

# ARCHITECTURE



**Creative Industries  
Policy and Evidence Centre**

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# Creative Industries Skills Audits

# Creative Industries Skills Audits

## ARCHITECTURE

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### About Work Advance

Work Advance undertakes research, analysis and evaluation to advance understanding of developments in the world of work. We drive practical improvements in policies, programmes and practices that support inclusive and sustainable growth; productive businesses and better management practices; a skilled, agile and healthy workforce; and stronger, more vibrant and cohesive local communities.

Through our networks, we provide research, policy and consultancy services to a range of partners, including businesses large and small, trade unions, professional bodies, policymakers and wider practitioners.

Work Advance adopts an approach that is client-centred. We aim to secure practical solutions through blended research and consultancy services, as well as strong stakeholder engagement and partnership, which brings value through evidence-based and expert insights into what works. We design and support the delivery of tailored programmes and initiatives to test and trial new innovations, including help with monitoring and evaluation to track results and impact.

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### About the Creative Industries Policy and Evidence Centre

The Creative Industries Policy and Evidence Centre (Creative PEC) works to support the growth of the creative industries in the UK through the production of independent and authoritative evidence and policy advice.

Led by Newcastle University, with the Royal Society of Arts, and funded by the UKRI via the Arts and Humanities Research Council, Creative PEC comprises a core consortium of Newcastle University, Work Advance, the University of Sussex and the University of Sheffield.

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# Executive summary

## 1 Skills shortages when recruiting: The picture today

The UK has a globally competitive architecture sector, contributing £4.8bn in gross value added (GVA) and 126,500 jobs in 2024. However, the last decade has seen uneven employment growth despite a recent increase between 2023 and 2024.

One in three (35%) architecture employers that had hired staff (including freelancers) in the past two years reported recruitment difficulties, with 80% of employers reporting that these were due to candidates lacking the required skills.

Skills shortages were seen as particularly acute for experienced and entry-level roles, with employers particularly struggling to recruit architects, chartered architectural technologists and architectural technicians (which includes architectural assistants completing their qualifications) as well as computer-aided design (CAD), drawing and other technical professionals.

Architecture employers were more likely than the creative industries average to report digital skills shortages, with these most commonly relating to the use of specialist software associated with CAD and building information modelling (BIM), as well as Adobe Creative Cloud. Architecture employers were almost four times more likely than the creative industries average to report skills shortages related to sustainability, with shortages in specific skills, including carbon calculation and Passivhaus, and lack of understanding of relevant regulation and certifications, such as the Building Research Establishment Environmental Assessment Methodology (BREEAM) standards.

## 2 Current skills gaps in the existing workforce

In addition to skills shortages, architecture employers were more likely to highlight skills deficiencies in their existing workforce (including freelancers and agency staff) than the creative industries as a whole. In 2025, two in five architecture employers were affected by skills gaps.

The most common causes for skills gaps relate to candidates being new to their role (42%), having not yet received training (35%) and having not completed their training (34%). Other reported causes point to the introduction of new working practices and technologies, particularly new digital software.

Skills gaps are most common in early-career roles, consistent with many professionals in the sector completing their full training in-work at this stage. Architectural technician was the most common skills gap occupation, followed by architect and marketing professional.

The types of skills employers reported as in need of improvement mirror those found in candidates. Digital skills were a particular concern, as was knowledge of building regulations and guidance as well as transversal skills around planning and organising. In 2025, 44% of architecture employers also reported sustainability skills gaps, compared to 19% for creative industries.

## 3 Jobs and skills priorities over the next three to five years

Despite uneven employment growth over the last few years, architecture employers were ambitious about their future growth: 50% anticipated growing their number of staff (including freelancers) over the next three to five years. Almost all of these employers also expected staff will need to require new skills over the same time period.

Architecture employers highlighted several drivers of future skills need, including the introduction of new working practices, new legislation and regulation (for instance, the Building Safety Act 2022 and regulation through the Planning and Infrastructure Act 2025), the development of new products and services, and the introduction of new technology.

Architects and architectural technicians top the lists of future occupations in demand and occupations with upskilling needs. Employers again highlighted the need for digital and sustainability skills in future. Many also identified the need to develop competence in using AI across the design process, in project management and for other business processes, like report writing.

Employers also pointed to future needs for transversal skills, in particular with respect to working with others, planning and organising, and speaking.

## 4 Taking action to address skills challenges for the industry

Skills challenges are affecting architecture employers, although they were slightly less likely to report that these are having an impact than employers in the creative industries as a whole. The most common impacts employers reported are difficulties meeting deadlines, increased workload for other staff and increased operating costs.

Positively, employers in the sector are taking a range of steps to address skills challenges, including increasing training for their workforce (reported by 46%). Architecture employers provide a mixture of on- and off-the-job training, with broader literature suggesting rates are higher for entry-level and early-career roles, consistent with training routes in the sector.

However, architecture employers face a number of barriers to providing training: 30% pointed to a lack of funds and 19% to external courses being too expensive. Also 19% said staff are too busy to undertake training, reflecting high workloads and often long hours in the sector.

When considering measures that could help architecture employers to increase investment in skills, they were most likely to call for financial subsidies and tax relief. Many would also welcome more flexible forms of training and advice on finding training relevant to their needs.

# 1. Introduction to the Creative Industries Skills Audits

**Throughout 2025, Creative PEC and Work Advance embarked on a series of UK-wide Skills Audits for the creative industries and its sub-sectors. A commitment in the UK government's Creative Industries Sector Plan, and funded jointly by the Department for Culture, Media and Sport (DCMS) and the Creative Industries Council (CIC), the Skills Audits have sought to provide an evidence base which enables the creative industries to speak with a united voice on: current and future skill needs; pressing skills shortages, gaps and wider workforce issues; and the extent to which the education system is well aligned to industry needs.**

The Skills Audits have been delivered in two phases:

**Phase 1:** Assessed the skills priorities across the creative industries as a whole; and

**Phase 2:** Examined in greater depth the skills priorities of different creative sub-sectors.

This is one of the sub-sector reports and covers the architecture sector.

The creative sub-sectors for the Audits deploy the DCMS definition of the creative industries, which uses the following Standard Industrial Classification (SIC) 2007 code for the architecture sub-sector (DCMS, 2025d):

**71.11** Architecture activities

The analysis for the Audits is underpinned by an established labour market framework, covering issues of labour demand, occupational structure, current and

future skills needs, and drivers of change (Government Office for Science, 2016; OECD, 2019). The framework provides a structured way of thinking about the different dimensions of the labour market around skills supply and demand and the way in which they interact with one another (e.g. driving mismatches – shortages and gaps).

The Skills Audits have adopted a five-stage approach:

- **A rapid evidence review** involving a high-level review of evidence on skills issues across the creative industries and synthesising skills research in the different UK nations, including research from trade bodies and other industry stakeholders;
- **Secondary data analysis** of official, national sources of labour market information (or 'top-down' LMI) to provide a robust, consistent and comparable baseline of employment and skills issues;
- **New primary research** involving the Creative Employer Skills Survey (CESS), which included over 1,300 telephone interviews with establishments

with two or more employees to explore their perspectives on skills priorities and the skills system and talent pipeline to the industry;

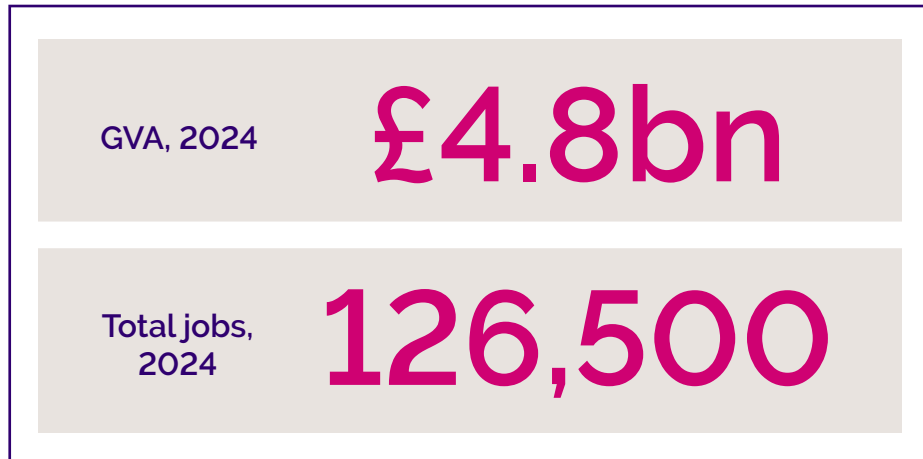
- **A series of stakeholder roundtables** to contextualise the findings and to identify and promote shared consensus on skills priorities, involving representatives from government, national and subnational creative agencies, trade bodies, unions, creative businesses, and major cultural organisations and training/education providers; and
- **Reporting and dissemination** to draw the findings together and use them to enhance policy developments.

The Skills Audits have been overseen by a Project Board comprised of the project funders and members of the research consortium. Day-to-day delivery has been shaped by a Steering Group including representatives from the governments across the UK, industry and training providers.

Figure 1: Developing the Creative Industries Skills Audits



## 2. Sector profile and performance



**Architecture is a globally competitive part of the UK's creative industries, contributing £4.8bn in GVA and 126,500 jobs in 2024. The UK is one of the world's largest exporters of architectural services by absolute value, ranking second only to Singapore in 2023 (BCG, 2025).**

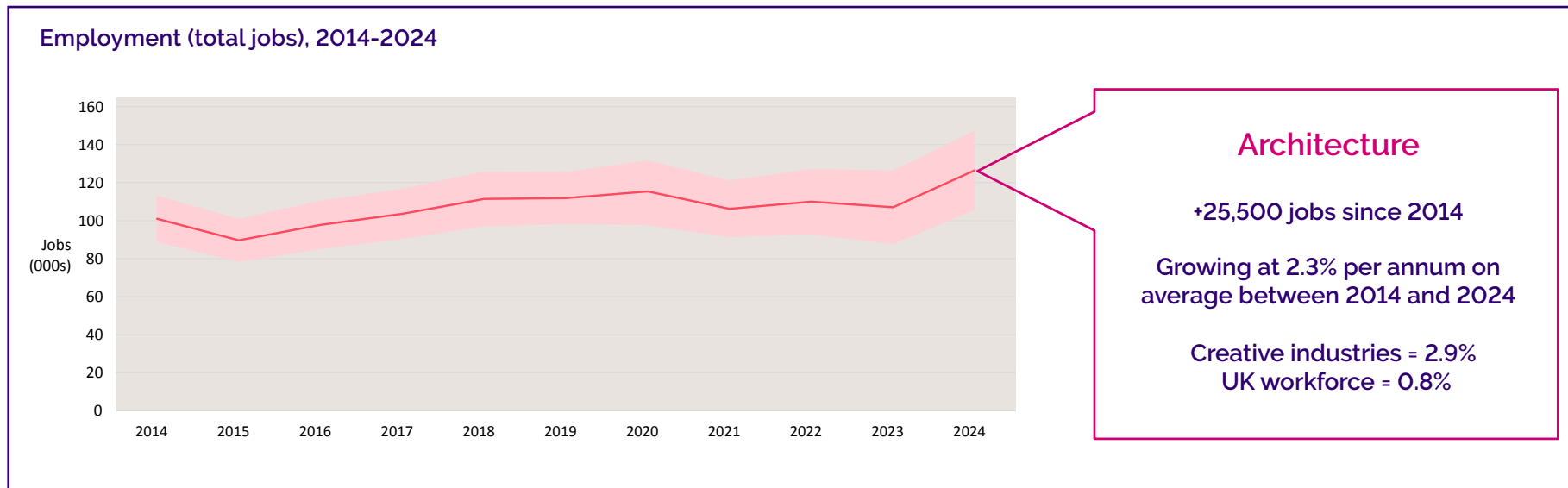
The sector includes architectural firms involved in the design of buildings, spaces and cities as well as businesses providing supporting services, landscape architecture, urban design, and town and city planning.

