology sector subject area.

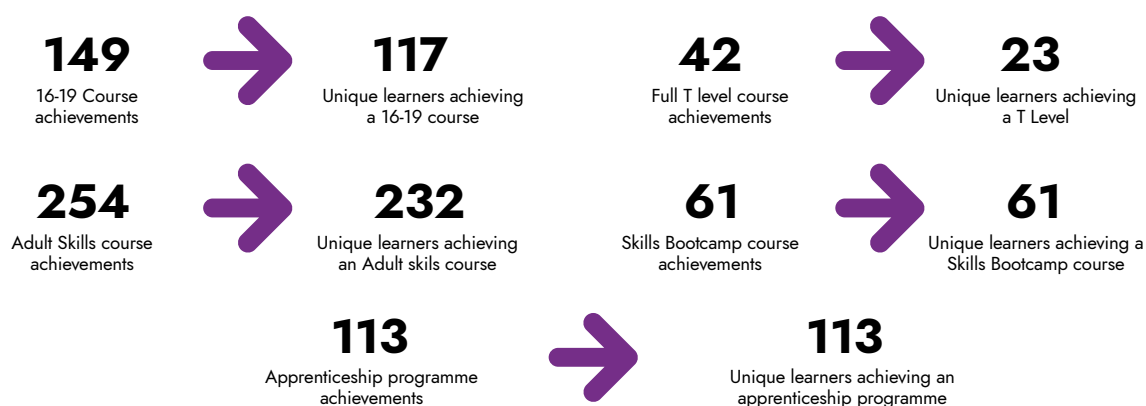
A supporting PowerBI report of current provision of learning to Buckinghamshire residents is available here - [Digital Technology sector – post-16 provision report](#)

A summary of key findings is given below.

Participation of Technical education programmes, Buckinghamshire Residents, Digital sector, 2023/24



Participation of Technical education programmes, Buckinghamshire Residents, Digital sector, 2023/24



Source: Individual Learner Record, DfE, 2023/24 academic year.

16–19 Funded Courses

- Provision is highest in general BTEC IT courses, at level 2 and 3, followed by a long T Levels and a long tail of various courses.
- Overall uptake is low for digital technology courses, with 149 learners starting these courses being low compared to the high vacancy levels for these occupations, particularly programmers and software developers. However, HE provision may be a better pathway for these roles.

T Levels

- While take-up is low, with only 27 learners starting a T Level in Digital Technologies, this was better than some other priority sectors in the LSIP.
- Take-up is good for courses aligned to IT Operations Technicians and IT User Support Technicians, but take-up and provision of a wider range of T Levels could be warranted, particularly for other Medium Skilled occupations in Digital technology.

Apprenticeships

- Very good uptake of apprenticeships for Data Analyst occupations (Data Analyst and Data Technician frameworks), but limited take-up for other frameworks. However, stakeholders have raised concerns that the Data Analyst apprenticeship framework is broad and may apply to multiple job roles within the sector.
- Again, higher level apprenticeships related to programming and software development could be introduced to address high demand.
- It should also be noted that the number of apprenticeship programme achievements is quite low relative to the number of starts. This could indicate a lag in uptake but could also signal issues with retention on apprenticeship programmes.

Skills Bootcamps

- Good take-up, relative to other sectors, but with 84 starts, uptake could be higher.
- Level 3 bootcamps are most popular, but there were several learners taking a level 5 course, which could be relevant for addressing skills shortages in higher skilled occupations, such as programmers.
- Provision is mostly general digital skills, so it is not clear how well this provision matches occupations in demand.

Higher Education

HE qualifiers in Computing, from Buckinghamshire universities, only accounted for 3% of Buckinghamshire HE qualifiers, below the 7% share of national Computing HE qualifiers.

Computing, HE Qualifiers, Buckinghamshire HE providers

Row Labels	Buckinghamshire New University	The University of Buckingham	Grand Total
2021/22	70	105	175
2022/23	130	85	215
2023/24	120	100	220
Grand Total	320	290	610

Source: HESA, 2025

Digital Technology: Skills Shortage Occupations

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
App / Software developers	2136	Programmers and software development engineers	1, 2	Future Skills Workshop (14/01/2026)
Automation and robotics programmers	2127	Production and process engineers	2	Future Skills Workshop (14/01/2026)
Business Intelligence (BI) Analyst	2135	IT Business Analysts, Architects and Systems Designers	2	Future Skills Workshop (14/01/2026)
Cyber Security Analyst	2135	Cyber Security Professionals	2	Buckinghamshire Digital Sector Employer Meeting (26/02/2026)
Data Analyst	3544	Data Analyst	2	Future Skills Workshop (14/01/2026)
Data Architect	2135	IT Business Analysts, Architects and Systems Designers	2	Future Skills Workshop (14/01/2026)
Data Engineer	2136	Programmers and Software Development Professionals	2	Future Skills Workshop (14/01/2026)
Data Scientist	2433	Actuaries, Economists and Statisticians	2	Future Skills Workshop (14/01/2026)
Identity and Access Management (IAM) Specialist	2139	Information Technology and Telecommunications Professionals n.e.c.	2	Future Skills Workshop (14/01/2026)
Information Security Manager	1136	Information Technology and Telecommunications Directors	2	Future Skills Workshop (14/01/2026)
IT service support roles	3031	IT Operations Technicians	1	Future Skills Workshop (14/01/2026)
Network Security Engineer	2136	Programmers and Software Development Professionals	2	Future Skills Workshop (14/01/2026)
Tech sales roles	3545	Sales accounts and business development managers	1	Future Skills Workshop (14/01/2026)
SOC Analyst (Security Operations Centre Analyst)	2139	Information Technology and Telecommunications Professionals n.e.c.	2	Future Skills Workshop (14/01/2026)
Software testers	2139	Programmes and software development nec.	1	Future Skills Workshop (14/01/2026)

Digital Technology: Skills Gaps

Skill gap	Occupational area
Leadership and management	Strategic managers
Leadership and management for line managers	Line managers
AI governance	Strategic managers
AI literacy	All
AI application specific to job role	All
Professional skills	All



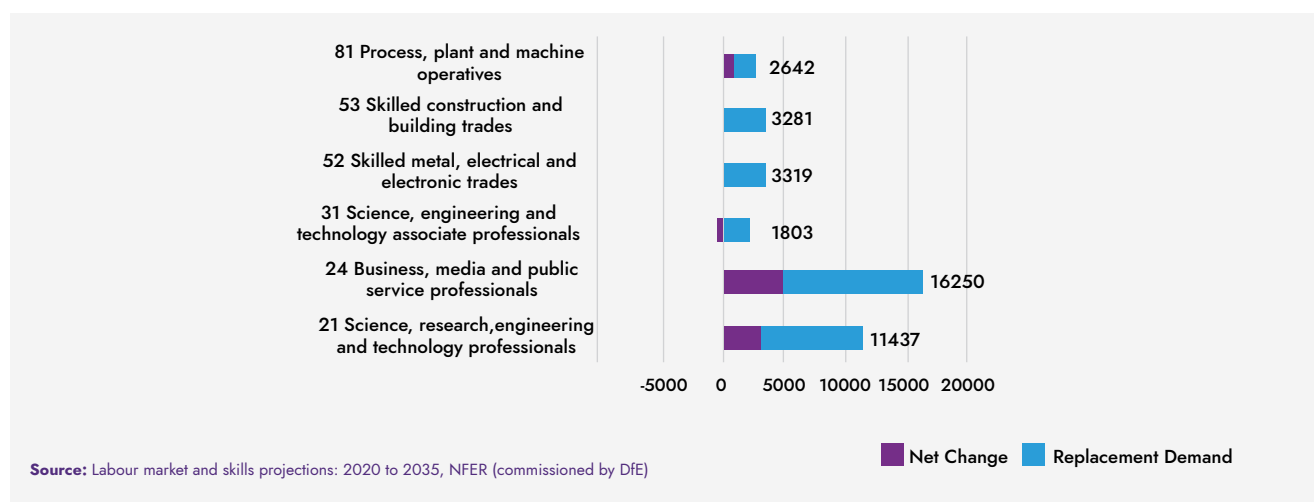
Engineering

Headline figures - Engineering

- The wider engineering workforce in Buckinghamshire varies depending on definition:
- **16,900 people** employed in core engineering occupations (2024).
 - Up to 28,800 employed in EngineeringUK core occupations, or 42,400 including related occupations (2024).
 - This represents around 17% of the entire Buckinghamshire workforce — *roughly 1 in 6 employees*.
 - The High-Performance Engineering sector specifically (covering, motorsport, space and aerospace, including drone technologies) employs **over 6,000 people**, with **16,000** in manufacturing more broadly.
- Fast-growing subsectors (2019–2024), including: **Air & spacecraft manufacturing** (+17%), **Repair and maintenance of aircraft and spacecraft** (+33%), **Technical testing & analysis** (+17%)
- Shortages are widespread across technical and professional roles, including but not limited to: **Mechanical engineers; Electrical & electronic engineers; Embedded software engineers; Civil engineers; Automation & robotics engineers, and more.**
- **AI, automation, robotics and digitalisation** increasing technical skill requirements.
- Strong competition between local engineering firms and digital employers for software and data talent.
- High levels of uncertainty in technological development make future skill needs harder to predict.
- **T Levels:** Very low take-up locally (engineering T Levels only recently introduced).
- **Apprenticeships:** Highest uptake in electrical installation, vehicle maintenance, engineering technicians
- **Higher Education:** only **40–50 HE qualifiers per year** in engineering/technology, or about 1% of Buckinghamshire HE output, compared to **6% nationally**.
- Strongest forecast demand, including replacement demand, sits overwhelmingly in **professional engineering roles**, particularly 'Science, research, engineering & technology professionals'.
- **Key High Performance Engineering clusters are expected to grow following investment:**
 - **Westcott Space Cluster:** New National InOrbit Servicing, Assembly & Manufacturing (ISAM) Facility; National Drone Centre of Excellence
 - **Silverstone Technology Cluster:** Proposed Silverstone Incubator Village; Focus on propulsion systems, advanced materials, and R&D

Occupational Requirements summary - Engineering

Forecast occupational requirements, Engineering occupations, Buckinghamshire, 2020-2035
(labels indicate total requirement)



- While the National Foundation for Educational Research forecasts for Buckinghamshire suggest a net decrease in engineering occupations, this is likely because their model does not account for engineering roles linked to construction, digital, life sciences, high-performance engineering and other sectors.
- Employers have also highlighted difficulties in predicting future labour requirements, driven by rapid technological change.
- The county will require some **11,400 additional people** employed in science, research, engineering, and technology roles (SOC 21) from 2020-2035, to meet new demand and replace leavers, or some **760 per year** on average. But many of these roles will be relevant for other sectors, such as digital.¹⁸
- For medium and lower skilled occupations, replacement demand is expected to account for the majority of new requirements. Note that there is some cross-over with construction for some of these roles.
- In 2024, there were some **4,554 job vacancies for core engineering occupations**, posted online according to Lightcast. While some of these roles may be filled by residents outside the area, and by reallocation between occupations, supporting the local talent pipeline will be critical for meeting demand.
- In 2023/24, according to DfE ILR data, 235 Bucks residents achieved a 16-19 funded course relevant to manufacturing and engineering, with 117 achieving a relevant apprenticeship. Given the high demand for engineering related skills, these achievement levels are low and may lead to reliance on labour from outside the county.
- According to HESA, Higher Education institutions in Buckinghamshire only produce some 30-50 qualifiers in engineering and manufacturing subjects per year, from 2021/22 to 2023/24. However, note that digital and construction subjects can be relevant for this sector.
- Occupations where 2024 job posting were particularly high relative to employment, included: **Mechanical Engineers; Production and Process Engineers; Quality Assurance Technicians; Engineering Technicians; Construction and Building Trades Supervisors** (demonstrating the cross-over with construction). This correlates with employer feedback.
- To conclude, despite challenges with accurately defining occupations with the sector, there is evident demand for occupations relevant for engineering, with low levels of local residents on relevant training and education programmes.
- **NB:** these estimates of requirements are based on NFER forecasts produced in 2023, current labour market demand indicators, and DfE and HESA data on post-16 education and training starts and achievements. Full details are presented in Annex A of the Buckinghamshire LSIP 2.0. As a result, these estimates are indicative, not prescriptive, and should not be used as comprehensive estimates of learner numbers required, particularly given high levels of uncertainty in the national and local labour market.

¹⁸ SOC 24 relates mainly to quality control / quality assurance roles, which only accounts for a small share of these occupations across the whole Bucks economy.

Skills and labour market profile

Engineering covers a wide range of economic activities relevant to key sectors in Buckinghamshire and is strongly aligned with the High Performance Engineering and Space priority sectors set out in the Buckinghamshire Growth Plan 2025. The sector also complements digital capabilities in the region, such as robotics and automation, drones, electronics manufacturing and more, as well as Medtech capabilities relevant for the Life Sciences priority sector. Therefore, to avoid double counting, this analysis focuses on occupations relevant to core engineering and manufacturing activities, using engineering occupations list defined by EngineeringUK¹⁹ as a starting point.

Indeed, several occupations included in Engineering UK's core and related occupational lists already fall within our definitions of the Construction, Digital Technology, and Life Sciences sectors. Applying the full EngineeringUK occupational definition, which overlaps significantly with these sectors and double-counts roles, indicates that around 28,800 people were employed in core engineering occupations in Buckinghamshire in 2024, and 42,400 in core and related occupations combined.²⁰ This represents roughly 17%, or one in six, employees in the county, down from 18% in 2019. Given this substantial overlap, we have chosen to use a more focused definition of engineering for our analysis of this sector.