Between 2014 and 2024, the architecture sector witnessed average annual employment growth of 2.3%, with a period of decline from 2020 to 2021, likely in part reflecting the impacts of Covid-19 on construction both within the UK and internationally. While the sector's employment growth has been slower than the creative industries as a whole (2.9%), it has still increased faster than for the UK workforce overall (0.8%).

Despite recent challenges facing architecture firms and uneven employment growth, sector research and forecasts suggest a more positive outlook for future demand and growth in the sector (RIBA, 2024; CITB and Oxford Economics, 2025). In 2025, RIBA's benchmarking of RIBA chartered architectural practices found that total revenue had grown to approximately £5bn from just over £4bn in 2024 (RIBA, 2025b).

Parts of the UK architecture sector rely heavily on global talent. In the sector, 13% of workers are non-UK nationals, compared to 12% across the UK workforce. EU-15 member states account for the largest share of non-UK workers by nationality. However, the share of non-UK nationals increases to 17.8% for those working as architects (Maioli et al., 2025).

In addition, businesses in the architecture sector are overwhelmingly micro-firms with one to ten employees, accounting for 91.4% of all architecture businesses (DCMS, 2024).



Source: DCMS (2025b, 2025c)

Notes: GVA is at current prices. GVA data for 2024 is provisional. Employment is total filled jobs, including second jobs and including both employees and self-employed workers in all occupations. The shaded confidence band represents the plausible range around the central estimate (95% confidence interval). It reflects the uncertainty in the data: when the band widens, the estimate is less precise; when it narrows, the estimate is more reliable. Growth rates are compound annual growth rate (CAGR).

# 3. Jobs and skills

**As is typical across creative industries sub-sectors, and consistent with the project-based nature of work in the sector, levels of self-employment in architecture remained higher than the UK workforce average, at 27% compared to 14%.**

The architecture sector is also one of the most highly qualified in the creative industries and the wider economy: in 2025, 77% of those working in the sector held a degree or equivalent level qualification. This compares to 69% across the creative industries and 43% across the UK workforce as a whole.

Qualification levels are particularly high for regulated and chartered occupations in the sector, which is unsurprising given the qualification routes for architects and similar professionals (Holt-White et al., 2024). Research from the Landscape Institute has also highlighted that those working in landscape architecture and town planning are overwhelmingly educated to higher education level (Metro Dynamics, 2022).

These qualification levels are reflected in the specialised and high-skilled roles that comprise the key occupations in architecture. The most common occupations in 2025 were architects (22%), architectural technologists and planning officers (21%) and architectural technicians, which includes architectural assistants at Part 1 and Part 2 (6%) (source: Labour Force Survey 2023). The sector also includes technical and specialist roles, such as heritage officers and sustainability roles, as well as business functions, such as marketing, finance and management.

Rates of full-time work in the architecture sector are higher than the UK workforce average, and sector-led reports highlight issues with long working hours across the sector (RIBA, 2025c). While median annual gross pay is higher than the UK average, at £40,300 compared to £31,602 (DCMS, 2025e), research by RIBA has highlighted low pay relative to hours worked in architecture practices, particularly for Part 1 architectural assistants and those early in their career (RIBA, 2025c).

Participants in our Skills Audit roundtables further highlighted that comparatively low wages in the architecture sector relative to other professions has intensified issues with workforce retention, with one participant suggesting that many architects are moving to more lucrative (and less regulated) sectors such as interior design.

Inequalities of representation persisted within the architecture sector, with women, ethnic minority groups, disabled people and people from working-class backgrounds all under-represented compared to the UK workforce (see also Carey, Giles and O'Brien, 2023; Design Council, 2022; ARB, 2023). Sector research has found that dissatisfaction with pay and working conditions is higher among some of these groups (RIBA, 2025b).

Social inequalities in parts of the sector likely begin prior to work. For instance, a report for the Sutton Trust found that undergraduate architecture degrees attract a disproportionately large number of students from upper-middle-class backgrounds compared to the UK undergraduate student population (Holt-White et al., 2024).

Figure 3: Employment status of the workforce, 2022-2024

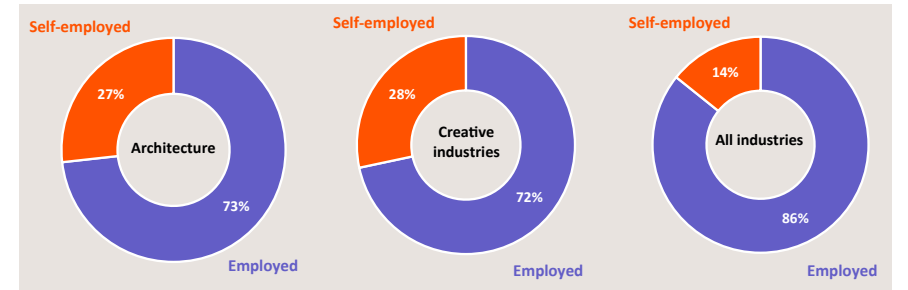


Figure 4: Workforce qualifications (% degree-qualified), 2022-2024

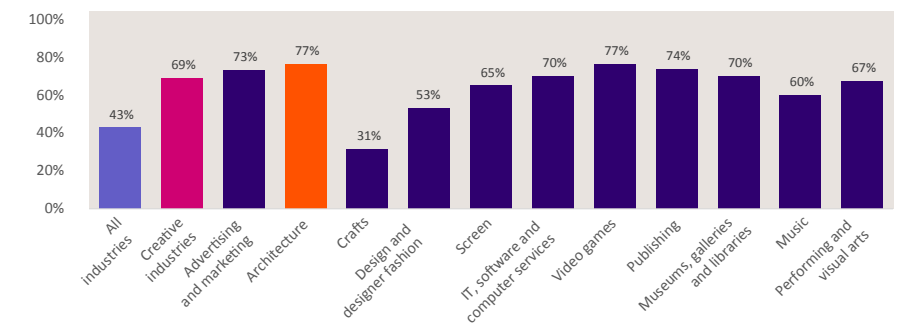
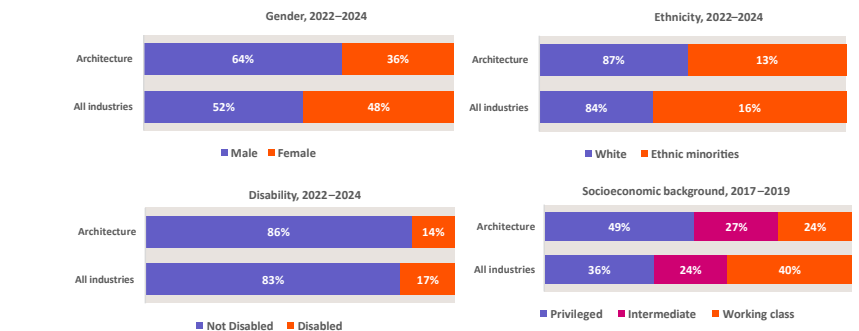


Figure 5: Workforce diversity



Source: Carey, Giles and O'Brien (2023); DCMS (2025a)

Notes: Data based on a three-year pooled sample from the Office for National Statistics Annual Population Survey. Data for socioeconomic background is from the Creative PEC Good Work Review – see Carey, Giles and O'Brien (2023) for further information on the definitions used.

# 4. Recruitment difficulties

**While employment growth has been uneven in the architecture sector in recent years, we find that levels of recruitment have been relatively stable over the past two years, with 63% of architecture employers recruiting in 2025 (including freelance and agency staff), compared to 65% across the creative industries.**

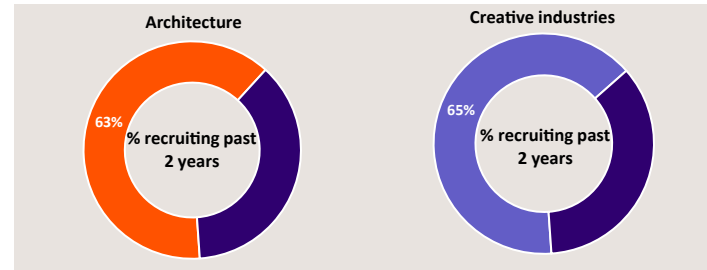
The most common recruitment methods architecture employers relied on were word of mouth (53%), online job platforms and websites (47%), professional networks (37%) and advertising on company websites (32%). Architecture relies on formal and informal networks and recruitment practices to an even greater degree than seen across all creative industries, which can reinforce inequalities of representation in the workforce (Carey, Giles and O'Brien, 2023).

When considering those vacancies that employers find hard to fill, we find similar, albeit high, levels to the creative industries average (35% vs 32%). The main causes of recruitment difficulties architecture employers reported for hard-to-fill vacancies in the survey are lack of required skills (80%), lack of required work experience (67%) and lack of required qualifications (37%). Each of these were reported to a higher degree than seen across all creative industries, with a particularly high proportion of employers reporting candidates lack required skills (see also ARB, 2021; Metro Dynamics, 2022).

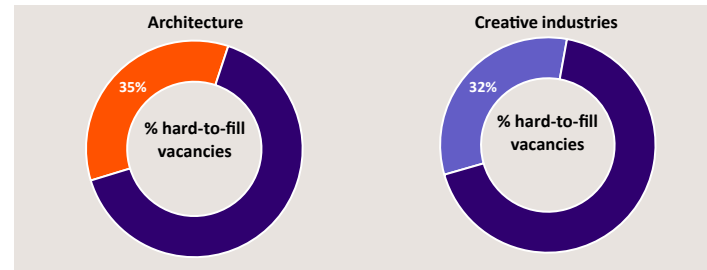
Roundtable participants and survey respondents also highlighted that recent slowdowns in construction have reduced labour mobility in the sector, with fewer people applying for new jobs. Others highlighted that comparatively low wages for architects are also resulting in skilled professionals leaving for other sectors (see also RIBA, 2025c).