To reiterate comments from the Buckinghamshire LSIP 2023: 'regardless of how engineering occupations are defined, it is clear that engineering occupations are a key component of the Buckinghamshire workforce and hence meeting demand for engineering knowledge and skills are essential.'

We estimate the high performance engineering sector, specifically, which includes space and aerospace, employs over 6,000 employees, with 16,000 employed in manufacturing more broadly²¹. Some 16,900 were employed in our core engineering sector occupations in 2024.²² Key business parks such as Silverstone and Westcott Venture Park, specialising in engineering activities, contribute significantly to employment in this sector. The sector continues to report challenges filling a broad range of roles due to skills shortages. Based on feedback from stakeholder workshops, a BBF survey of local employers, and the Cressex and Global Business Park employer survey (by Cressex Business Park BID and Buckinghamshire Council), engineering roles experiencing skills shortages include:

- Mechanical Engineers (multiple mentions)
- Senior Engineer
- Electrical and Electronics Engineers (multiple mentions)
- Embedded Software Engineers
- Digital Signal Processing Engineers
- Civil Engineers
- Automation & Robotics Engineers
- Design & Development Engineers
- Graduate Engineers
- Engineering Technicians
- Vehicle Embedded Engineer
- Test Engineer
- Toolmakers / Tool makers
- Time-served Maintenance Engineers
- CNC Turner
- Skilled Metal Worker
- Metal Working Production & Maintenance Fitters
- Welder
- Assembly Technician
- HGV Technician
- Vehicle Technicians, Mechanics & Electricians
- Vehicle Test Engineer
- Production Managers / Directors in Manufacturing
- Logistics Manager
- Senior Sales Roles
- Customer Service
- Administrators
- Director Roles

Broader feedback from the sector indicated challenges in predicting engineering roles and skillsets which will in demand, due to uncertainty around technological change, as well as challenges in recruiting engineers with commercial awareness and leadership skills (particularly at senior level) suitable for SMEs and start-ups. Software skills, necessary for digital capabilities in manufactured products (robotics, automated systems, drones, etc.) were also in short supply, due to high competition from the digital sector, suggesting opportunities in engineering should be promoted to learners studying for digital occupations. Finally, work-readiness skills continued to be reported as lacking from new entrants. In addition to skills relevant to other sectors, such as communications and continuous professional development, engineering employers were particularly interested in sector specific commercial awareness and practical hands-on skills to complement technical knowledge.

¹⁹ Engineering Footprint: Update March 2024, Defining engineering using the 2020 Standard Occupational Classification (SOC) System

²⁰ Lightcast, 2025

²¹ Business Register and Employment Survey, ONS, 2024

²² Lightcast, 2024. Refer to our occupational definition in the following section.

Within the High Performance Engineering sector, a subset of broader engineering related businesses, employment growth (2019-2024) has been highest in the following subsectors: Manufacture of air and spacecraft and related machinery; Repair and maintenance of aircraft and spacecraft; and technical testing and analysis. Core occupations experiencing a high level-change in employment in the past 5 years include: Metal Working Production and Maintenance Fitters; Engineering Professionals n.e.c. (wide range of occupations in civil engineering, R&D, and science); Aircraft Maintenance and Related Trades; Assemblers and Routine Operatives n.e.c.

Furthermore, while employment decreased by some 3,000 jobs in Manufacturing more broadly, from 2019-2024, replacement demand for workers leaving the sectors is expected to be significant for this sector, leading to a high net requirement of workers. For example, according to the National Foundation for Education Research 'Labour market and skills projections: 2020 to 2035,' a projected 3,400 workers in 'skilled metal, electrical, and electronics trades' will be required to replace existing workers in Buckinghamshire. Similarly, we expect significant growth in professional engineering occupations, linked to the county's strengths in high performance engineering and the space economy, with a projected 11,400 total requirement of workers for 'Science, research, engineering and technology professionals.'

Sector and occupation definitions

The following table sets out the SIC code definitions for the engineering sector, alongside employment levels and growth for the Buckinghamshire economy.

4-digit SIC	Industry description	2019	2024	Change (2019-2024)	% change (2019-2024)
2540	Manufacture of weapons and ammunition	0	0	0	-
2611	Manufacture of electronic components	25	10	-15	-60%
2612	Manufacture of loaded electronic boards	125	100	-25	-20%
2620	Manufacture of computers and peripheral equipment	75	75	0	0%
2630	Manufacture of communication equipment	500	400	-100	-20%
2670	Manufacture of optical instruments and photographic equipment	50	30	-20	-40%
2711	Manufacture of electric motors, generators and transformers	50	50	0	0%
2720	Manufacture of batteries and accumulators	0	0	0	-
2815	Manufacture of bearings, gears, gearing and driving elements	10	5	-5	-50%
2841	Manufacture of metal forming machinery	75	75	0	0%
2849	Manufacture of other machine tools	50	30	-20	-40%
2899	Manufacture of other special-purpose machinery n.e.c.	150	150	0	0%
2910	Manufacture of motor vehicles	75	75	0	0%
2931	Manufacture of electrical and electronic equipment for motor vehicles	50	15	-35	-70%
2932	Manufacture of other parts and accessories for motor vehicles	300	175	-125	-42%
3012	Building of pleasure and sporting boats	20	10	-10	-50%
3030	Manufacture of air and spacecraft and related machinery	1500	1750	250	17%
3099	Manufacture of other transport equipment n.e.c.	0	10	10	-
3316	Repair and maintenance of aircraft and spacecraft	150	200	50	33%
7112	Engineering activities and related technical consultancy	3000	2500	-500	-17%
7120	Technical testing and analysis	600	700	100	17%

Source: Business Register and Employment Survey, 2024

The following table sets out the core occupations relevant for the engineering sector, alongside employment, labour demand, and relevant technical education starts by local learners. Note that there is some crossover in occupations with other priority sectors. Occupations where 2024 job posting were particularly high relative to employment, included: Mechanical Engineers; Production and Process Engineers; Quality Assurance Technicians; Engineering Technicians; Construction and Building Trades Supervisors. Demand for Pipe Fitters was also high, although current employment in this sector is low, and demand is mainly related to the HS2 rail project.

Occupations		Demand Indicators			Relevant Technical Education Provision		
Occupation (SOC)	SOC Code	Employees in employment (2024, Bucks)	'Occupations in demand' category (SOC4 national)	Vacancies posted, 12 months, 2024 SOC4 local)	T Level Starts (2023/24)	Apprenticeship starts (2023/24)	Apprenticeship starts (2024/25)
Production Managers and Directors in Manufacturing	1121	2497	Higher Skilled	127	0	0	0
Production Managers and Directors in Mining and Energy	1123	58	Higher Skilled	3	0	0	0
Civil Engineers	2121	481	Higher Skilled	207	0	1	4
Mechanical Engineers	2122	428	Higher Skilled	410	7	0	0
Electrical Engineers	2123	328	Higher Skilled	115	5	0	0
Electronics Engineers	2124	223	Higher Skilled	108	0	0	4
Production and Process Engineers	2125	346	Higher Skilled	282	5	3	6
Aerospace Engineers	2126	313	Higher Skilled	33	0	1	2
Engineering Project Managers and Project Engineers	2127	232	Higher Skilled	33	0	0	2
Engineering Professionals n.e.c.	2129	984	Higher Skilled	98	0	2	5
Quality Control and Planning Engineers	2481	207	Higher Skilled	76	0	0	0
Electrical and Electronics Technicians	3112	258	Medium Skilled	79	0	0	0
Engineering Technicians	3113	570	Medium Skilled	385	12	6	5
Quality Assurance Technicians	3115	196	Medium Skilled	159	0	0	0
Planning, Process and Production Technicians	3116	202	Medium Skilled	29	0	5	3
Science, Engineering and Production Technicians n.e.c.	3119	316	Medium Skilled	140	1	2	7
CAD, Drawing and Architectural Technicians	3120	294	Medium Skilled	94	0	2	0
Inspectors of Standards and Regulations	3581	243	Medium Skilled	53	1	1	3
Sheet Metal Workers	5211	244	Medium Skilled	24	2	1	2
Welding Trades	5213	231	Medium Skilled	83	0	0	0
Pipe Fitters	5214	17	Medium Skilled	31	0	0	0
Metal Machining Setters and Setter-operators	5221	260	Medium Skilled	49	0	3	6
Tool Makers, Tool Fitters and Markers-out	5222	75	Medium Skilled	20	0	0	0

Occupations		Demand Indicators			Relevant Technical Education Provision		
Metal Working Production and Maintenance Fitters	5223	1327	Medium Skilled	2	7	11	4
Precision Instrument Makers and Repairers	5224	125	Medium Skilled	40	0	1	0
Vehicle Technicians, Mechanics and Electricians	5231	1478	Medium Skilled	417	0	73	62
Vehicle Body Builders and Repairers	5232	140	Medium Skilled	22	0	5	0
Vehicle Paint Technicians	5233	79	Medium Skilled	46	0	1	0
Aircraft Maintenance and Related Trades	5234	320	Medium Skilled	5	0	0	6
Boat and Ship Builders and Repairers	5235	67	Medium Skilled	-	0	0	0
Rail and Rolling Stock Builders and Repairers	5236	38	Medium Skilled	-	0	0	0
Telecoms and Related Network Installers and Repairers	5242	458	Medium Skilled	257	0	0	0
Security System Installers and Repairers	5245	99	Medium Skilled	24	0	5	8
Electrical Service and Maintenance Mechanics and Repairers	5246	274	Medium Skilled	22	5	0	0
Electrical and Electronic Trades n.e.c.	5249	240	Medium Skilled	-	5	0	0
Skilled Metal, Electrical and Electronic Trades Supervisors	5250	257	Medium Skilled	149	0	-	-
Construction and Building Trades Supervisors	5330	322	Medium Skilled	183	0	2	8
Chemical and Related Process Operatives	8113	212	Medium Skilled	8	0	-	-
Plastics Process Operatives	8114	134	Ineligible	3	0	0	0
Metal Making and Treating Process Operatives	8115	119	Medium Skilled— extending in same occupation only	1	0	0	0
Metal Working Machine Operatives	8120	416	Ineligible	1	0	-	-
Paper and Wood Machine Operatives	8131	132	Ineligible	-	0	0	0
Mining and Quarry Workers and Related Operatives	8132	28	Ineligible	11	0	-	-
Energy Plant Operatives	8133	74	Medium Skilled	49	0	0	1
Water and Sewerage Plant Operatives	8134	55	Medium Skilled	11	0	0	0
Plant and Machine Operatives n.e.c.	8139	181	Ineligible	346	0	0	0
Assemblers (Electrical and Electronic Products)	8141	250	Ineligible	41	0	-	-
Assemblers (Vehicles and Metal Goods)	8142	183	Ineligible	26	0	-	-
Routine Inspectors and Testers	8143	604	Medium Skilled	48	0	0	0
Assemblers and Routine Operatives n.e.c.	8149	365	Ineligible	206	0	0	0

Vacancy and employment information has been sourced from Lightcast for 2024. T Level and Apprenticeship starts have been calculated by matching 4-digit SOC occupations to relevant courses and frameworks using Skills England Occupational Maps, and using Individual Learner Record for starts for Buckinghamshire-based learners in the 2023/24 academic year. Given that individual T Levels and apprenticeship framework may be relevant to multiple occupations, and vice-versa, please interpret column totals with caution.

Employment Projections: Engineering

In this section, we aim to provide forecast employment requirements for the sector, using National Foundation for Education Research projections for Buckinghamshire, from 2020-2035, published in 2023. Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area, in a policy-off scenario, and should not be interpreted as precise future requirements.

Projected employment in the Engineering sector (2020-2035)

Broad Occupation	Forecast Engineering employment growth, 2020 to 2035
Managers, directors and senior officials	-210
Professional occupations	-285
Associate professional occupations	-247
Administrative and secretarial occupations	-138
Skilled trades occupations	-181
Caring, leisure and other service occupations	-15
Sales and customer service occupations	-25
Process, plant and machine operatives	-55
Elementary occupations	-49

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area and should not be interpreted as precise future requirements.

- Employment growth in engineering is forecast to decrease across all skill levels, likely assuming that much of the engineering employment will be reallocated overseas, taking advantage of cheaper labour, mirroring national trends.
- However, the sector definition puts limited weight on the design, research and development professional occupations which primarily characterise Buckinghamshire's economic specialisms. It also ignores replacement demand, increasing requirement for new recruits despite downward trends in total employment at lower skill levels. This is demonstrated in the occupational forecast below.

Projected employment in the engineering sector by occupation (2020-2035)

Occupation (2-digit SOC)	2020-2035		
	Net Change	Replacement Demand	Total Requirement
21 Science, research, engineering and technology professionals	3,027	8,410	11,437
24 Business, media and public service professionals	4,917	11,333	16,250
31 Science, engineering and technology associate professionals	-338	2,141	1,803
52 Skilled metal, electrical and electronic trades	-73	3,392	3,319
53 Skilled construction and building trades	-48	3,329	3,281
81 Process, plant and machine operatives	815	1,827	2,642

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

- This table shows the occupation forecasts, in levels, two digit SOC codes associated with core engineering occupations. It also includes a breakdown by net change (reflecting growth due to new businesses) and replacement demand (workers retiring or becoming otherwise economically inactive).
- As set out previously, forecast net change, or growth due to increased demand, is highest in the science, research and engineering occupation, while demand is lower for lower skilled occupations in engineering, with the exception of process, plant and machine operatives.
- ‘Business, media and public service professionals’ includes quality control professionals, identified as an area of skills shortages by the engineering sector group, and an area with forecast growth in employment.
- The majority of future requirement is expected to be replacement demand, reflecting the challenge of an aging workforce. This is particularly an issue in associate professional and skilled trades occupations.

Expected developments locally

The following developments are likely to have an impact on the demand for labour in the engineering sector:

- The Buckinghamshire Investment Pipeline, published in September 2025, includes a variety of projects aimed at increasing the productive capacity of the region’s engineering sector, including space and high performance technology. Increased productive capacity will likely result in increased demand for skilled labour. Examples include:
 - **Westcott Space Cluster** – A national hub for advanced space technologies, with plans for a National In-Orbit Servicing, Assembly and Manufacturing (ISAM) Facility and a National Drone Centre of Excellence.
 - **Silverstone Technology Cluster** – A global centre for high-performance engineering, including a proposed Silverstone Incubator Village to drive R&D in new propulsion and advanced materials.
- Advanced manufacturing and space, both heavily reliant on engineering skills, are both priority sectors in the National Industrial Strategy, published in July 2025. As a result, we can expect continued support for this sector to grow, increasing labour demand, particularly in high skilled areas required to drive innovation in these advanced technologies.

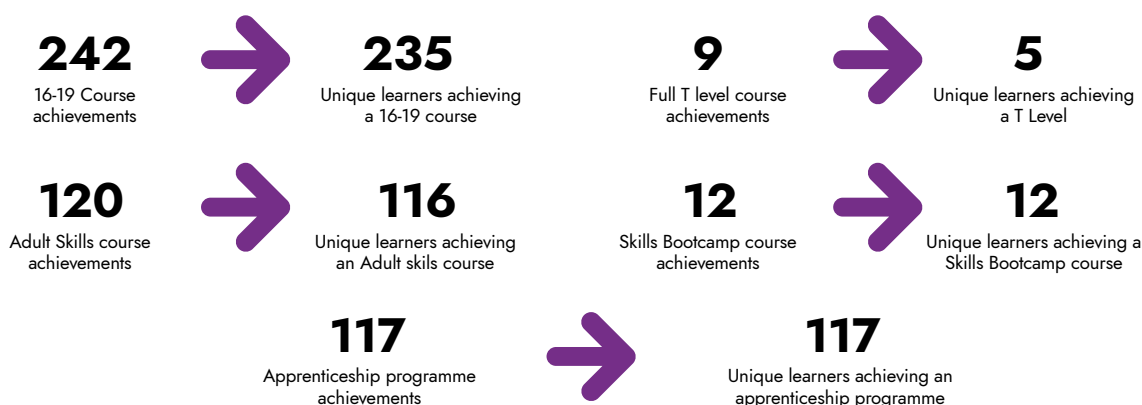
Skills supply: Engineering

Using Individual Learner Record Data, we have assessed the uptake of post-16 education by Buckinghamshire residents related to the Manufacturing and Engineering sector subject area. Using Individual Learner Record Data, we have prepared a PowerBI report of current provision of learning to Buckinghamshire residents. A summary of key findings is given below, with an interactive dashboard available here: [Engineering and Manufacturing sector – post-16 provision report](#). A summary of key findings is given below.

Participation of Technical education programmes, Buckinghamshire
Residents, Manufacturing and Engineering sector, 2023/24



Achievement of Technical education programmes, Buckinghamshire Residents, Manufacturing and Engineering, 2023/24



Source: Individual Learner Record, DfE, 2023/24 academic year.

16-19 Funded Courses

- Provision is highest in general BTEC engineering courses, and in vehicle maintenance and technician courses.
- While this is a positive foundation, more specialised provision for engineering occupations in demand would complement this provision.

T Levels

- Very low take-up in 2023/24, mainly in courses related to design and development. However, mechanical engineering is the most popular T Level, consistent with market demand.
- Employer feedback suggests this is linked to challenges provided suitable work experience for T Level learners, as well as apprenticeships being a preferable route.

Apprenticeships

- It should be noted that there is some cross-over between engineering and construction. The 'Installation and Maintenance Electrician' apprenticeship framework has the highest number of starts in this sector subject area.
- Similarly, 'train driver' is included due to the categories used overlapping with transport operators. As a result, apprenticeship start numbers for this sector may be biased upwards.
- As with other provision types, starts are skewed towards electrical engineering, vehicle maintenance, and engineering technicians. While this is consistent with patterns of demand, indicated by Lightcast the high job postings levels associated with these occupations, the diversity of skills shortage occupations reported by stakeholders would suggest a need to broaden the apprenticeship framework uptake.

Skills Bootcamps

- Limited take up, with less than 20 starts and achievements. Provision is mostly level 3 general engineering courses, a similar pattern to popular 16-19 courses.

Higher Education

- There are usually only 40 to 50 HE qualifiers in Engineering and Technology qualifications, from Buckinghamshire universities, per year, and only from Buckinghamshire New University. This is low, accounting for about 1% HE qualifiers in 2023/24 in Buckinghamshire, compared to a 6% share nationally.²³ Therefore, given the clear demand for engineering skills locally, and the high competition for skills with other regions, there could be scope to implement further provision

²³ Buckinghamshire: Labour Market and Skills Analysis, 2025

Engineering and Technology, HE Qualifiers, Buckinghamshire HE providers

Row Labels	Buckinghamshire New University	The University of Buckingham	Grand Total
2021/22	35	0	35
2022/23	50	0	50
2023/24	40	0	40
Grand Total	125	0	125

Source: HESA, 2025

Engineering: Skills Shortage Occupations

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
AI and machine learning engineers	2136	Programmers and software development professionals	2	Future Skills Engineering Workshop (20/01/2026)
Air conditioning and refrigeration engineers	5241	Electricians and electrical fitters	1	Future Skills Engineering Workshop (20/01/2026)
Automation and robotics engineers	2127	Production and process engineers	2	Future Skills Engineering Workshop (20/01/2026)
Civil engineers	2121	Civil engineers	2	Future Skills Engineering Workshop (20/01/2026)
Controls / PLE engineers	2127	Production and process engineers	2	Future Skills Engineering Workshop (20/01/2026)
Cybersecurity engineers	2139	Information technology professionals n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
Data engineers / data scientists	2135	IT business analysts, architects and systems designers	2	Future Skills Engineering Workshop (20/01/2026)
Design and development engineers	2126	Design and development engineers	2	Future Skills Engineering Workshop (20/01/2026)
Design thinking / human-centred engineers	2126	Design and development engineers	2	Future Skills Engineering Workshop (20/01/2026)
Digital twin and simulation experts	2129	Engineering professionals n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
DSP engineers	2123	Electrical engineers	2	Future Skills Engineering Workshop (20/01/2026)
Electrical and electronics technicians	3112	Electrical and electronics technicians	2	Future Skills Engineering Workshop (20/01/2026)
Electrical engineers	2123	Electrical engineers	2	Future Skills Engineering Workshop (20/01/2026)
Electronic engineers	2123	Electrical engineers	2	Future Skills Engineering Workshop (20/01/2026)
Embedded software engineers	2136	Programmers and software development professionals	2	Future Skills Engineering Workshop (20/01/2026)

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
Engineering technicians	3119	Science, engineering and production technicians n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
Foam engineers	2129	Engineering professionals n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
GNSS / Navigation Systems Specialists	2129	Engineering professionals n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
Hydrogen systems engineers	2122	Mechanical engineers	2	Future Skills Engineering Workshop (20/01/2026)
Mechanical engineers	2122	Mechanical engineers	2	Future Skills Engineering Workshop (20/01/2026)
Metal working production and maintenance fitters	5223	Metal working production and maintenance fitters	2	Future Skills Engineering Workshop (20/01/2026)
Mission and systems analysts	2135	IT business analysts, architects and systems designers	2	Future Skills Engineering Workshop (20/01/2026)
Production and process engineers	2127	Production and process engineers	2	Future Skills Engineering Workshop (20/01/2026)
Production managers and directors in manufacturing	1121	Production managers and directors in manufacturing	2	Future Skills Engineering Workshop (20/01/2026)
Propulsion and avionics engineers	2129	Engineering professionals n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
Renewable energy engineers	2123	Electrical engineers	2	Future Skills Engineering Workshop (20/01/2026)
Resilience engineers	2129	Engineering professionals n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
Satellite systems engineers	2129	Engineering professionals n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
Sustainable materials engineers	2113	Physical scientists	2	Future Skills Engineering Workshop (20/01/2026)
Systems engineers	2129	Engineering professionals n.e.c.	2	Future Skills Engineering Workshop (20/01/2026)
Systems engineers for smart manufacturing	2127	Production and process engineers	2	Future Skills Engineering Workshop (20/01/2026)
Vehicle technicians, mechanics and electricians	5231	Vehicle technicians, mechanics and electricians	1	Future Skills Engineering Workshop (20/01/2026)
Welding trades	5213	Welding trades	1	Future Skills Engineering Workshop (20/01/2026)

Engineering: Skills Gaps

Skill gap	Occupational area
Leadership and management	Strategic managers
Leadership and management for line managers	Line managers
AI governance	Strategic managers
AI literacy	All
AI application specific to job role	All
Professional skills	All

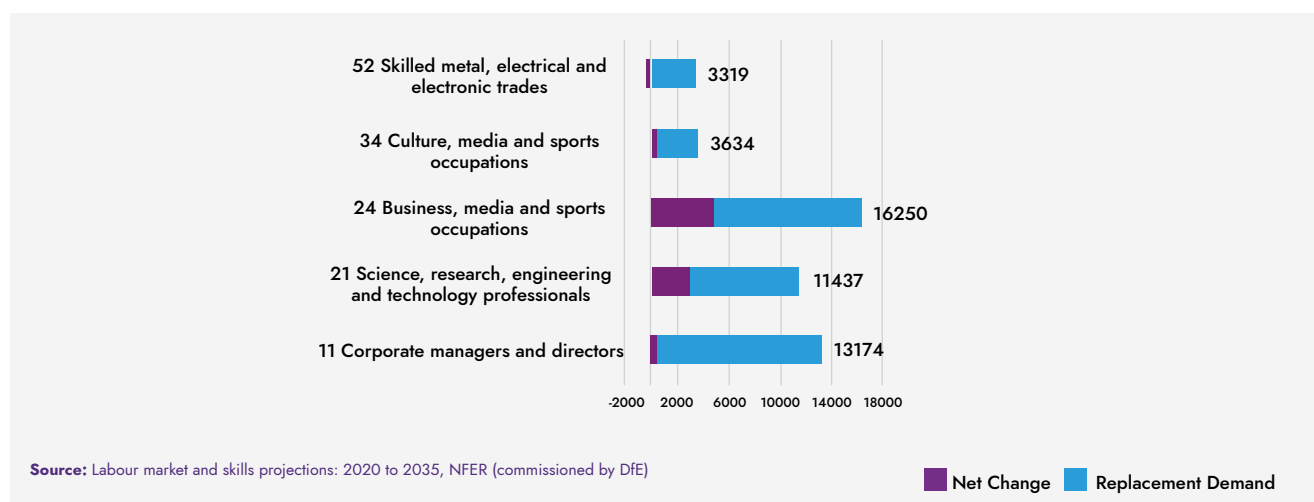


Film & TV

Headline statistics – Film & TV

- Employs around **3,500 people** in Buckinghamshire, approximately **1.4% of the local workforce**.
- Freelancers make up a large proportion of the workforce — **potentially around 30%**.
- Highly specialised locally, with an **employment location quotient (LQ) of 2.8**, meaning the sector is 2.8x more concentrated in Bucks than the national average.
- Part of a wider Creative Industries cluster where local employment is **nearly double the national rate**.
- Employment grew by **36% between 2019 and 2024**, despite sector disruption (including the 2023 US writers' strike).
- **Significant studio expansion projects in the region, such as Pinewood Studios expansion** and Marlow Film Studios (now "Marlow Studios" and expected to support 4,000 jobs.)
- Growing demand expected over the next **18 months** as production activity increases following recent downturn.
- Current shortages identified in: VFX, set building, **electricians, sound designers, production directors**, and a broad range of **2D/3D design, postproduction**, and **virtual production** roles.
- Some freelancers currently lack **commercial awareness, transferability of skills**, and **self-employment readiness**.
- Occupations strongly linked to Film & TV show significant long-term labour requirements, from 2020-2035:
 - **Science, research, engineering & technology professionals**: +3,027 net change, 8,410 replacement demand → 11,437 total requirement
 - **Business, media & public service professionals**: +4,917 net change, 11,333 replacement demand → 16,250 total requirement
 - **Culture, media & sports occupations**: +421 net change, 3,213 replacement demand → 3,634 total requirement

Occupational Requirements summary - Film & TV

Forecast occupational requirements, Film & TV occupations, Buckinghamshire, 2020-2035
(labels indicate total requirement)

- Due to the high levels of freelance work in the Film & TV sector (potentially as high as 30% of the creative workforce nationally, according to Creative UK), the diverse range of roles required by the sector, and the highly volatile nature of labour demand for specific projects, forecasting future requirements is very challenging for this sector.
- Staffing patterns analysis indicates that SOC 3416 and 3417 (Arts Officers, Producers, Directors, and Photographers, Audio-visual and Broadcasting Equipment Operators) have both experienced notable employment growth in the past 5 years, and account for about a quarter of employment in the sector.
- Total requirements for culture, media, and sport occupations is expected to be some 3,600 additional jobs, including both growth demand and replacement demand, or some **240 jobs per year**.
- However, as per other priority sectors, demand is expected to be high for professional occupations, as well as leaders and managers in the sector.
- In 2024, there were some **386 job vacancies for core film and TV occupations**, posted online according to Lightcast. However, based on employer feedback, this likely highly underestimates demand due to private requirement of freelancers and specialised job boards for freelancers.
- In 2023/24, according to DfE ILR data, some 979 Bucks residents achieved a 16-19 funded course relevant to arts, media, and publishing, with 11 achieving a relevant apprenticeship. This reflects challenges with apprenticeships as a pathway for the sector, and it should be noted that individual 16-19 courses may not be appropriate for all Film & TV roles.
- For HE, some 150-235 learners qualified in a 'Design, and creative and performing arts' degree from Buckinghamshire institutions per year, between 2021/22 and 2023/24.
- To conclude, while it is very challenging to estimate exact learner requirements for this sector, we have evidence of high demand for specialised roles for the sector, and a limited supply of learners in specialised subject areas, highlighting the importance of promoting opportunities in the sector.
- **NB:** these estimates of requirements are based on NFER forecasts produced in 2023, current labour market demand indicators, and DfE and HESA data on post-16 education and training starts and achievements. Full details are presented in Annex A of the Buckinghamshire LSIP 2.0. As a result, these estimates are indicative, not prescriptive, and should not be used as comprehensive estimates of learner numbers required, particularly given high levels of uncertainty in the national and local labour market.