**Figure 6: Hiring and recruitment difficulties, 2025**

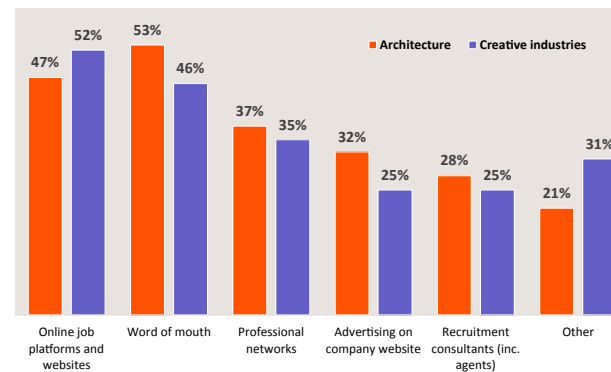
*Q: Has this site recruited anyone, including any paid employees, agency staff, and self-employed or freelance workers, in the past two years?*  
Base = all establishments (n = 104)



*Q: Did any of the vacancies you had at this site in the past two years prove hard to fill?*  
Base = establishments that have recruited in the past two years (n = 73)



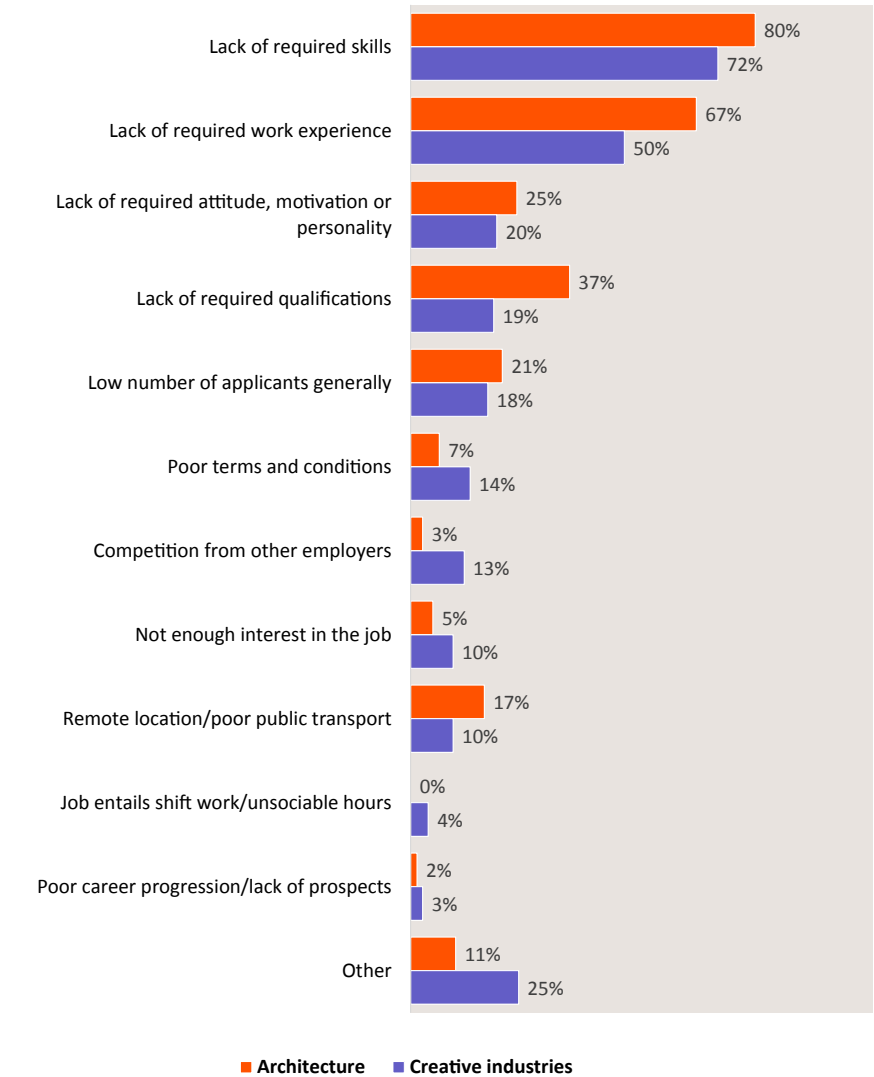
*Q: What recruitment methods do you use to fill vacancies at this site?*  
Base = establishments that have recruited in the past two years (n = 73)



Source: CESS 2025

**Figure 7: Main causes of recruitment difficulties, 2025**

*Q: What were the main causes of your vacancies for [occupation] being hard to fill?*  
Base = establishments with hard-to-fill vacancies (n = 29)



Source: CESS 2025

Notes: Responses are based on a small sample size. This may result in less precise estimates, which should be used with caution.

# 5. Skills shortages

The CESS 2025 finds that skills shortages were the main causes of hard-to-fill vacancies in the sector: **88% of architecture employers reported that their vacancies were hard to fill for skills reasons. Consistent with recent research by DCMS using the Employer Skills Survey 2022, this was higher than the levels for the creative industries, at 79%, suggesting that skills challenges are particularly acute in this part of the creative industries (see also DCMS, 2025f).**

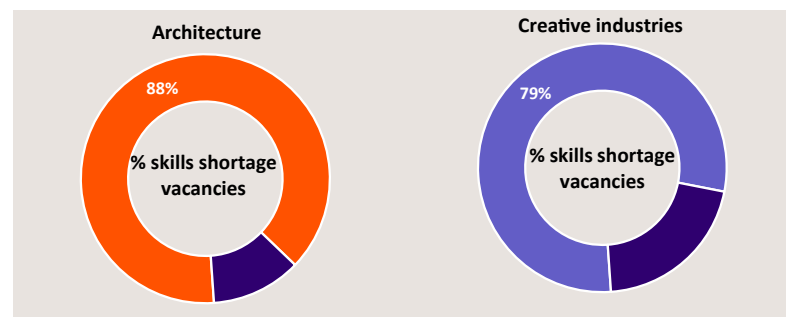
The level of seniority of hard-to-fill vacancies reported by architecture employers was experienced workers, at 32%, although this is below that reported across creative industries, at 42%. Architecture employers were also more likely than creative industries employers to report that the roles that were hard to fill were entry level or expert level.

Roundtable participants highlighted that this is often because those training to be architects – that is, architecture assistants undertaking their Part 1 and Part 2 qualifications – undertake training while in work and can potentially lack key skills from their education.

Architecture employers reported a relatively narrow range of occupations as being hard to fill. The most common were architects (33%), chartered architectural technologists (32%), architectural technicians (which includes Part 1 and Part 2 architectural assistants) (17%) and CAD, drawing and architectural technicians (16%). Alongside this, we also see other specialist roles featuring on the list, including civil engineers, heritage officers and urban designers, as well as some business support functions, such as financial accountants and marketing managers.

**Figure 8: Hard-to-fill vacancies caused by skills shortages, 2025**

Q: What were the main causes of your vacancies for [occupation] being hard to fill? = Lack of applicants with required skills, qualifications or experience  
Base = establishments with hard-to-fill vacancies (n = 29)

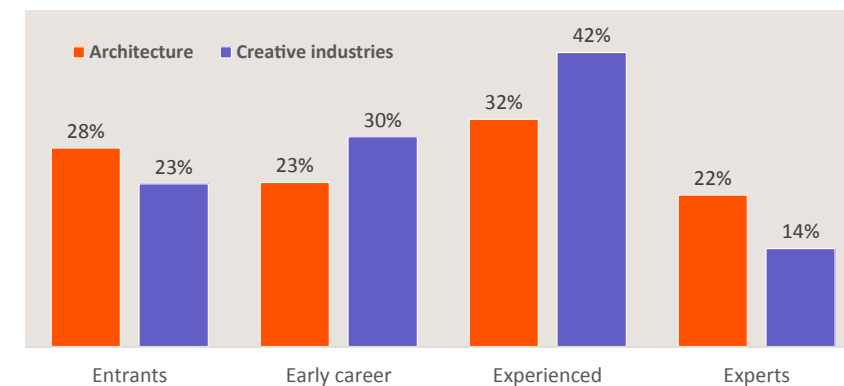


Source: CESS, 2025

Estimates are based on a small sample size. This may result in less precise estimates, which should be used with caution.

**Figure 9: Seniority of roles with skills shortages, 2025**

Q: How would you describe the level of experience or seniority of the candidates sought for [skills shortage occupation] vacancies?  
Base = establishments with skills shortage vacancies (n = 27)

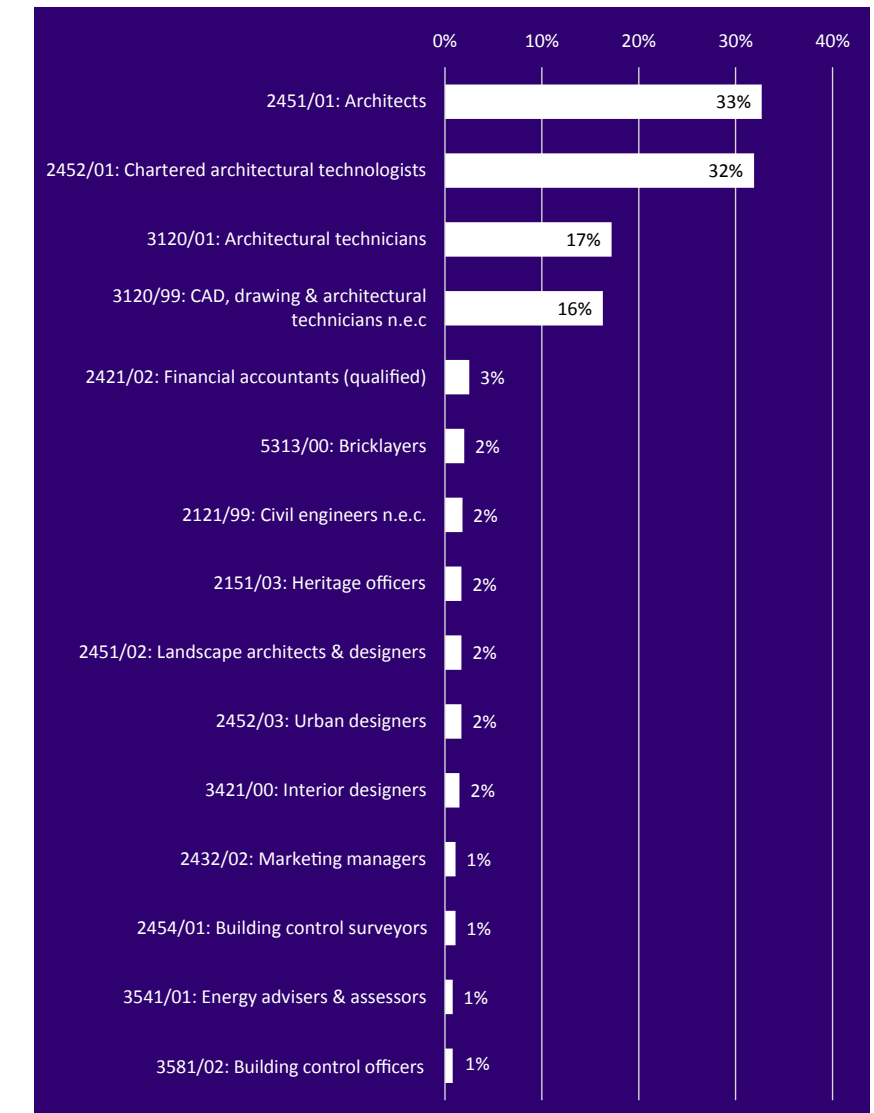


Source: CESS 2025

Notes: Estimates are based on a small sample size. This may result in less precise estimates, which should be used with caution.