Skills and labour market profile

The Film & TV sector employs an estimated 3,500 people in Buckinghamshire. While this is a low share of the workforce in Buckinghamshire, about 1.4% of the workforce, the sector is highly specialised locally, with an employment location quotient of 2.8 (the proportion of employment in the Buckinghamshire Film & TV sector is some 2.8 times that of the national rate), with the share of employment in the broader Creative Industries sector nearly double the national rate. The sector has also experienced significant employment growth of 36% (2019-2024) despite the impacts of industrial action on the visual effects subsector, where efforts to reduce costs and increase efficiency in the VFX have had adverse impacts on working conditions, causing recruitment and retention challenges.²⁴

These figures are likely to underestimate employment in the sector, as it does not include those that are self-employed. Freelance workers continue to account for a large proportion of the workforce, potentially accounting for almost 30% of the Creative industries workforce²⁵, with workers normally moving from production to production. Some large productions may require up to 1,000 to 1,500 people.

The Buckinghamshire Investment Pipeline, published in September 2025²⁶, mentions projects aimed at increasing the productive capacity of the county's Film & TV sector, notably the Pinewood Studios and Creative Cluster as an investment priority, owing to its capabilities in gaming, virtual reality and on-screen entertainment. The £1bn expansion of the studios was confirmed in December 2025 and will include 21 new stages and a 55,030 sq. m data centre.²⁷ Marlow Film Studios was granted planning permission in 2025. The project will include 18 sound stages over 472,000 sq. ft, 410,000 sq. ft of workshops, and 280,000 sq. ft of production offices over a 36 hectare plot. It aims to support 4,000 jobs in the area.²⁸

Despite the sector's relatively small workforce size, significant growth is likely to continue in the short and medium term through major developments within Buckinghamshire and neighbouring counties. The Buckinghamshire Investment Pipeline²⁹, published in September 2025, includes a variety of projects aimed at increasing the productive capacity of the region's film & TV sector. It specifically cited the Pinewood Studios & Creative Cluster as an investment priority, due to its capabilities in gaming, virtual reality and on-screen entertainment. Indeed, the £1bn expansion of the studios was confirmed on 11th December 2025. In addition to creating approximately 21 new stages, the development will include a 55,030 sq. m data centre, and will feature a 60-acre nature reserve, a six-acre community garden and learning space.³⁰ Marlow Film Studios has been granted planning permission following a government review, recognising the project's alignment with the UK Industrial Strategy. The project will include 18 sound stages over 472,000 sq. ft, 410,000 sq. ft of workshops, and 280,000 sq. ft of production offices over a 36 hectare plot, with the hope to support 4,000 jobs in the area.

While many of these projects are pending planning approval, as well as finance, additional growth is expected for this sector, stimulated by the recognition of the importance of the sector to economic growth in both the Buckinghamshire Growth Plan and the National Industrial Strategy (as part of the Creative Industries priority sector).

The Film & TV sector is already experiencing recruitment issues stemming from booming demand from streaming giants and high-end productions, which has greatly exposed the county's limited provision of training. However, due to challenges with categorising job roles through SOC codes, and short term employment making it difficult to reliably track demand, consultation with employers has revealed specific skills shortages and gaps limiting their ability to grow.

Since the publication of the 2023 Buckinghamshire LSIP, Skills Bootcamps for Film & TV, have seen strong demand and high conversion into employment. Courses such as "Skills Bootcamp in Production" and "Management for Production Managers" have delivered high completion and job outcome rates, supporting workforce growth in the creative industries.

According to our 'Future Skills: Film & TV' employer meeting, held in January 2026. In terms of high-end productions, which can employ some 1,000 - 1,500 people per show, employment needs are diverse, ranging from construction to animal management, with demand remaining for traditional roles (carpentry and crafts) and new skills (CNC manufacturing, 3D printing etc.). However, skills shortages were predominantly linked to work-readiness and attitude, particularly getting leavers from education ready for self-employment. Barriers to using apprenticeships to resolve skills shortage vacancies continues to be an issue of this sector. Research by Screen Skills³¹, the industry-led strategic skills body for the UK screen industries, suggests that

²⁴ BECTU, 2025

²⁵ Forging Freelance Futures Report, Creative UK, 2025

²⁶ Council launches ambitious Growth Plan to drive economic prosperity, September 2025, Buckinghamshire County Council

²⁷ Pinewood: James Bond studio given £1bn licence to build, CityAM, December 2025

²⁸ Film studio on green belt land approved on appeal, BBC News, November 2025

²⁹ Buckinghamshire's strategic vision for 2050, Buckinghamshire Council, 2025

³⁰ Pinewood Studios Approves £1bn Green Expansion Plan, The Financial Analyst, 2025

low uptake is linked to the apprenticeship training framework being too rigid to accommodate learners and employers. However, a study into flexible apprenticeships by Screen Skills, published in 2024³², found that the Flexi-Job Apprenticeship Agency model for apprenticeships in the skills sector was an effective training solution for the sector, although this approach was also considered expensive and time-consuming for employers arranging flexible placements. Intervention from government to reduce these administrative and assessment burdens on businesses could unlock further apprenticeship opportunities for this sector, supporting efforts to resolve occupational skills shortages.

Diversity and inclusivity in the sector continue to be challenges for the sector, particularly barriers to people from lower socio economic backgrounds from entering the sector, as evidenced by the British Film Institute.³³ Barriers can be significant and range from practical needs such as having access to a car to travel to set and afford equipment, to the risks of self-employment and inconsistent work and income. The risks and costs associated with starting out as a freelancer alone can exclude many socioeconomic groups from taking up entry-level positions in the industry or even gaining access to education and training opportunities.

Sector and occupation definitions

The following table sets out the SIC code definitions for the Film & TV sector, alongside employment levels and growth for the Buckinghamshire economy. However, note that employment in this sector is often project specific and highly seasonal, as well as highly reliant on freelance labour, such that these figures for employment may not accurately reflect the size of the workforce.

4-digit SIC	Industry description	2019	2024	Change (2019-2024)	% change (2019-2024)
5911	Motion picture, video and television programme production activities	1750	2500	750	43%
5912	Motion picture, video and television programme post-production activities	225	175	-50	-22%
5913	Motion picture, video and television programme distribution activities	75	30	-45	-60%
5914	Motion picture projection activities	125	200	75	60%
6020	Television programming and broadcasting activities	400	600	200	50%

Source: Business Register and Employment Survey, 2024

The following table sets out the core occupations relevant for the Film & TV sector, alongside employment, labour demand, and relevant technical education starts by local learners. However, it should be noted that SOC classifications are not well suited to describing this sector, due to the broad range of specialised roles in the sector and crossover with other sectors, such as digital, construction, manufacturing and more. Plus, given that employment is often project specific and highly seasonal, figures for employment may not accurately reflect the size of the workforce. As a result, while demand for authors and writers is high, not all postings will be relevant for the sector.

³¹ <https://www.screenskills.com/news/apprenticeships-not-a-good-fit-for-the-screen-industries/>

³² <https://www.screenskills.com/media/3h1b1ieb/apprenticeship-pilot-final-report-040924.pdf>

³³ <https://core-cms.bfi.org.uk/media/22344/download>

Occupations		Demand Indicators			Relevant Technical Education Provision		
Occupation (SOC)	SOC Code	Employees in employment (2024, Bucks)	'Occupations in demand' category (SOC4 national)	Vacancies posted, 12 months, 2024 (SOC4 local)	T Level Starts	Apprenticeship starts (2023/24)	Apprenticeship starts (2024/25)
Graphic and Multimedia Designers	2142	580	Higher Skilled	59	0	0	2
Advertising Accounts Managers and Creative Directors	2494	323	Higher Skilled	3	0	0	1
Artists	3411	111	Higher Skilled	15	0	0	0
Authors, Writers and Translators	3412	312	Higher Skilled	222	0	2	2
Actors, Entertainers and Presenters	3413	140	Higher Skilled	20	0	-	-
Dancers and Choreographers	3414	21	Higher Skilled	-	0	-	-
Musicians	3415	96	Higher Skilled	12	0	-	-
Arts Officers, Producers and Directors	3416	842	Higher Skilled	29	0	4	1
Photographers, Audio-visual and Broadcasting Equipment Operators	3417	431	Medium Skilled	26	0	2	1

Vacancy and employment information has been sourced from Lightcast for 2024. T Level and Apprenticeship starts have been calculated by matching 4-digit SOC occupations to relevant courses and frameworks using [Skills England Occupational Maps](#), and using Individual Learner Record for starts for Buckinghamshire-based learners in the 2023/24 academic year. Given that individual T Levels and apprenticeship framework may be relevant to multiple occupations, and vice-versa, please interpret column totals with caution.

The Film & TV sector has historically had low levels of apprenticeship uptake, due to challenges of arranging work placements on productions.³⁴ Consequently, although technical education offerings for these roles remain limited, alternative pathways may contribute more significantly to fulfilling skills demand.

Staffing Patterns: Film & TV

Due to the unique challenges of assigning SOC codes to core occupations within the Film & TV sector, due to both the breadth and depth of roles, we have included below a staffing patterns analysis for this sector. This provides employment estimates at 4-digit SOC level for workers within the Film & TV sector, defined using the SIC codes set out previously.

While we have identified that SOC codes 3416, 3417, and 2142 have a high share of employment in the sector, it should be recognised that financial managers, project managers, and electrical and construction occupations also feature significantly in the staffing profile of the sector. However, note that SOC 3416 and 3417 (the main occupations within film & TV) have both experienced notable employment growth in the past 5 years.

³⁴ Apprenticeships "not a good fit" for the screen industries, Screen Skills, 2023

Staffing Patterns

SOC	Description	Employed in Industry Group (2019)	Employed in Industry Group (2024)	Change (2019 - 2024)	% Change (2019 - 2024)	% of Total Jobs in Industry Group (2024)
3416	Arts Officers, Producers and Directors	511	543	32	6%	18%
3417	Photographers, Audio-visual and Broadcasting Equipment Operators	155	181	26	17%	6%
1131	Financial Managers and Directors	106	117	11	10%	4%
2142	Graphic and Multimedia Designers	97	94	-4	-4%	3%
2440	Business and Financial Project Management Professionals	73	80	7	9%	3%
5241	Electricians and Electrical Fitters	75	79	4	5%	3%
5319	Construction and Building Trades n.e.c.	64	70	6	10%	2%
3554	Advertising and Marketing Associate Professionals	55	65	10	18%	2%
7219	Customer Service Occupations n.e.c.	39	62	23	58%	2%
4122	Bookkeepers, Payroll Managers and Wages Clerks	65	62	-2	-3%	2%
2492	Newspaper and Periodical Broadcast Journalists and Reporters	47	59	12	25%	2%
1255	Managers and Directors in the Creative Industries	50	58	8	16%	2%
1132	Marketing and Sales Directors	53	58	5	10%	2%
2134	Programmers and Software Development Professionals	51	55	4	8%	2%
9267	Leisure and Theme Park Attendants	40	53	13	31%	2%
2434	Business and Related Research Professionals	35	53	18	52%	2%
9139	Elementary Process Plant Occupations n.e.c. ³⁵	21	46	26	125%	2%
1259	Managers and Proprietors in Other Services n.e.c.	38	43	6	15%	1%
3131	IT Operations Technicians	40	42	2	6%	1%
2161	Research and Development (R&D) Managers	34	42	7	21%	1%
2494	Advertising Accounts Managers and Creative Directors	42	38	-4	-9%	1%
1121	Production Managers and Directors in Manufacturing	34	36	2	7%	1%
7111	Sales and Retail Assistants	21	36	15	71%	1%
3116	Planning, Process and Production Technicians	36	34	-1	-4%	1%
1111	Chief Executives and Senior Officials	32	34	2	5%	1%
2139	Information Technology Professionals n.e.c.	16	31	15	98%	1%
8151	Scaffolders, Stagers and Riggers	10	29	18	179%	1%
4159	Other Administrative Occupations n.e.c.	25	28	3	13%	1%
4215	Personal Assistants and Other Secretaries	19	27	8	44%	1%

³⁵ not elsewhere classified

SOC	Description	Employed in Industry Group (2019)	Employed in Industry Group (2024)	Change (2019 - 2024)	% Change (2019 - 2024)	% of Total Jobs in Industry Group (2024)
2491	Newspaper, Periodical and Broadcast Editors	23	27	4	18%	1%
2133	IT Business Analysts, Architects and Systems Designers	15	26	11	78%	1%
3551	Buyers and Procurement Officers	21	26	4	21%	1%
9252	Warehouse Operatives	11	25	14	124%	1%
2131	IT Project Managers	11	21	10	84%	1%
5243	TV, Video and Audio Servicers and Repairers	22	21	-1	-4%	1%
2132	IT Managers	11	20	9	81%	1%
5323	Painters and Decorators	14	20	5	37%	1%
1241	Managers in Transport and Distribution	15	19	4	27%	1%
4133	Stock Control Clerks and Assistants	14	19	5	31%	1%
1224	Leisure and Sports Managers and Proprietors	14	18	4	29%	1%
2432	Marketing and Commercial Managers	15	18	3	17%	1%
9219	Elementary Administration Occupations n.e.c.	16	17	1	7%	1%
3556	Sales Accounts and Business Development Managers	13	17	4	31%	1%
2422	Finance and Investment Analysts and Advisers	14	16	2	16%	1%
2124	Electronics Engineers	9	16	7	75%	1%
5413	Tailors and Dressmakers	15	16	1	6%	1%
4141	Office Managers	17	15	-2	-13%	1%In all

Source: Lightcast, 2025 (excludes occupations with <1% share employment in the sector)

Employment Projections: Film & TV

In this section, we aim to provide forecast employment requirements for the sector, using National Foundation for Education Research projections for Buckinghamshire, from 2020-2035, published in 2023. Note, that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area, in a policy-off scenario, and should not be interpreted as precise future requirements. Given that Film & TV is a high specialised sector for Buckinghamshire, and has highly seasonal and project specific employment, it is difficult to provide reliable forecasts of future employment. As a result, we have only included forecasts linked to specific occupations within the sector, rather than broader trends. Nevertheless, it should be noted that the sector employs a broad range of roles.

Future occupational employment

Occupation (2-digit SOC)	2020-2035		
	Net Change	Replacement Demand	Total Requirement
21 Science, research, engineering and technology professionals	3,027	8,410	11,437
24 Business, media and public service professionals	4,917	11,333	16,250
34 Culture, media and sports occupations	421	3,213	3,634

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

³⁴ Apprenticeships “not a good fit” for the screen industries, Screen Skills, 2023

Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area and should not be interpreted as precise future requirements.

- When focusing on occupations aligned to core Film & TV occupations, at the 2-digit level, we can anticipate that the majority of the net equipment will be for professional roles, similarly to engineering, construction, and digital technologies which share skills needs with the sector.
- Although the overall increase in employment within culture, media, and sports occupations is projected to be relatively modest, with an estimated 421 additional positions required by 2035, replacement demand is anticipated to be substantial, with 3,213 required to replace leavers from 2020-2035. Therefore, maintaining a steady pipeline of qualified personnel for this sector will remain important.

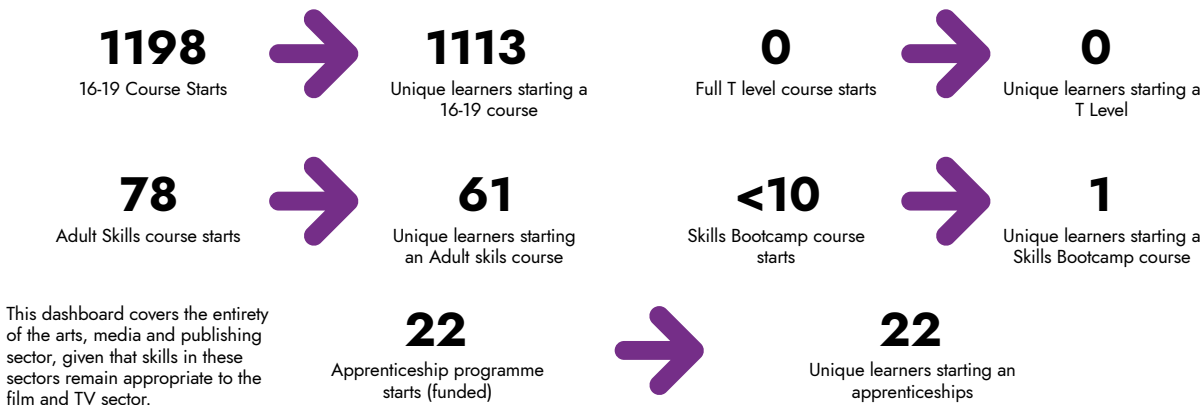
Skills supply: Film & TV

Using Individual Learner Record Data, we have assessed the uptake of post-16 education by Buckinghamshire residents related to the Digital Technology sector subject area.

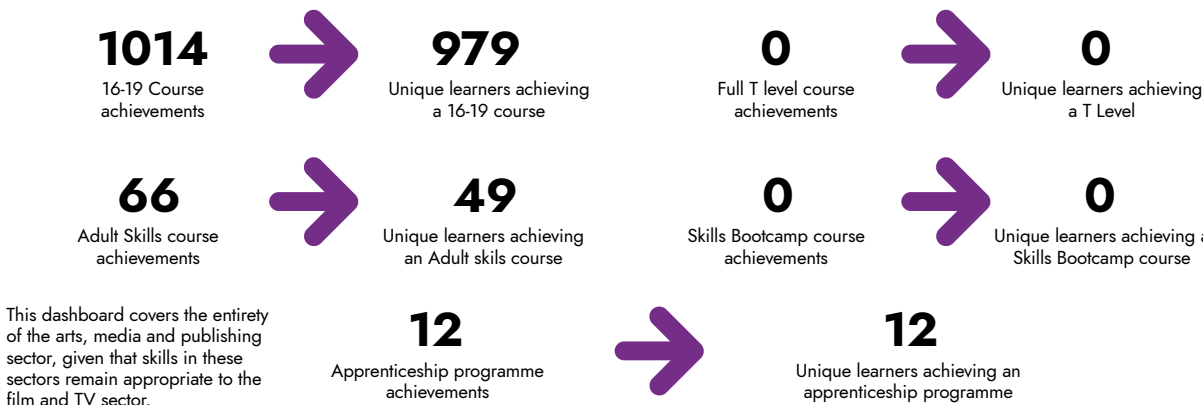
A supporting PowerBI report of current provision of learning to Buckinghamshire residents is available here - [Digital Technology sector – post-16 provision report](#)

NB: low starts and achievements of Skills Bootcamps are due to this data being for the 2023/24. Delivery, and uptake, of Skills Bootcamps has significantly increased in 2024/25

Participation of Technical education programmes, Buckinghamshire
Residents, Film & TV sector, 2023/24



Achievement of Technical education programmes, Buckinghamshire
Residents, Film & TV, 2023/24



Source: Individual Learner Record, DfE, 2023/24 academic year. (Where blank no data is available)

Using Individual Learner Record Data, BBF has prepared a PowerBI report of current provision of learning to Buckinghamshire residents. A summary of key findings is given below.

Film & TV sector – post-16 provision report

16–19 Funded Courses

- This is the most popular form of provision for Film & TV / Creative Industries training in Buckinghamshire
- Popular courses include Diplomas in Creative Media production and Technology, as well as broader creative arts, media, and communication courses. This is consistent with demand for writers, graphic designers, and production.
- Uptake of A level courses is also positive, signalling continued uptake of courses at HE level.

Apprenticeships

- Limited take-up, and consequently low numbers achieving relevant apprenticeships.
- Note that these apprenticeships include creative sectors related to film & TV, such as journalism, furniture design, librarians, etc. There were <10 starts for Content Creator apprenticeships in 2023/24.

Skills Bootcamps

- Limited take up in 2023/24, although it should be noted that the Bootcamp programme began in 2024/25 in Buckinghamshire and will not be counted here.
- According to final summary of Wave 5 Buckinghamshire Skills Bootcamps to 30th September 2025:
 - **National Film and Television School (NFTS) – Production Bootcamp:** Recruited 30 starts, with 90% completion and 44% milestone 3 job outcomes.
 - **All Spring Media – Production Manager Bootcamp:** Recruited 37 starts over 3 cohorts, with 95% completion and 62% milestone 3 job outcomes.
 - **All Spring Media – 3rd Assistant Director Bootcamp:** Recruited 42 starts over 3 cohorts, with 98% completion and 56% milestone 3 job outcomes.
 - **All Spring Media – VFX Production Manager Bootcamp:** Recruited 16 starts over 2 cohorts, with 88% completion and 64% milestone 3 job outcomes.
 - **All Spring Media – Production Coordinator Skills Bootcamp:** Recruited 24 starts over 2 cohorts, with 100% completion and 71% milestone 3 job outcomes.
 - **All Spring Media – Location Manager Bootcamp:** Recruited 31 starts, with 94% completion and 72% milestone 3 job outcomes.
 - **Technical Assistants (Outside Broadcast) Bootcamp:** Not commissioned due to lack of provider.
 - **Riggers for Studio and Outside Broadcasts Bootcamp:** Not commissioned due to lack of provider.

Higher Education

- Regarding Higher Education, achievements in design, creative and performing arts are highly concentrated at Buckinghamshire New University, reflecting local specialisation from this institution. These courses accounted for some 6% of HE achievements in Buckinghamshire, close to the national rate of 7%, in 2023/24.³⁶ However, given the local specialisation of Film & TV in the area, it may be necessary to increase provision, and tailor it to film & TV specifically.

Design, and creative and performing arts, HE Qualifiers, Buckinghamshire HE providers

Row Labels	Buckinghamshire New University	The University of Buckingham	Grand Total
2021/22	145	5	150
2022/23	195	0	195
2023/24	230	5	235
Grand Total	570	10	580

³⁶ Buckinghamshire: Labour Market and Skills Analysis, 2025, Buckinghamshire Economic Intelligence Observatory

Film & TV: Skills Shortage Occupations

NB: due to the previously stated challenges with defining the Film & TV sector through SIC and SOC codes, we have attempted to match job roles to relevant SOC classifications to the best of our ability.

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
2D Animator	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
2D Compositor	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
2D layout artist	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
2D modeller	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
2D rigger	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
2D storyboard artist	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
3D animator	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
3D compositor	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
3D layout artist	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
3D modeller	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
3D rigger	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
3D storyboard artist	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
Carpenters	5316	Carpenters and Joiners	1, 2	Future Skills Workshop (06/01/2026)
Costume making	3422	Clothing, Fashion and Accessories Designers	2	Future Skills Workshop (06/01/2026)
Crane operators	8221	Crane Drivers	1	Future Skills Workshop (06/01/2026)
Data analyst	3544	Data Analysts	2	Future Skills Workshop (06/01/2026)
Data matte painter	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
Digital producer	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
Digital sculptor	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
Director of photography	3416	Arts Officers, Producers and Directors	2	Future Skills Workshop (06/01/2026)

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
Electricians	5241	Electricians and Electrical Fitters	1, 2	Future Skills Workshop (06/01/2026)
FX technical director	3416	Arts Officers, Producers and Directors	2	Future Skills Workshop (06/01/2026)
Game engine developer (Unreal Engine and Unity)	2134	Programmers and software development professionals	2	Buckinghamshire Film & TV Sector Employer Group Meeting - February 2026 (25/02/2026)
Gimbal operator	3417	Photographers, Audio-visual and Broadcasting Equipment Operators	1, 2	Future Skills Workshop (06/01/2026)
Grips	3417	Photographers, Audio-visual and Broadcasting Equipment Operators	1, 2	Future Skills Workshop (06/01/2026)
Production co-ordinator	3416	Arts Officers, Producers and Directors	2	Future Skills Workshop (06/01/2026)
Production designer	3416	Arts Officers, Producers and Directors	2	Future Skills Workshop (06/01/2026)
Production director	1255	Managers and Directors in the Creative Industries	2	Future Skills Workshop (06/01/2026)
Rigger	8151	Scaffolders, Stagers and Riggers	1	Future Skills Workshop (06/01/2026)
Runner	6211	Sports and Leisure Assistants	1	Future Skills Workshop (06/01/2026)
Rotoscope artist	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
Screen Writer	3412	Authors, Writers and Translators	2	Future Skills Workshop (06/01/2026)
Set builder	5319	Construction and Building Trades n.e.c.	1, 2	Future Skills Workshop (06/01/2026)
Sound editor	3417	Photographers, Audio-visual and Broadcasting Equipment Operators	2	Future Skills Workshop (06/01/2026)
Tracking artist	2142	Graphic and Multimedia Designers	1, 2	Future Skills Workshop (06/01/2026)
Travel co-ordinator	6219	Leisure and Travel Service Occupations n.e.c.	1, 2	Future Skills Workshop (06/01/2026)
Technical director	1255	Managers and Directors in the Creative Industries	2	Future Skills Workshop (06/01/2026)
VFX production assistant	2142	Graphic and Multimedia Designers	1, 2	Future Skills Workshop (06/01/2026)
VFX editor	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
VFX production co-ordinator	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs	Source
VFX production manager	1255	Managers and Directors in the Creative Industries	2	Future Skills Workshop (06/01/2026)
VFX Supervisor	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)
Visual effects director	1255	Managers and Directors in the Creative Industries	2	Future Skills Workshop (06/01/2026)
Virtual production technician	2142	Graphic and Multimedia Designers	2	Future Skills Workshop (06/01/2026)

Film & TV: Skills Gaps

NB: due to the previously stated challenges with defining the Film & TV sector through SIC and SOC codes, we have attempted to match job roles to relevant SOC classifications to the best of our ability.