**Figure 10: Hard-to-fill occupations (six-digit Standard Occupational Classification [SOC]), 2025**

Q: For which specific occupations did vacancies at this site prove hard to fill?  
Top fifteen occupations cited. Base = establishments with hard-to-fill vacancies (n = 29)



Source: CESS 2025

Notes: Estimates are based on a small sample size. This may result in less precise estimates, which should be used with caution. n.e.c. Not Elsewhere Classified

## 5. Skills shortages (continued)

The CESS has also sought to understand the main specialist or technical skills that architecture employers struggle to obtain from applicants. As part of this, the Skills Audit focuses on digital skills shortages, given acute challenges for the creative industries in accessing digital skills – especially advanced or specialist skills (Giles, Carey and O'Brien, 2025) – and the challenges for the architecture sector (e.g. see RIBA, 2025a; ARB, 2021).

The CESS found that a smaller share of architecture firms reported that there were no digital skills lacking among prospective applicants, at 48% compared to 55% for the creative industries, suggesting digital skills shortages are a particular challenge for the sector.

Overwhelmingly in the architecture sector, the most common digital skills lacking were in specialist software/hardware/systems (44%), followed by other IT skills (28%) and graphic design and design engineering (9%).

Respondents and roundtable participants highlighted skills in specialist software, including CAD and BIM software (e.g. Autodesk Revit and Graphisoft Archicad), and knowledge of coding and programming languages (e.g. C++ and Python) and Adobe Creative Cloud (see also ARB, 2021). Research by RIBA has also highlighted growing demand for advanced skills in parametric modelling as well as building simulation, with regular updates to software meaning candidates' skills can quickly become out of date (RIBA, 2025a).

Architecture employers highlight a range of further specialist skills shortages. Survey respondents and roundtable participants highlighted candidate skills shortages in understanding and applying new legislation, building regulations and guidance, such as the Building Safety Act or legislation and regulations associated with biodiversity net gain (ARB, 2021). Others highlighted skills shortages in applying health and safety guidance and requirements as well as in building and contract management and procurement (ARB, 2021).

Alongside these, roundtable participants highlighted skills shortages related to working with heritage buildings, be it in understanding heritage construction techniques or how to suitably adapt and retrofit historic properties.

**Figure 11: Specialist skills shortages, 2025**

*Q: Have you found any specialist skills or knowledge needed to perform the role difficult to obtain from applicants for [skills shortage occupation] vacancies? If so, what specific specialist skills or knowledge have been lacking?*

Base = establishments with skills shortage vacancies (n = 27)



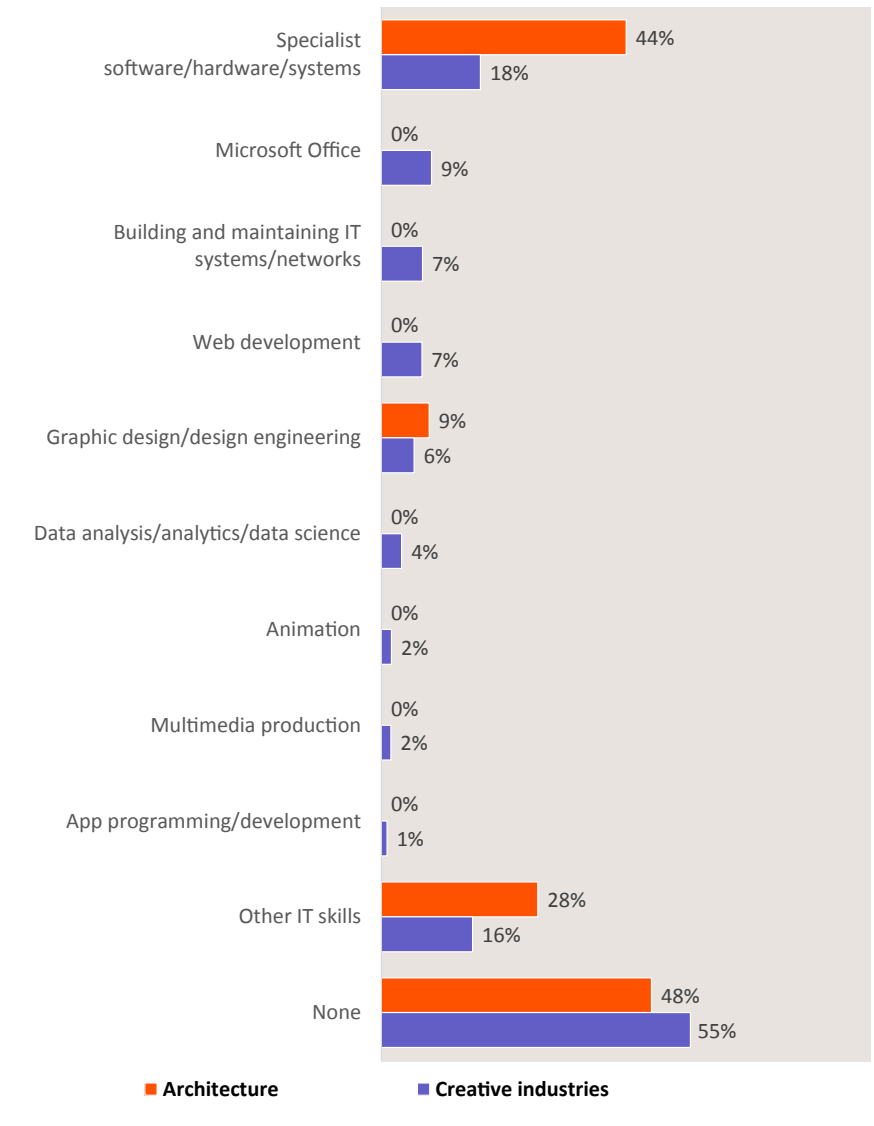
Source: CESS 2025

Notes: Estimates are based on a small sample size. This may result in less precise estimates, which should be used with caution.

**Figure 12: Digital skills shortages, 2025**

*Q: Have you found any basic or advanced IT skills difficult to obtain from applicants for [skills shortage occupation] vacancies. If so, what specific IT skills have been lacking?*

Base = establishments with skills shortage vacancies (n = 27)



Source: CESS 2025

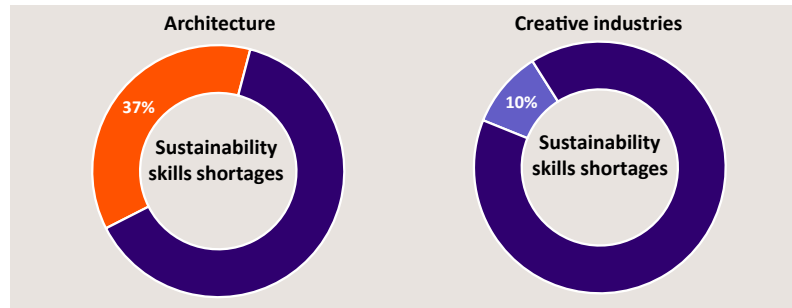
Notes: Estimates are based on a small sample size. This may result in less precise estimates, which should be used with caution.

## 5. Skills shortages (continued)

**Figure 13: Sustainability skills shortages, 2025**

*Q: Were any of the skills you found difficult to obtain from applicants for [skills shortage occupation] vacancies related to wanting to be more sustainable or carbon-neutral? If so, what specific sustainability or 'green' skills have been lacking?*

Base = establishments with skills shortage vacancies (n = 27)



Source: CESS 2025

Notes: Responses are based on a small sample size. This may result in less precise estimates, which should be used with caution.

In an increasingly automated modern economy characterised by constant disruption, transversal or 'core' skills are also key. In line with previous research on the creative industries (Giles, Carey and O'Brien, 2025), the core skills most difficult to find for architecture employers were working with others (42%), leadership (35%), planning and organising (30%) and speaking (29%).

While this reflects similar skills shortages found across the creative industries, there is important variation. Architecture employers were more likely to report skills shortages in the areas highlighted above. For instance, architecture employers were almost four times more likely to report shortages around leadership skills. Roundtable participants suggested that this may reflect the typical progression route of architectural practitioners into people management roles without the associated training.

The CESS also provides information about difficulties finding more sustainable or carbon-neutral skills. The levels found for architecture were

almost four times higher than those found for the creative industries, at 37% compared to 10%.

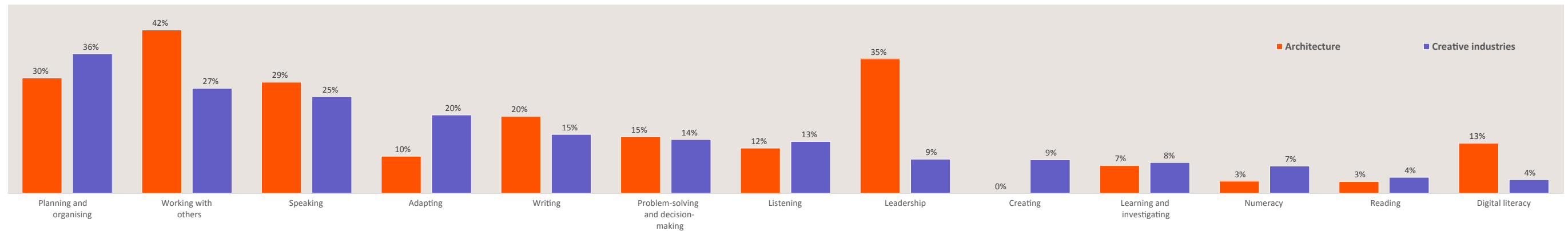
This is consistent with the relatively high levels of sustainable innovation found in the architecture sector (Nana-Cheraa and Roper, 2025) and the increase in client demand as well as regulation and guidance around sustainable planning and architecture through recent legislation like the Environment Act 2021. Research commissioned by both the Landscape Institute and the Architects Registration Board has underlined 'green' skills challenges for the sector, which roundtable participants suggested disproportionately affect smaller firms (ARB, 2021; Metro Dynamics, 2022).

Consistent with broader research (ARB, 2021; Metro Dynamics, 2022), survey respondents highlighted specific sustainability skills shortages, including carbon calculation and Passivhaus as well as understanding of certifications, like BREEAM, and knowledge of life-cycle assessment and 'cradle to grave' design principles.

**Figure 14: Core skills shortages, 2025**

*Q: Have you found any core or 'transversal' skills difficult to obtain from applicants for [skills shortage occupation] vacancies. If so, what specific core or transversal skills have been lacking?*

Base = establishments with skills shortage vacancies (n=27)



Source: CESS 2025

Notes: Responses are based on a small sample size. This may result in less precise estimates, which should be used with caution.

# 6. Skills gaps

**When considering skills deficiencies in their current workforce, 41% of architecture employers reported skills gaps, higher than the creative industries average at 32%. While levels of skills gaps appear to be higher than those seen in previous surveys, such as the Employer Skills Survey 2022, which found that 9.4% of employers reported gaps (Giles, Carey and O'Brien, 2025), this potentially reflects the broader assessment of the workforce in the Skills Audits, which covers self-employed and freelance workers.**

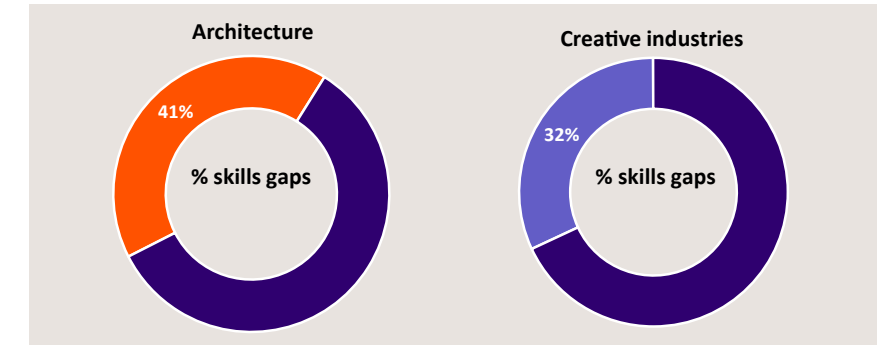
According to the CESS, we see a variety of factors contributing to skills gaps in the sector. The most common factors in 2025 were 'transitory' issues, which will likely be addressed during employment, such as the individual being new to their role (42%) or their training being only partially complete (34%). In addition, survey respondents and roundtable participants highlighted that workers need to develop practical experience in their roles and on construction sites. They also highlighted a potential mismatch between skills learnt in education and the needs of industry.

Other causes reflect the high level of innovation in the sector and reliance on regularly updated software and digital tools: the introduction of new working practices (19%) and the development of new products and services (19%). As with skills shortages, the introduction of new digital technologies (17%) was seen as an important driver of skills gaps (see RIBA, 2025a).

**Figure 15: Skills gaps, 2025**

*Q: Thinking about your current workforce (including employees, agency staff, self-employed or freelance workers), approximately what percentage would you regard as fully proficient at their job? = <100%.*

Base = all establishments (n = 104)

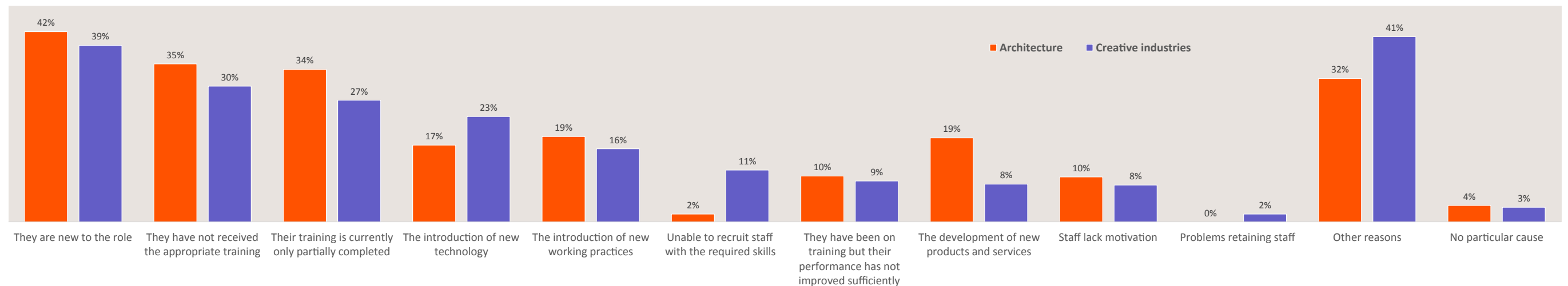


Source: CESS 2025

**Figure 16: Main causes of skills gaps, 2025**

*Q: What are the main causes of staff in [skills gap occupation] not being fully proficient at their job?*

Base = establishments with skills gaps (n = 45)



Source: CESS 2025

## 6. Skills gaps (continued)

When considering the levels of seniority of staff working in roles with skills gaps, we see that, compared to creative industries employers, architecture employers were slightly more likely to report gaps in early-career roles (36% vs 32%). This may reflect the role of on-the-job training in securing professional qualifications in architecture, although roundtable participants and survey respondents also highlighted the need for workers to build experience on construction sites and with clients.

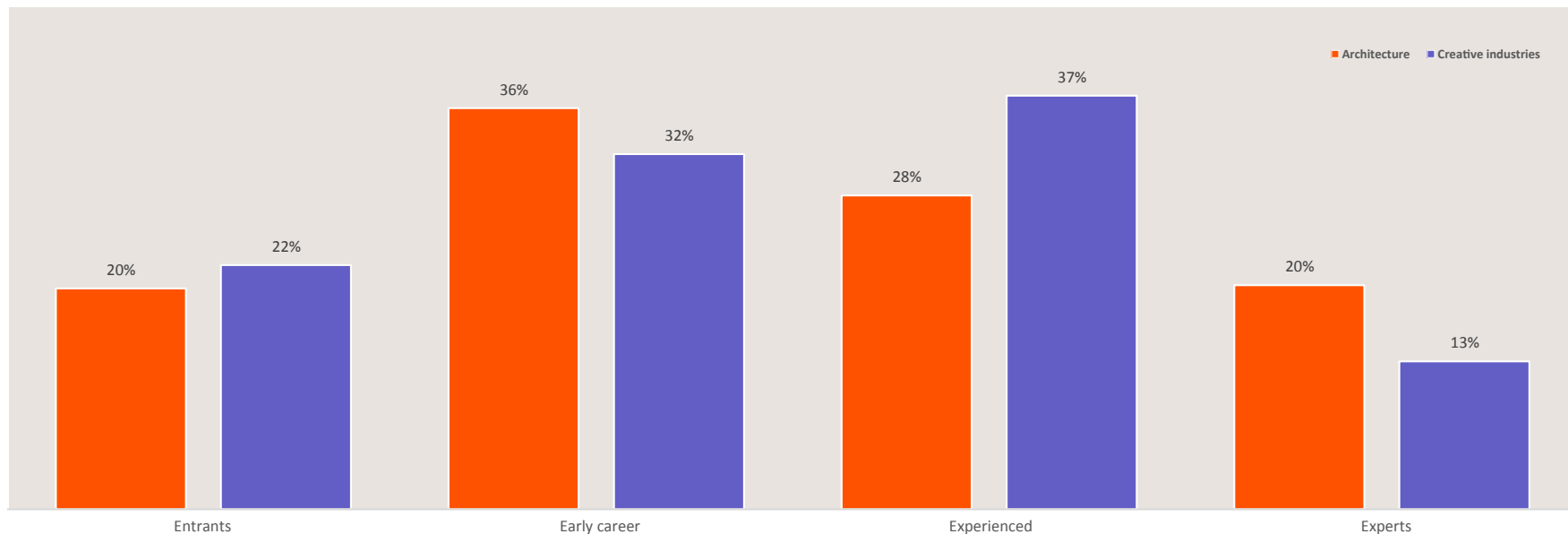
Turning to the occupations employers reported as being most likely to have skills gaps (where the postholder is not fully proficient for their role), architectural technicians (25%) is the most common category. For the purposes of this survey, this category includes architectural assistants and

those who are not yet fully qualified (e.g. Part 1 architects). This is followed by qualified architects (11%). In addition, we also see marketing associate professionals (6%), which refers to roles in marketing and communications teams, technical roles such as BIM and CAD technicians (4%), and managers and directors in the creative industries (5%).

As with skills shortages, the CESS also examines the main skills architecture employers report to be missing or lacking in full proficiency in their existing workforce. This points to the main specialist skills or knowledge to perform the role that employers identify as a skills gap. Again, a key priority has been to understand digital skills gaps given their critical importance to the creative industries and architecture sector (RIBA, 2025a; ARB, 2021).

**Figure 17: Seniority of staff with skills deficiencies, 2025**

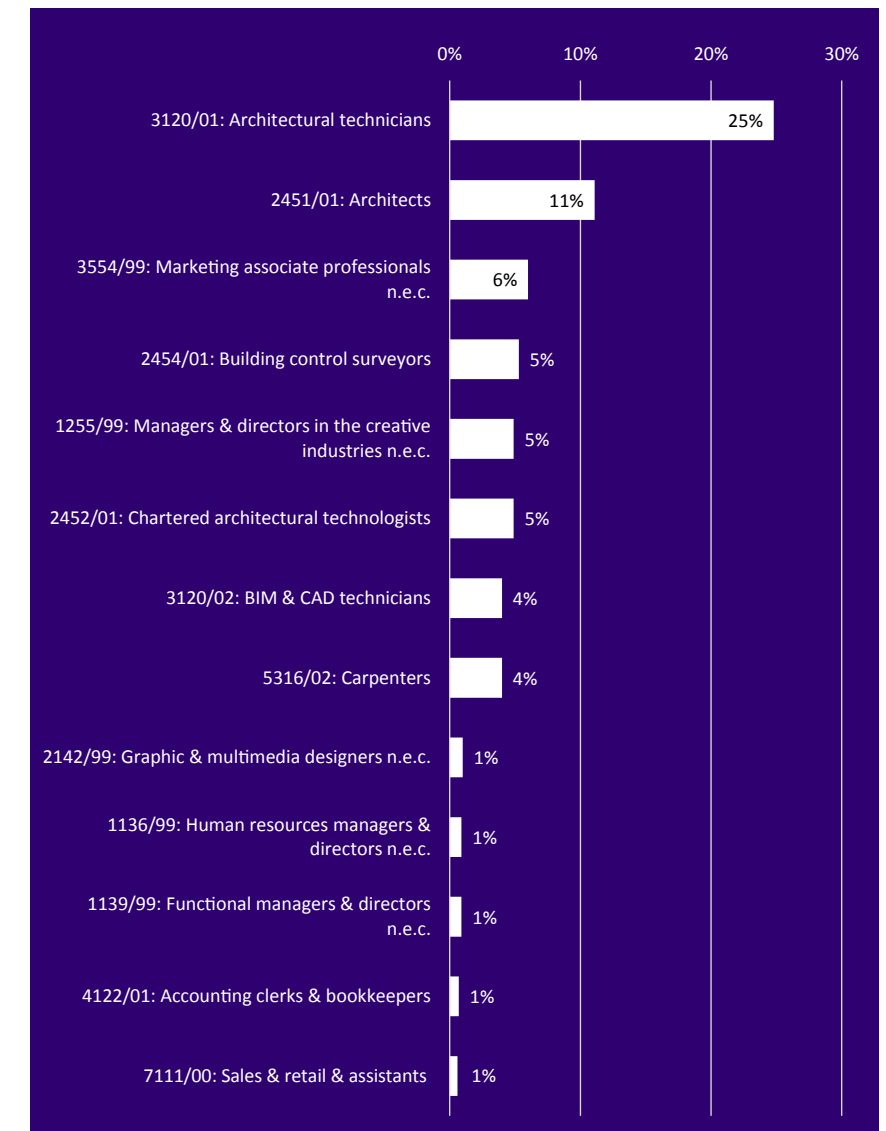
*Q: How would you describe the level of experience or seniority of the staff working as (skills gap occupation)?*  
Base = establishments with skills gaps (n=45)



Source: CESS 2025

**Figure 18: Skills gap occupations, 2025**

*Q: In which specific occupations are staff not fully proficient at their role?*  
Top fifteen occupations cited. Base = establishments with skills gaps (n = 45)



Source: CESS 2025

Notes: n.e.c.: not elsewhere classified

## 6. Skills gaps (continued)

In contrast to our findings on skills shortages, architecture employers were more likely than creative industries employers to report that skills gap occupations had no digital skills deficiencies (72% compared to 67%), suggesting that some digital skills shortages may be transitory and addressed through upskilling once workers are in role.