Skill gap	Occupational area
People management	Line Managers
AI literacy	All
Technological change	Professional and trade occupations in production, post-production, virtual production and VFX production.
Production design	Professional occupations in production, post-production, virtual production and VFX production.
Production techniques (including technological and sustainable changes)	All – awareness of the full production process was considered relevant across all roles.
AI application specific to job role	All where AI and technological changes where are changing tasks and skill requirements
Professional skills (particularly those for self-employment)	All
Health and safety	All



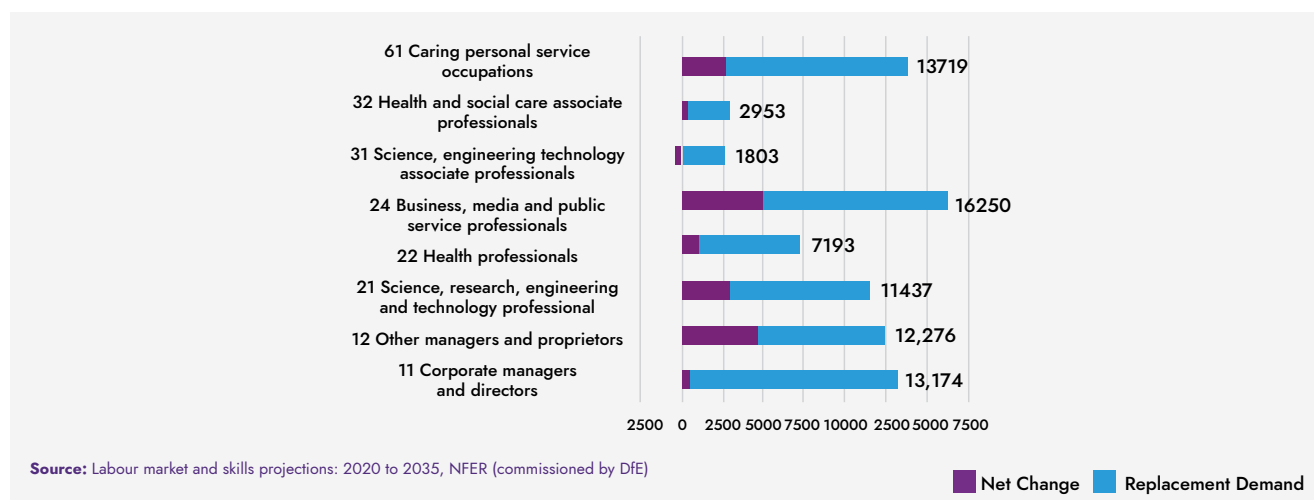
Health & Social Care

Headline statistics – Health and Social Care

- Employs around **31,000 people** in Buckinghamshire — the **largest local sector by employment**.
- Workforce grew by **1,350 workers** in the five years to 2024.
- Contributes approximately **6% of Buckinghamshire's GVA**.
- The sector faces a significantly **ageing workforce: 24%** of adult social care workers are aged 55+, with **2,900 roles** in adult social care are expected to reach retirement age within the next **10 years**.
- Adult social care is also subject to high staff turnover and vacancy levels: **6.6% vacancy rate** (2024/25) and **25.3% staff turnover rate** in adult social care.
- Only **39%** of direct adult social care staff hold a relevant qualification (England average = 45%).
- **46%** of new starters in Adult Social Care roles come from within the sector — suggesting a low inflow of new entrants.
- Apprenticeship participation for Adult Social Care roles remains low — **apprenticeship starts represent only 0.8% of filled posts** (vs 1.5% regionally) and the **national adult social care apprenticeship achievement rate is only 46.1%** (vs 60.5% for all apprenticeships).
- The **Buckinghamshire Health and Social Care Academy** plays a central role in local provision, bringing together NHS partners, the council, universities and key stakeholders, and supporting codesigned workforce development, training pathways, and alignment to regional/national priorities.
- Forecast growth in health and social care employment is expected to be significant, **particularly for health professionals and caring and support roles**.
- Replacement demand is expected to be high, from 2020-2035, for **health professionals** (6,146 jobs required to replace leavers) and **caring personal service occupations** (11,097 jobs)
- Skills gaps include: **Digital and AI skills; Leadership and management; Work-readiness and professional behaviours**

Occupational Requirements summary - Health and Social Care

Forecast occupational requirements, Health and Social Care occupation, Buckinghamshire, 2020-2035
(labels indicate total requirement)



- National Foundation for Educational Research forecasts for Buckinghamshire project a net growth in employment in the Health and Social Care (HSC) sector, with some 1,300 more people employed in caring occupations and 1,200 more people employed in professional occupations (not including replacement demand).
- However, employment in administrative occupations for this sector is expected to decrease by some 1,200 people, reflecting a drive towards digital administration and note taking in the sector. However, this change will also increase demand for digital literacy and AI skills across the sector.
- Focusing on care specifically, the county is expected to require some **13,700 additional people** employed in caring personal service occupations (SOC 61) from 2020-2035, to meet new demand and replace leavers, or some **913 per year** on average.
- Demand for managers and directors is highly significant across the economy, with qualitative feedback from HSC stakeholders indicating particular pressures in HSC.
- In 2024, there were some **7,044 job vacancies for core HSC occupations**, posted online according to Lightcast. While some of these roles may be filled by residents outside the area, and by reallocation between occupations, supporting the local talent pipeline will be critical for meeting demand.
- In 2023/24, according to DfE ILR data, **320 Bucks residents achieved a 16-19 funded course relevant to HSC, with 288 achieving a relevant apprenticeship**. Given the very high demand for various occupations across the sector, these achievement levels are low, making recruitment from outside the county necessary.
- According to HESA, Higher Education institutions in Buckinghamshire produce about 990 qualifiers in medicine subjects per year, on average from 2021/22 to 2023/24. While this is significant, it remains low relative to demand (according to online job postings tracked by Lightcast) and qualifiers may not be entering priority occupations.
- Occupations where 2024 job posting were particularly high relative to employment, included: **Health Associate Professionals n.e.c.; Health Care Practice Managers; Social Workers; Medical and Dental Technicians; Pharmaceutical Technicians**.
- Demand for care workers and home care workers was also significant, with **1,456 job postings in 2024**.
- To conclude, high demand in this sector is likely driving skills shortages in this sector, highlighting the importance of training for care staff, professional occupations, and leadership and management, alongside digital literacy and AI skills across all roles.
- NB:** these estimates of requirements are based on NFER forecasts produced in 2023, current labour market demand indicators, and DfE and HESA data on post-16 education and training starts and achievements. Full details are presented in Annex A of the Buckinghamshire LSIP 2.0. As a result, these estimates are indicative, not prescriptive, and should not be used as comprehensive estimates of learner numbers required, particularly given high levels of uncertainty in the national and local labour market.

Skills and labour market profile

This section sets out the proposed action plan for discussion and validation by the Bucks Health & Social Care Academy LSIP working group. The Health and Social care sector employs some 31,000 people in Buckinghamshire³⁷, which makes it the largest sector by employment in the county (along with the business administration and support sector). The sector grew by 1,350 workers in the 5 years to 2024³⁸. The sector also contributes some 6% of the county's GVA (Gross Value Added).

As per national trends, the sector is experiencing significant staff shortages at all levels, in both traditional and emerging health and social care roles.³⁹ Jobs postings levels are high for various occupations within the sector, from nurses, adult social carers, and health care and practice managers, with forecasts suggesting high demand for workers across various roles in future, as well as significant replacement demand.

In Adult Social Care, an ageing workforce is expected to drive particularly high levels of replacement demand. Adult social care workers aged 55 and above represented 24% of the workforce in Buckinghamshire, such that approximately 2,900 posts will be reaching retirement age in the next 10 years.⁴⁰

Employment projections for Buckinghamshire from 2020-2035, produced by the National Foundation for Education Research, also indicate significant replacement demand for various broad occupations (2-digit SOC) related to health and social care, such as 'Health professionals' (SOC 22) with a projected 6,146 workers required to replace leavers, from 2020-2035, and 'Caring personal service occupations' (SOC 61) some 11,097 workers may be required from 2020-2035 to replace leavers.⁴¹

The Buckinghamshire Works Plan⁴² has also identified links between long term sickness in the county and rising levels of economic inactivity, such that the Health and Social Care sector will be part of the solution to local economic growth and productivity. Although Buckinghamshire performs better than national averages, long-term sickness-related inactivity is increasing, especially in parts of Aylesbury and High Wycombe. Local data indicates a sharp rise in mental health conditions among young people and adults, with musculoskeletal (MSK) conditions increasing and acting as a major cause of work-limiting illness. Furthermore, 55,000 residents provide unpaid care, many of working age, with those providing 20+ or 50+ hours of care are significantly more likely to be economically inactive. As a result, there will be a role for the local HSC sector in addressing physical and mental health conditions, including preventative measures, to support individuals into work, and reduce reliance on unpaid carers.

Adult Social Care

The Buckinghamshire adult social care sector faces persistent recruitment and skills pressures despite recent improvements, according to Skills for Care's latest summary report for Buckinghamshire.⁴³ In 2024/25, the county recorded a 6.6% vacancy rate, close to regional and national levels, alongside a 25.3% staff turnover rate. Although vacancies fell by 30% over the year, employers have continued to compete for experienced staff, with 46% of new starters recruited from within the sector rather than from new entrants. Skills gaps remain a challenge: only 39% of direct care staff hold a relevant adult social care qualification, below the England average of 45%. However, many unqualified workers have substantial experience, with 54% having five or more years in the sector. Reliance on non-EU workers is also notable, at 37% of the workforce, which could cause issues for recruitment if visa rules are tightened. Recruitment is further pressured by an ageing workforce, with around 2,900 posts expected to reach retirement age within the next decade.

Regarding apprenticeships, research from Skills for Care⁴⁴ has identified a positive increase in adult social care apprenticeship starts in 2024/25 nationally, although this remains 75% below levels in 2016/17. For Buckinghamshire, ASC apprenticeship starts have been low, relative to filled posts, at 0.8% in 2024/25, below the regional rate of 1.5%. This has also declined from 1% in 2022/23, indicated action may be necessary to support this training route into the sector. Furthermore, national achievements rates for apprenticeships are low, with about 46.1% of starters achieving their ASC apprenticeship in 2022/23. This was lower than for all apprenticeships (60.5%) and was particularly low for the 'Lead Practitioner in Adult Social Care' apprenticeship (37.3%). As a result, it may be necessary to explore interventions to increase uptake of these programmes to meet demand, while reviewing how to make address low achievement rates, through addressing common challenges such as lack of back-fill funding for off-the-job training, barriers to provided effective supervision, and unclear career pathways.

³⁷ BRES, ONS, 2021.

³⁸ Ibid.

³⁹ Local intelligence gathered through the Buckinghamshire Skills Advisory Panel.

⁴⁰ Skills for Care Local Area Summary reports – Buckinghamshire, 2024/25

⁴¹ Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

⁴² The Buckinghamshire Works Plan, 2026

⁴³ Skills for Care Local Area Summary reports – Buckinghamshire, 2024/25

⁴⁴ Apprenticeships in adult social care 2024/25, Skills for Care analysis of Department for Education data, February 2026



The Buckinghamshire Health and Social Care Academy

The Buckinghamshire Health and Social Care Academy is a non-profit partnership between Buckinghamshire Council, Buckinghamshire NHS Healthcare Trust, Bucks New University, University of Bedfordshire, Health Education England, Buckinghamshire Local Enterprise Partnership, Buckinghamshire College Group and the University of Buckingham. Its purpose is to optimise the health and social care workforce's education, training and skills development through partnership-working across systems, ensuring the best possible delivery of care to the population of Buckinghamshire.

It brings together Buckinghamshire's healthcare, social care, primary care, community care and education providers as a collective and innovative place-based workforce, education and training partnership for Buckinghamshire within the wider integrated care system of Buckinghamshire, Oxfordshire and West Berkshire (BOB). Its core functions include:

- Recognition as a key integrated area-based delivery vehicle that relates specifically to Buckinghamshire and system 'people plans' that form part of the BOB integrated care system, reflecting key local, regional and national workforce education and training priorities
- Support skills and competencies development (and capability) within the workforce
- Enable the co-design and creation of innovative, collaborative, inclusive evidence-based workforce-related learning and development activities, along with new and specialist accredited learning where there is an absence, gap or needs to be met.

Further information is available on the Academy's website – www.bhsca.co.uk



Sector and occupation definitions

The following table sets out the SIC code definitions for the Health and Social Care sector, alongside employment levels and growth for the Buckinghamshire economy.