The most common digital skills gaps reported for architecture are specialist software/hardware/systems skills (19%) – which includes CAD and BIM software – Microsoft Office skills (11%), graphic design/design engineering skills (6%) and other IT skills (6%).

Digital skills gaps are a significant concern for the sector, with research from the Architects Registration Board finding that many workers do not feel confident that they have the requisite digital skills (ARB, 2021). In addition, the use of AI has increased across the architecture sector in recent years (RIBA, 2025a), with a survey of almost 500 architects by RIBA in 2025 finding that 60% were using AI in their work in areas including design, bid creation, project management, report writing and environmental sustainability analysis (RIBA, 2025a).

As with specialist skills shortages, employers responding to the CESS also highlighted specific technical skills and knowledge where full proficiency is lacking. These include knowledge of conservation and construction techniques, subject-matter knowledge around historic buildings, and client management, communication and specialist project management skills (see also ARB, 2021).

**Figure 19: Specialist skills gaps, 2025**

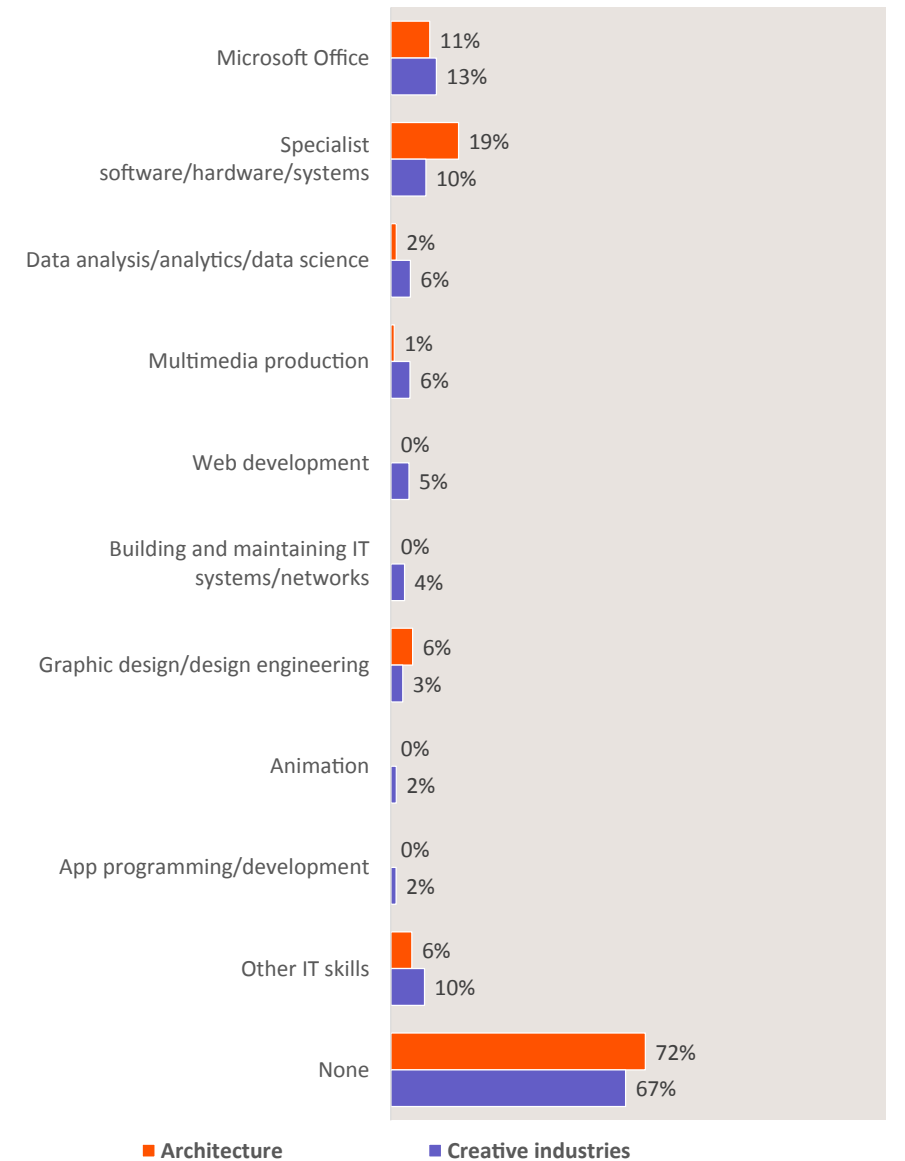
*Q: Do any of your staff working as [skills gap occupation] lack full proficiency in terms of specialist skills or knowledge needed to perform the role? If so, what specific specialist skills or knowledge are they lacking full proficiency in?*  
Base = establishments with skills gaps (n = 45)



Source: CESS 2025

**Figure 20: Digital skills gaps, 2025**

*Q: Do any of your staff working as [skills gap occupation] lack full proficiency in terms of basic or advanced IT skills? If so, what specific IT skills do you feel need improving?*  
Base = establishments with skills gaps (n = 45)



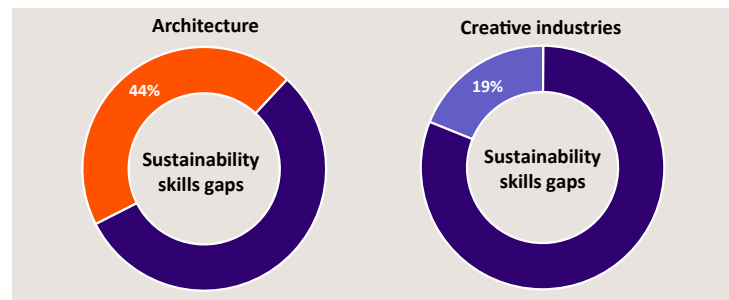
Source: CESS 2025

## 6. Skills gaps (continued)

**Figure 21: Sustainability skills gaps, 2025**

*Q: Were any of the skills you mentioned needing improving among staff working as [skills gap occupation] related to wanting to be more sustainable or carbon-neutral? If so, what specific sustainability or 'green' skills are they lacking full proficiency in?*

Base = establishments with skills gaps (n = 45)



Across most categories, transversal or core skills were found to be less deficient in the architecture workforce compared to the creative industries workforce in the CESS 2025. The most commonly cited skills gaps were in planning and organising (17%), working with others (10%), writing (9%), problem-solving and decision-making (8%) and leadership (7%). Team working has been highlighted as a particular gap in sector research (ARB, 2021), and our roundtable participants suggested that this is particularly acute for entrant and early-career roles due to lack of workplace experience.

As in the case of skills shortages, the CESS also asks architecture employers to consider skills deficiencies in their existing workforce related to sustainability and being carbon neutral. Again, architecture employers were significantly more likely to report issues here: 44% of architecture employers reported sustainability skills gaps, over twice the rate reported across the creative industries.

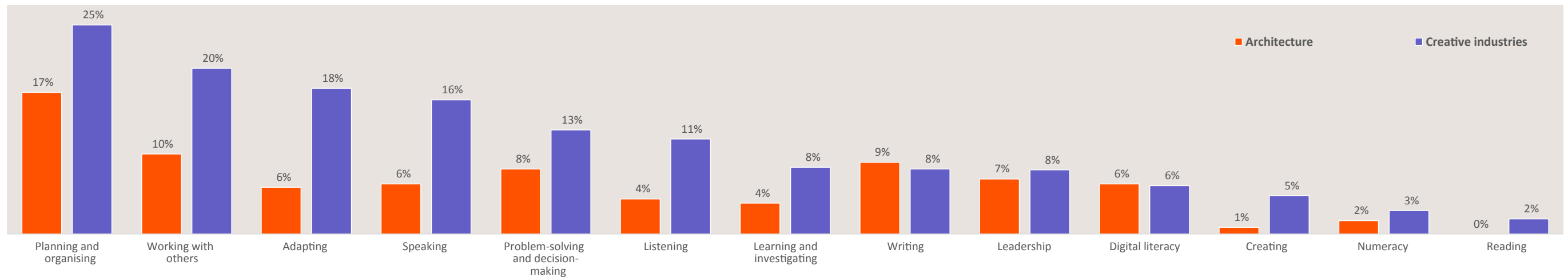
Specific sustainability skills gaps highlighted mirror those found for skills shortages, including carbon calculation, biodiversity net gain and the ability to complete biodiversity matrices; knowledge of energy efficiency; sustainable design principles; recycling and waste management; and technical knowledge of sustainable building materials.

While the CESS provides an employer perspective on skills gaps, wider research has explored the extent to which workers in the sector feel they are proficient in 'green' or 'sustainable' design. Research from the Design Council, underpinned by a survey of over 1,000 designers, found that 47% of those working in architecture, interior design, urban design or landscape design do not feel proficient in sustainable or environmental design (Design Council, 2024). Similarly, the Landscape Institute has reported skills gaps in the landscape sector around conservation, sustainability, biodiversity net gain and use of relevant software (Metro Dynamics, 2022).

**Figure 22: Core skills gaps, 2025**

*Q: Do any of your staff working as [skills gap occupation] lack full proficiency in terms of core or 'transversal' skills? If so, what specific core or transversal skills do you feel need improving?*

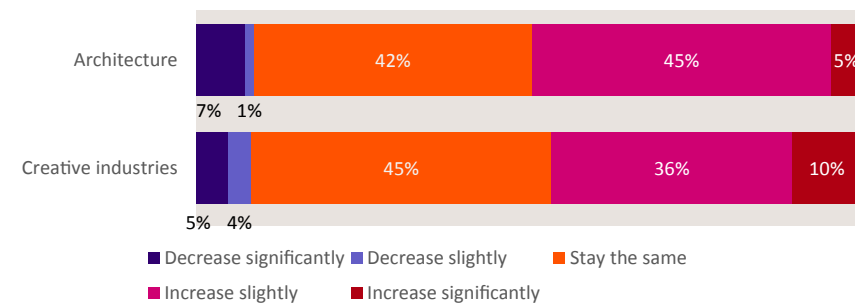
Base = establishments with skills gaps (n = 45)



# 7. Future jobs and skills needs

**Figure 23: Employer expectations for employment in the next three to five years, 2025**

*Q: Over the next three to five years, how do you expect the number of staff (including employees, agency staff, self-employed or freelance workers) at this site to change?*  
Base = all establishments (n = 104)



Source: CESS 2025

**The CESS provides an indication of employers' expectations for the future and whether they anticipate a need to increase levels of employment and/or upskill their workforce in the next three to five years. This survey points to a higher degree of ambition, especially in the architecture sector, than has been found previous research, potentially reflecting the longer time horizons considered (Giles, Carey and O'Brien, 2025).**

Half of architecture employers expected to slightly increase or significantly increase their number of staff (including freelancers and agency staff) compared to 46% across the creative industries, consistent with some industry forecasts which suggest demand for architects will grow over the next four years (CITB and Oxford Economics, 2025).