Industry description	2019	2020	2021	2022	2023	2024	Change (2019-2024)	% change (2019-2024)
Hospital activities	7000	7000	7000	8000	9000	8000	1000	14%
General medical practice activities	3000	2500	3000	1750	2500	2250	-750	-25%
Specialist medical practice activities	450	400	450	350	450	400	-50	-11%
Dental practice activities	1250	900	1000	700	1000	900	-350	-28%
Other human health activities	5000	5000	5000	6000	6000	6000	1000	20%
Residential nursing care activities	1750	1750	1500	1500	1500	1750	0	0%
Residential care activities for learning disabilities, mental health and substance abuse	250	250	300	225	500	250	0	0%
Residential care activities for the elderly and disabled	3500	3500	3500	3000	3500	3500	0	0%
Other residential care activities	1500	1750	1250	1250	1750	1750	250	17%
Social work activities without accommodation for the elderly and disabled	2000	2000	1750	1500	2250	2000	0	0%
Child day-care activities	2000	1250	1250	2000	2500	2000	0	0%
Other social work activities without accommodation n.e.c.	1500	1000	1250	1750	2000	1750	250	17%

Source: Business Register and Employment Survey, 2024

The following table sets out the core occupations relevant for the Health and Social Care sector, alongside employment, labour demand, and relevant technical education starts by local learners. Following consultation with the sector, we have opted not to include youth workers and early years educators in our occupational definitions.

- Occupations where 2024 job posting were particularly high relative to employment, included: **Health Associate Professionals n.e.c.; Health Care Practice Managers; Social Workers; Medical and Dental Technicians; Pharmaceutical Technicians**. Health Associate Professionals (SOC: 3219) includes a diverse range of health support roles, from surgical assistants, trainers, lifestyle advisers, alternative therapy professionals, and more, reflecting the growth in specialist roles for the sector not currently captured effectively by more traditional SOC code definitions. Furthermore, it should be noted that demand is high across various occupations, and that high demand for roles does not always indicate a skills shortage occupation.

It should also be noted that Care Workers and Home **Carers; Other Registered Nursing Professionals; Social Workers and Health Care Practice Managers** accounted for most job postings in 2024, reflecting reported challenges in adult social care and leadership and management skills gaps.

Occupations		Demand indicators			Relevant Technical Education Provision		
Occupation (SOC)	SOC Code	Employees in employment (2024, Bucks)	'Occupations in demand' category (SOC4 national)	Vacancies posted, 12 months, 2024 (SOC4 local)	T Level Starts (2023/24)	Apprenticeship starts (2023/24)	Apprenticeship starts (2024/25)
Health Services and Public Health Managers and Directors	1171	504	Higher Skilled	265	-	11	6
Health Care Practice Managers	1231	275	Medium Skilled	473	-	1	1
Residential, Day and Domiciliary Care Managers and Proprietors	1232	432	Medium Skilled	171	-	36	21
Biochemists and Biomedical Scientists	2113	304	Higher Skilled	36	-	0	3
Physical Scientists	2114	242	Higher Skilled	12	-	0	0
Generalist Medical Practitioners	2211	1001	Higher Skilled	71	-	0	1
Specialist Medical Practitioners	2212	931	Higher Skilled	286	-	-	-
Physiotherapists	2221	478	Higher Skilled	147	-	1	1
Occupational Therapists	2222	360	Higher Skilled	159	-	4	8
Speech and Language Therapists	2223	146	Higher Skilled	104	-	1	3
Psychotherapists and Cognitive Behaviour Therapists	2224	113	Higher Skilled	4	-	0	0
Clinical Psychologists	2225	109	Higher Skilled	30	-	2	1
Other Psychologists	2226	146	Higher Skilled	69	-	-	-
Therapy Professionals n.e.c.	2229	225	Higher Skilled	168	28	10	16
Midwifery Nurses	2231	353	Higher Skilled	48	28	1	4
Registered Community Nurses	2232	787	Higher Skilled	94	28	0	0
Registered Specialist Nurses	2233	648	Higher Skilled	158	28	-	-
Registered Nurse Practitioners	2234	465	Higher Skilled	143	28	26	12
Registered Mental Health Nurses	2235	370	Higher Skilled	52	-	-	-
Registered Children's Nurses	2236	230	Higher Skilled	58	28	0	0
Other Registered Nursing Professionals	2237	2310	Higher Skilled	715	-	-	-
Pharmacists	2251	466	Higher Skilled	181	-	0	0
Optometrists	2252	144	Higher Skilled	64	-	0	0

Occupations		Demand indicators			Relevant Technical Education Provision		
Occupation (SOC)	SOC Code	Employees in employment (2024, Bucks)	'Occupations in demand' category (SOC4 national)	Vacancies posted, 12 months, 2024 (SOC4 local)	T Level Starts (2023/24)	Apprenticeship starts (2023/24)	Apprenticeship starts (2024/25)
Dental Practitioners	2253	131	Higher Skilled	65	-	-	-
Medical Radiographers	2254	225	Higher Skilled	7	-	1	2
Paramedics	2255	233	Higher Skilled	17		11	9
Podiatrists	2256	41	Higher Skilled	23	-	2	1
Other health professionals n.e.c.	2259	559	Higher Skilled	126	5	9	6
Social Workers	2461	459	Higher Skilled	509	-	9	8
Laboratory Technicians	3111	428	Medium Skilled	56		9	10
Dispensing Opticians	3211	97	Medium Skilled	84		0	1
Pharmaceutical Technicians	3212	151	Medium Skilled	142	28	12	17
Medical and Dental Technicians	3213	240	Medium Skilled	235	28	28	30
Complementary Health Associate Professionals	3214	39	Medium Skilled – extending in same occupation only	18	28	0	1
Health Associate Professionals n.e.c.	3219	117	Medium Skilled	382		2	3
Nursing Auxiliaries and Assistants	6131	2713	Medium Skilled	212		2	2
Ambulance Staff (Excluding Paramedics)	6132	250	Medium Skilled	4		7	7
Dental Nurses	6133	565	Medium Skilled	102		0	25
Care Workers and Home Carers	6135	6013	Medium Skilled – Subject to listed conditions	1456		26	13
Senior Care Workers	6136	618	Medium Skilled – Subject to listed conditions	98		56	58

Vacancy and employment information has been sourced from Lightcast for 2024. T Level and Apprenticeship starts have been calculated by matching 4-digit SOC occupations to relevant courses and frameworks using Skills England Occupational Maps, and using Individual Learner Record for starts for Buckinghamshire-based learners.

Employment Projections: Health and Social Care

In this section, we aim to provide forecast employment requirements for the sector, using National Foundation for Education Research projections for Buckinghamshire, from 2020-2035, published in 2023. Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area, in a policy-off scenario, and should not be interpreted as precise future requirements.

Projected employment in the health and social care sector (2020-2035)

Broad Occupation	Forecast Health and Social work employment growth, 2020 to 2035
Managers, directors and senior officials	186
Professional occupations	1,201
Associate professional occupations	160
Administrative and secretarial occupations	-1,166
Skilled trades occupations	-76
Caring, leisure and other service occupations	1,319
Sales and customer service occupations	22
Process, plant and machine operatives	-27
Elementary occupations	-318
Total	1,301

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

Significant growth in employment is projected for this sector, with Professional occupations and Caring, leisure and other service occupations making up most employment growth to 2035.

The only occupations expected to experience a major decrease in employment are in Admin and secretarial occupations, likely reflecting increased automation and digital technology in the sector.

Projected employment in the Health and Social Care sector by occupation (2020-2035)

Occupation (2-digit SOC)	2020-2035		
	Net Change	Replacement Demand	Total Requirement
11 Corporate managers and directors	485	12,689	13,174
12 Other managers and proprietors	4,675	7,601	12,276
21 Science, research, engineering and technology professionals	3,027	8,410	11,437
22 Health professionals	1,047	6,146	7,193
24 Business, media and public service professionals	4,917	11,333	16,250
31 Science, engineering and technology associate professionals	-338	2,141	1,803
32 Health and social care associate professionals	220	2,734	2,953
61 Caring personal service occupations	2,621	11,097	13,719

Source: Labour market and skills projections: 2020 to 2035, NFER (commissioned by DfE)

Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area and should not be interpreted as precise future requirements.

- Net requirements, which include replacement demand for individuals leaving the sector, are high across higher level occupational groups unique to health and social care.
- Business, media, and public service professionals, which includes social workers, has a particularly high forecast requirement of over 16,000 additional workers by 2035 in Buckinghamshire.
- While associate professional occupations are expected to experience weaker demand growth, including occupations such as lab, dental, pharmaceutical, and optical technicians, the high replacement demand is expected to increase the required workers for these occupations.

Skills supply: Health and Social Care

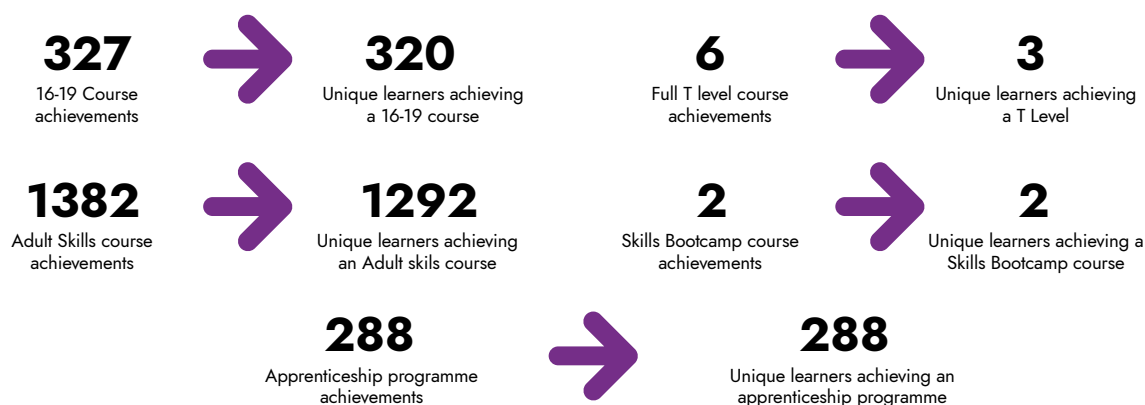
Using Individual Learner Record Data, we have assessed the uptake of post-16 education by Buckinghamshire residents related to the Health, Public Services, and Care sector subject area. This does not include non-HSC public service workers (police officers, firefighters, etc.) These estimates include early years educators, which are classified under this sector subject area, but are not relevant for this analysis. We have indicated where these figures may significantly influence results.

Using Individual Learner Record Data, we have prepared a PowerBI report of current provision of learning to Buckinghamshire residents. A summary of key findings is given below, with an interactive dashboard available here: [Health and Social Care sector – post-16 provision report](#). A summary of key findings is given below.

Participation of Technical education programmes, Buckinghamshire Residents, Health & Social sector, 2023/24



Achievement of Technical education programmes, Buckinghamshire Residents, Health & Social sector, 2023/24



Source: Individual Learner Record, DfE, 2023/24 academic year.

16-19 Funded Courses

- The 'Extended Diploma in health and social care' was the most popular 16-19 funded course by starts in 2023/24, in this sector, followed by 'Certificate in Early Years Education', and 'Technical Certificate in health and social care'.
- However, only 320 unique learners achieved at least one course through 16-19 funding, supply may not be able to meet the high demand evidenced in the previous section.

T Levels

- T Level take-up is low relative to other post-16 routes, similarly to other sectors.
- All T Level starts in 2023/24 were for the occupational specialism 'Supporting the Adult Nursing team.' As a result, there is limited variety in provision and uptake of T Levels for other skills shortage occupations outside nursing, such as technicians.
- It may be useful to explore opportunities to provide T Levels in other occupations, improving provision to meet high demand.

Apprenticeships

- While the take-up of apprenticeships is higher for HSC than various other priority sectors, with 617 Buckinghamshire learners starting a programme and 288 achieving an apprenticeship in 2023/24, 185 of these starts were linked to early years educators.
- As demonstrated in the occupational skill shortage table, apprenticeship starts are generally low relative to vacancies.
- It should also be noted that some 36% of learners starting an apprenticeship aligned to HSC lived in an Opportunity Bucks (OB) ward, compared to the 25% of all learners starting any apprenticeship in Buckinghamshire were from an OB ward.

Skills Bootcamps

- Low take-up and achievement from Skills Bootcamps in Buckinghamshire (<10 learners). Starts are mainly in courses linked to early years educators and paediatric first aid. While these courses were started by Buckinghamshire residents, they were delivered outside the county.
- It should also be noted that take-up of adult skills funded courses is particularly high, with over 1,200 learners achieving at least one course. These are mainly in courses linked to mental health and counselling courses, reinforcing skills for workers across the health and social care sector.

Higher Education

- Medicine and Dentistry, and Subjects Allied to Medicine, both have good levels of qualifiers across the county's two universities. Qualifiers from these subjects as a proportion of total qualifiers locally is similar to the share nationally, apart from Psychology where it is lower. As a result, given that levels of qualifiers in key subjects is good for the area, and demand is generally highest at lower skill levels, there may be limited scope for additional HE provision.

HE Qualifiers, Buckinghamshire HE providers

Row Labels	Buckinghamshire New University				The University of Buckingham			
	01 Medicine and dentistry	02 Subjects allied to medicine	03 Biological and sport sciences	04 Psychology	01 Medicine and dentistry	02 Subjects allied to medicine	03 Biological and sport sciences	04 Psychology
2021/22	10	895	235	95	110	10	0	60
2022/23	5	970	215	80	145	55	0	65
2023/24	10	1040	70	85	125	5	0	50
Grand Total	25	2905	520	260	380	70	0	175

Source: HESA, 2025

Health & Social Care: Skills Shortage Occupations

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs
Care Workers, Support Workers and Homecare Workers	6135	Care workers and home carers	1
Occupational Therapists (OTs)	2222	Occupational therapists	1
Social worker	2461	Social workers	1
Child Psychologists	2212	Psychologist	2
Mental health support workers	3219	Health Associate Professionals n.e.c.	1
Podiatrists	2256	Podiatrists	1
Pharmaceutical Radiologist	2254	Medical Radiographers	2

Health & Social Care: Skills Gaps

Skill gap	Occupational area
Digital/IT skills (including AI application)	All roles, particularly in primary and social care
Leadership capability	Line managers
Work-readiness skills	All roles
Professional skills	All roles
Shortage of coding/programming exposure	Mainly health – linked to specific job roles!!