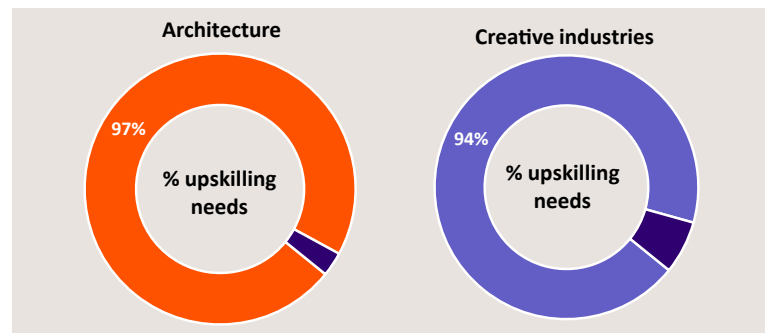
In addition, the vast majority of architecture employers (97%) that expect to grow staff numbers also anticipate a need to upgrade the skills of their workforce over the next three to five years.

A closer examination of the main drivers for upskilling needs show high proportions of architecture employers reporting introduction of new working practices (88%) and new legislative and regulatory requirements (84%), with roundtable participants highlighting the Building Safety Act 2022 and the Planning and Infrastructure Act 2025 as major drivers. Alongside this, the UK government's target to build 1.5 million homes in the current Parliament is expected to increase demand (Skills England, 2024). Foresight work from RIBA has also highlighted several megatrends driving future demand and skills needs, including global demographic shifts with ageing populations requiring new design solutions, climate change and associated regulation, and new digital technologies (RIBA, 2024).

Consistent with this, other key drivers were development of new products and services (80%) and introduction of new technologies or equipment (79%), with roundtable participants and research highlighting increased use of advanced digital and AI tools in the sector (RIBA, 2025b).

**Figure 24: Employer expectations for upskilling in next three to five years, 2025**

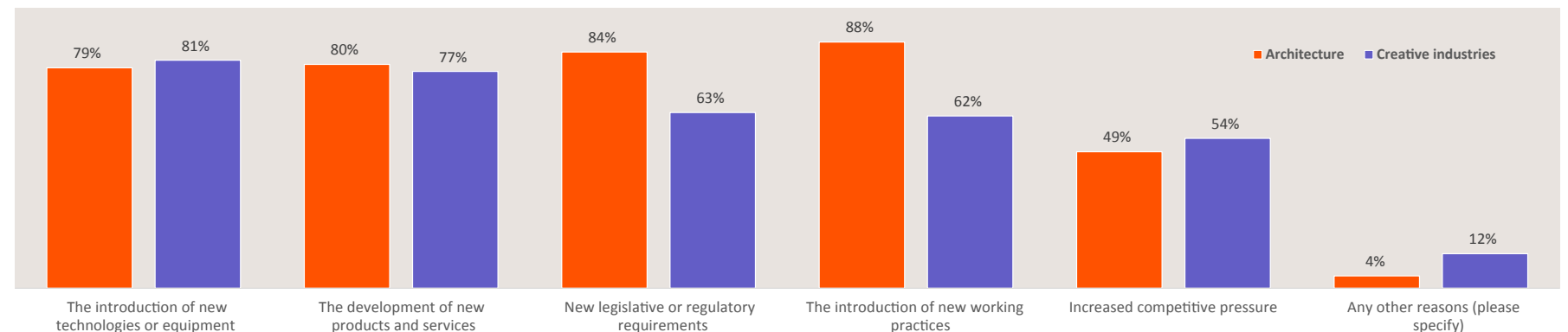
*Q: Over the next three to five years, do you expect that any staff at this site will need to acquire new skills or knowledge? ≠ 'None'*  
Base = establishments expecting to increase staff numbers in future (n = 52)



Source: CESS 2025

**Figure 25: Main drivers of upskilling needs, 2025**

*Q: Over the next three to five years, do you expect that any staff at this site will need to acquire new skills or knowledge as a result of the following factors?*  
Base = establishments with upskilling needs (n = 52)



Source: CESS 2025

## 7. Future jobs and skills needs (continued)

The CESS enables a more detailed look at the nature of roles that employers expect to increase in demand over the next three to five years.

Figure 26 considers the existing roles likely to grow and increase in demand in future. The roles most commonly identified were architects (63%) and architectural technicians (55%), highlighting the continued importance placed on these core creative occupations for the future workforce.

However, we also see a range of technical and management roles on the list, including interior designers, BIM and CAD technicians, and managers and directors.

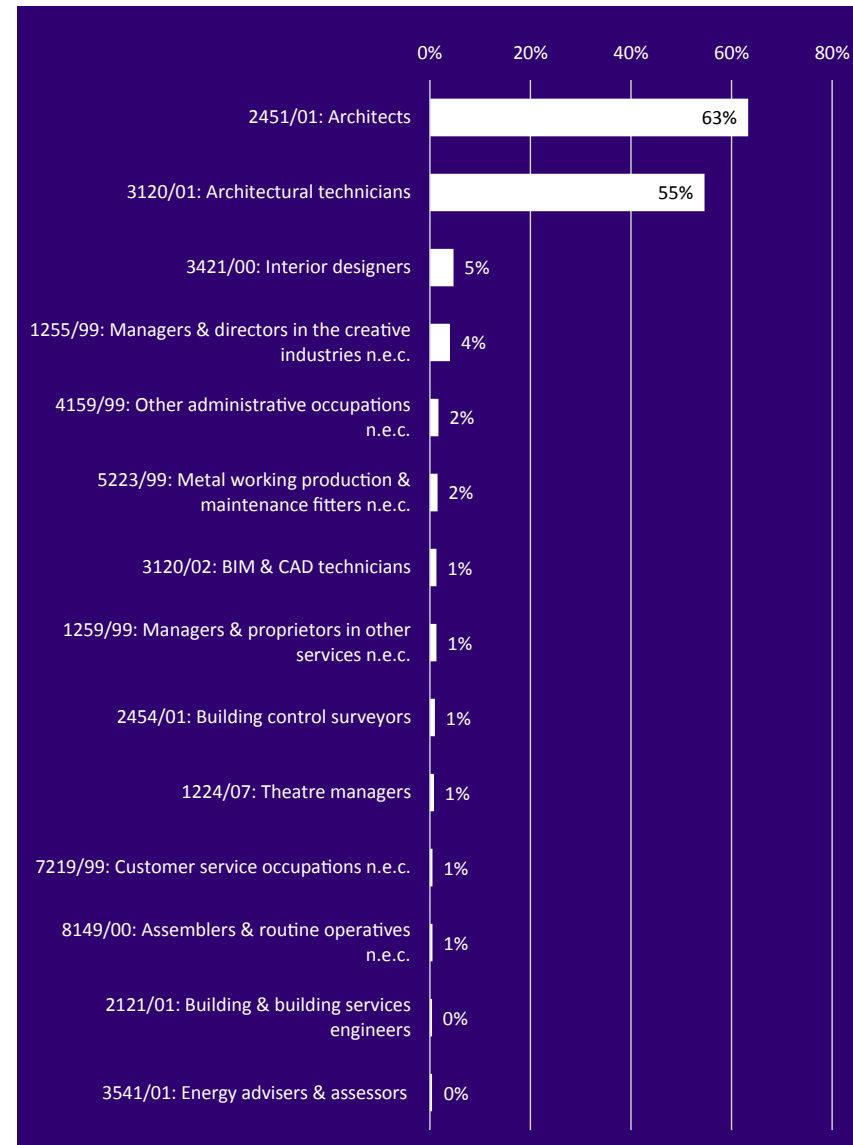
The CESS also asks which occupations employers anticipate staff will have the greatest need to acquire new knowledge or skills for. We find limited variation here to current skills shortages and skills gaps, with architects (58%) and architectural technicians (which includes architectural assistants and those not yet fully qualified, such as Part 1s) (26%) most common.

However, we can also see the importance placed on specialist technical and digital roles, including chartered architectural technologists (5%) and computer games designers (3%). These likely reflect the increasing adoption of advanced digital tools and techniques in architectural services and growing client demand for them, as well as the rise of architecture practices developing new technologies for the sector using AI, augmented reality (AR) and virtual reality (VR) (RIBA, 2025c).

**Figure 26: Occupations in demand in future, 2025**

*Q: In which specific occupations do you expect the number of staff to increase over the next three to five years?*

Top fifteen occupations cited. Base = establishments that expect staff numbers to increase [n = 48]



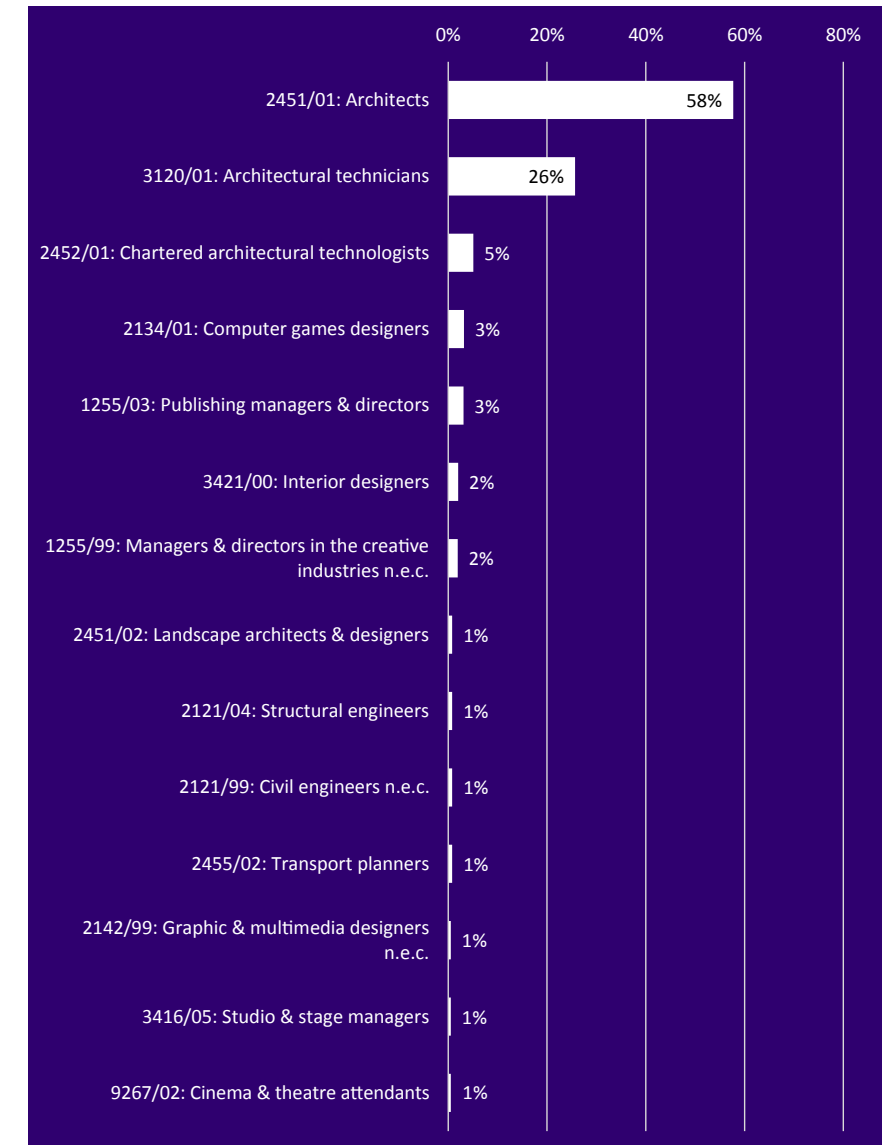
Source: CESS 2025

n.e.c. Not Elsewhere Classified

**Figure 27: Occupations with upskilling needs, 2025**

*Q: In which specific occupations do you expect staff to have the greatest need to acquire new skills or knowledge over the next three to five years?*

Top fifteen occupations cited. Base = establishments with upskilling needs [n = 50]



Source: CESS 2025

n.e.c. Not Elsewhere Classified

## 7. Future jobs and skills needs (continued)

Given the specialised and technical nature of the occupations employers anticipate future demand for, it is unsurprising that the CESS also finds a range of future technical and specialist skills needs reported by employers.