Occupation Specific High-Priority Needs

In addition to the 5 priority sectors, this LSIP has also identified three occupations that are the sole occupations identified as a priority skill need in their respective sectors. These occupations have been included in response to qualitative feedback from businesses, which indicated shortages in skills provision and potential risks to the supply of appropriately skilled individuals. While these issues are of a significantly smaller scale to broader priority sector needs, they have been included in this plan for completeness. Continuous review of these skills shortages will take place to ensure that post-16 education and training is available to support these occupations, subject to longer term need.

Skills and labour market profile

Chefs

The Buckinghamshire Growth Plan 2025 notes that Buckinghamshire has a significant SME economy, with a high proportion of businesses in non-tradeable sectors, namely businesses with activities that are only traded within their immediate geography, and face less competition from other regions and limited capacity to scale compared to tradeable sectors. Retail and hospitality were identified by the plan as key local sectors within the county's non-tradeable economy, but not as priority sectors for productivity-driven growth.

However, Buckinghamshire Business First has received feedback from employers in the hospitality sector regarding their skills shortage vacancies for chefs, with a very limited talent pool and concerns that tighter immigration policy may add to recruitment challenges going forward. Upon evaluation of the available evidence, we concluded that there was significant demand for chefs in the local labour market, but no provision within the county. Buckinghamshire residents currently need to go out of county for Commis Chef apprenticeships, mainly delivered by Milton Keynes College.

Positively, local employers have taken an active role in raising awareness of opportunities in this occupation. Buckinghamshire's Menu Masters competition, supported by the Buckinghamshire Skills Hub, saw more than 450 Year 9 students from across the county step up to a unique work experience challenge, with teams of students creating and presenting the best possible restaurant concepts, names, menus, ambience, marketing and use of technology. Local restaurateur Atul Kochhar, and Karim Kassam from Horwood House Hotel, supported the event and heard over 60 pitches from students keen to become the winners of the first inter-schools challenge of its kind in the county.⁴⁵

Despite this interest in supporting more young people into this occupation, it may be necessary to continue support for this occupation. There needs to be co-ordinated action to promote chef careers, dedicated into-work programmes, signposting to apprenticeship provision, and work to bring employers and learning providers together to support careers activities, and monitor the effectiveness of the into-work and apprenticeship provision.

HGV / LGV Drivers

Throughout this report, the terms Heavy Goods Vehicle and Large Goods Vehicle are used interchangeably, given that both terms refer to the same roles, but different terms are used by different stakeholders. The term LGV Driver is recognised as the modern term.

Nationally, challenges with the provision of training for HGV / LGV drivers have been well documented since the COVID-19 pandemic. While evidence from the Department for Transport indicates that demand for drivers is significantly below its peak in 2021 Q4, where 43% of businesses reported a driver vacancy in the UK, about a quarter of businesses were reporting a driver vacancy in 2025 Q4. Key reasons for these vacancies included 'better pay or benefits elsewhere' was reported by 42% of businesses; 'existing drivers leaving industry' was reported by 38% of businesses; and 'driver retirements' was reported by 33% of businesses.⁴⁶ These issues indicate that there is likely to be high replacement demand in this sector, such that training provision for new drivers is necessary.

Furthermore, while logistics and distribution is not a local priority sector, HGV / LGV drivers are necessary for the success of other high priority sectors. Businesses which produce physical goods, or use physical goods in their production process, have a derived demand for HGV driving services, including life sciences and engineering (specifically those actively manufacturing).

Recent demand for HGV drivers has been high in Buckinghamshire, with 515 online vacancies in 2024 in Buckinghamshire (733 in 2025) relative to 2,280 employed, with vacancies representing almost a third of current employment, according to Lightcast data. Despite this, overall growth in employment has been limited, with a net change of -46 jobs in 2019 to 2024. The high demand relative to occupational employment growth likely reflects challenges with staff retention and very high replacement demand, adding to existing skills shortage vacancies. In addition, the ending of national funding for HGV driver skills bootcamps in May 2025 may reduce the labour supply for this sector further, with a leading driver training provider, Insite, warning that '...the UK could face a severe shortage of heavy goods vehicle drivers, potentially threatening business operations and supply chains across the country.'⁴⁷

In response, noting that this is a small occupation, it may be necessary to co-ordinate activity to bring together businesses seeking HGV-drivers, promote job opportunities to job-seekers, and ensure that the relevant support is available to provide relevant driving courses and CPC provision.

Landscape gardeners

While qualitative employer feedback to BBF has indicated challenges with recruiting into land-based occupations, it can be challenging to determine labour demand for these roles using tools such as Lightcast, which only record publicly available online job postings. Nevertheless, analysis of Lightcast data has indicated both a high growth rate of employment, with a net growth of 428 jobs from 2019 to 2024, and high demand currently. There were 314 online vacancies for landscape gardening and horticulture roles in 2024 in Buckinghamshire, rising to 375 in 2025, high relative to the 1,393 employed in 2024. HS2 may be driving some of the demand for these roles, with the project requiring significant landscaping work.

Whilst there are no specific professional landscaping qualifications being delivered in Buckinghamshire, there is nearby provision available from Windsor Forest College and Bedford College. Work readiness skills, particularly resilience, are also important for entry level staff into this occupation. This occupation is also complemented by broader land-based studies occupations, provision of which is also key, given qualitative feedback from employers.

As a result, it will be necessary for activities to bring together businesses seeking landscapers, to promote job opportunities to job-seekers, ensure that relevant into-work programmes are in place, and ensure that employers are aware of and are engaging learning providers delivering relevant landscaping and horticulture provision.

Sector and employment definitions

As this section concerns specific occupations within various sectors, there are no relevant SIC codes for these occupations. The table below indicates the relevant SOC codes for these occupations, and the change in employment over time.

SOC 4-digit	Description	2019 Jobs	2024 Jobs	Level Growth (2019 to 2024)	% Growth (2019 to 2024)
5113	Gardeners and Landscape Gardeners	965	1393	428	44%
5434	Chefs	2186	2588	402	18%
8211	Large Goods Vehicle Drivers	2326	2280	-46	-2%

Source: Lightcast, 2025

The following table sets out the core occupations relevant for the Health and Social Care sector, alongside employment, labour demand, and relevant technical education starts by local learners.

Occupations		Demand Indicators			Relevant Technical Education Provision		
Occupation (SOC)	SOC Code	Employees in employment (SOC4 local)	'Occupations in demand' category (SOC4 national)	Vacancies posted, 12 months, 2024 (SOC4 local)	T Level Starts (2023/24)	Apprenticeship starts (2023/24)	Apprenticeship starts (2024/25)
Gardeners and Landscape Gardeners	5113	1393	Medium Skilled	314	-	0	0
Chefs	5434	2588	Medium Skilled	837	-	20	24
Large Goods Vehicle Drivers	8211	2280	Ineligible	515	-	0	1

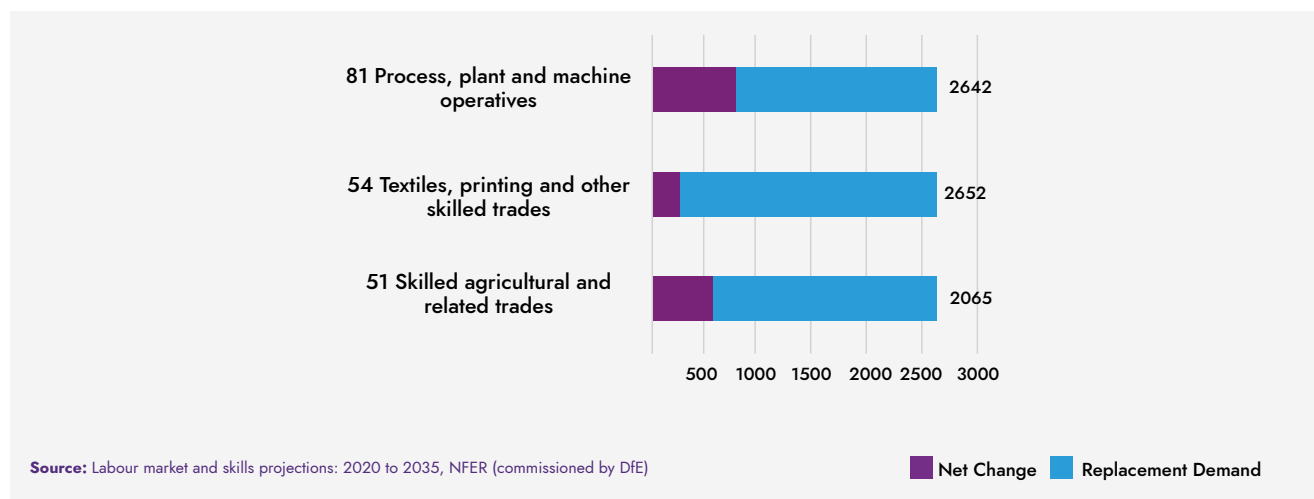
Vacancy and employment information has been sourced from Lightcast for 2024. T Level and Apprenticeship starts have been calculated by matching 4-digit SOC occupations to relevant courses and frameworks using Skills England Occupational Maps, and using Individual Learner Record for starts for Buckinghamshire-based learners.

As indicated above, job postings relative to current employment are high for all three of these occupations, with vacancies in 2024 representing some 20% to 30% of total employment. While some of this may be accounted for by poor worker retention in these sectors, it also indicates significant requirements for additional staff. Similar apprenticeship starts against all three are limited relative to demand. Please see the 'Skills supply: Occupation Specific High-Priority Needs' section for more details.

Employment projections: Occupation Specific High-Priority Needs

Given that these specific occupations are not part of a defined sector, forecasts are only focused on occupational changes, rather than sectoral changes.

Forecast occupational requirements, Occupational requirements, Occupational Specific needs, Buckinghamshire, 2020-2035 (labels indicate total requirement)



Note that these forecasts are developed to provide an indication of long-term trends and magnitude of jobs growth by sector and local authority area and should not be interpreted as precise future requirements.

- Both net requirements and replacement demand for the three occupations are positive and significant, during the 2020-2035 forecast period.
- SOC 51 corresponds with landscape gardeners and similar occupations, SOC 54 corresponds with Chefs and similar occupations, and SOC 81 corresponds to HGV / LGV Drivers and similar occupations. Note that SOC 81 also includes plant machinery operators, relevant for the construction and engineering sectors, such that it may be appropriate to coordinate measures with those priority sectors.
- As these requirements apply to broad occupations, they cannot be used to determine specific requirements for these occupations.
- While these overall requirements are significantly lower than for other priority occupations in this LSIP – for example ‘Science, research, engineering and technology professionals’ occupations, with an expected requirement of some 11,400 from 2020-2035 - these requirements remain significant and indicate forecast demand for labour, both to replace leavers and respond to growth in demand.

Skills supply: Occupation Specific High-Priority Needs

Chefs

- While there were some apprenticeship starts associated with the Chef occupation in 2023/24 and 2024/25, 20 and 24 respectively, it should be noted that these apply to Buckinghamshire residents starting courses. These apprenticeships were delivered out of the county by Milton Keynes College. As a result, while some residents can access training, this may not be sufficiently high to meet the high growth in demand for chefs in Buckinghamshire.

HGV / LGV Drivers

- There has been low apprenticeship take-up for this sector, with only 1 start in 2024/25 by a Buckinghamshire resident in a relevant framework. However, it should be noted that provision has been available through other pathways, such as through nationally funded DfE Skills Bootcamps. In 2023/24, some 17 Buckinghamshire learners started a relevant skills bootcamp course for LGV / HGV driving, with some 14 learners achieving at least 1 relevant course. But, this may be insufficient relative

to demand, and national funding for these skills bootcamps ended in May 2025. Furthermore, heavy and large goods vehicle drivers are currently ineligible for a skilled worker visa, such that domestic training for these roles may become more important for resolving skills shortages, particularly if immigration rules are tightened in the absence of nationally funded skills bootcamps.

Landscape gardeners

- There were no recorded apprenticeship starts by Buckinghamshire residents in the 2023/24 or 2024/25 academic years, in frameworks relevant to the landscape gardener occupation specifically. Whilst there are no specific professional landscaping qualifications being delivered in Buckinghamshire, there is nearby provision available from Windsor Forest College and Bedford College. Only 30 Bucks residents were enrolled on these courses (ILR, DfE, 2023/24). However, it should be noted that this occupation is complemented by broader land-based education and training. There were some 74 apprenticeships starts, by Buckinghamshire residents, in courses linked to the land-based/agriculture sector in 2023/24. However, some of these qualifications may not align with the specific requirements of this occupation. (ILR, DfE, 2023/24).

Skills Shortages and Gaps: Occupation Specific High-Priority Needs

- By definition, the three occupations are themselves skill shortage occupations, all with issues mainly at entry level. Skills gaps mainly relate to general work readiness issues, similarly to all other sectors.

Job role	Related SOC	Related SOC title	Relates to Priority Skill Needs
Gardeners and Landscape Gardeners	5113	Gardeners and Landscape Gardeners	1
Chefs	5434	Chefs	1
Heavy and large goods vehicle drivers	8211	Heavy and large goods vehicle drivers	1



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