As for current skills shortages and skills gaps, a critical challenge architecture employers anticipated lies in keeping digital skills up to date, especially advanced and specialist skills. This is especially the case for the architecture sector, with the most commonly reported future digital skills needs being specialist software/hardware/systems skills (40%), other IT skills (26%) and graphic design/design engineering skills (20%).

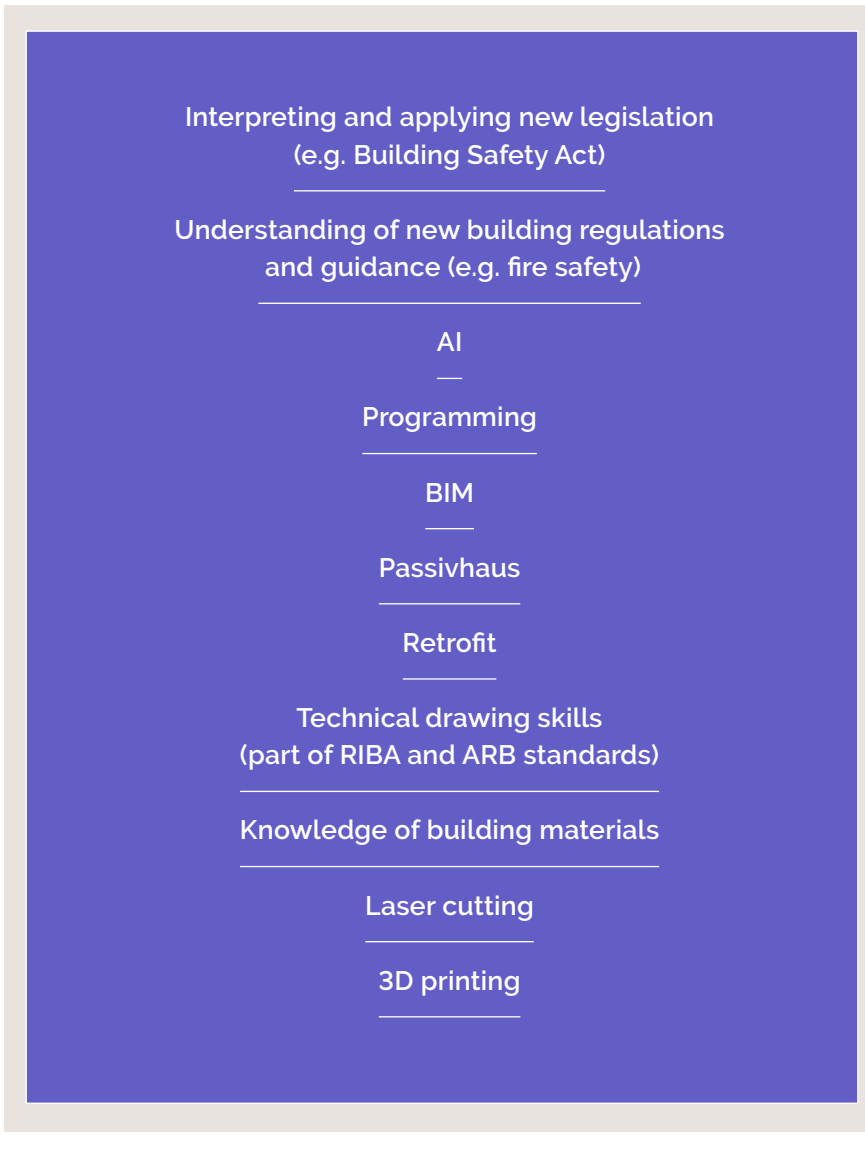
Employers highlighted similar specific future needs to present ones, with a key focus on upskilling in specialist CAD and BIM software packages (e.g. Autodesk Revit and AutoCAD), rendering and graphics packages (e.g. Lumion) as well as management software (e.g. Timeflow). Respondents also highlighted the need to develop familiarity with new models – such as the Home Energy Model, expected next year – and skills in the use of VR and AR applications.

In addition, respondents and roundtable participants highlighted a need to develop competence in using AI across design, project management and business processes. In addition, and consistent with broader research, roundtable participants highlighted the need for greater understanding of ethical use of AI, particularly in small businesses, with a recent RIBA survey of 500 architecture professionals finding that 47% of respondents expect their practice to have an AI policy in the next two years (RIBA, 2025b).

**Figure 28: Specialist skills needs in next three to five years, 2025**

*Q: Which, if any, specialist skills or knowledge do you feel will need improving over the next three to five years?*

Base = establishments with upskilling needs (n = 50)

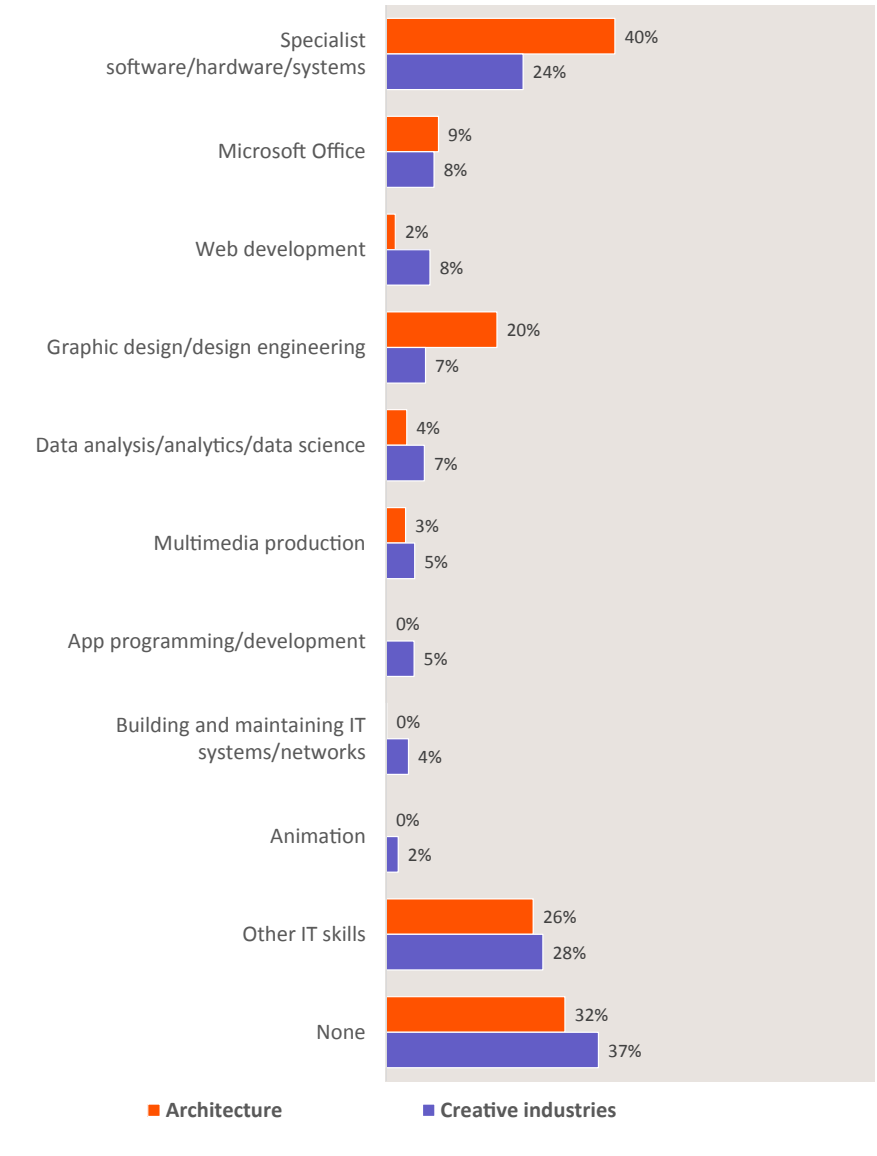


Source: CESS 2025

**Figure 29: Digital skills needs in next three to five years, 2025**

*Q: Do you expect staff will need to acquire new IT skills over the next three to five years? If so, which specific IT skills do you feel will need improving?*

Base = establishments with upskilling needs (n = 50)



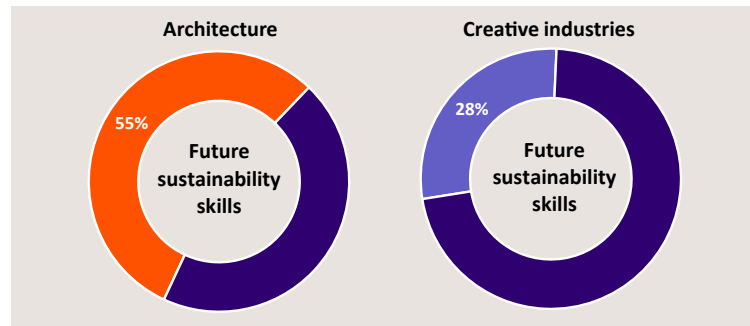
Source: CESS 2025

## 7. Future jobs and skills needs (continued)

**Figure 30: Sustainability skills needs in next three to five years, 2025**

*Q: Are any of the skills you expect staff will need to acquire over the next three to five years related to wanting to be more sustainable or carbon-neutral? If so, what specific sustainability or 'green' skills will need improving?*

Base = establishments with upskilling needs (n = 50)



Alongside technical and specialist skills needs, architecture employers also reported that transversal skills will need improving over the next three to five years.

The CESS found that architecture employers tend to report similar transversal skills in need of improvement to those reported by creative industries employers, albeit generally at higher rates. The most common skills highlighted by architecture employers were working with others (31%), planning and organising (30%) and speaking (18%). Roundtable participants also highlighted the need to develop commercial awareness skills across businesses.

As previously discussed, climate change is a significant driver of change across the architecture sector (Design Council, 2025; Metro Dynamics, 2022; RIBA, 2024), and it is therefore unsurprising to see even higher proportions of architecture employers that expect to grow also anticipate future upskilling needs with respect to sustainability: 55% of architecture employers reported this, almost twice the rate found for the creative industries (28%).

Specific future skills needs reported are similar to those highlighted by employers in relation to present skills challenges: knowledge of carbon calculation, biodiversity net gain matrices, sustainable design principles, Passivhaus and waste management as well as understanding of upcoming legislation and sustainability standards, like Leadership in Energy and Environmental Design (LEED) and BREEAM.

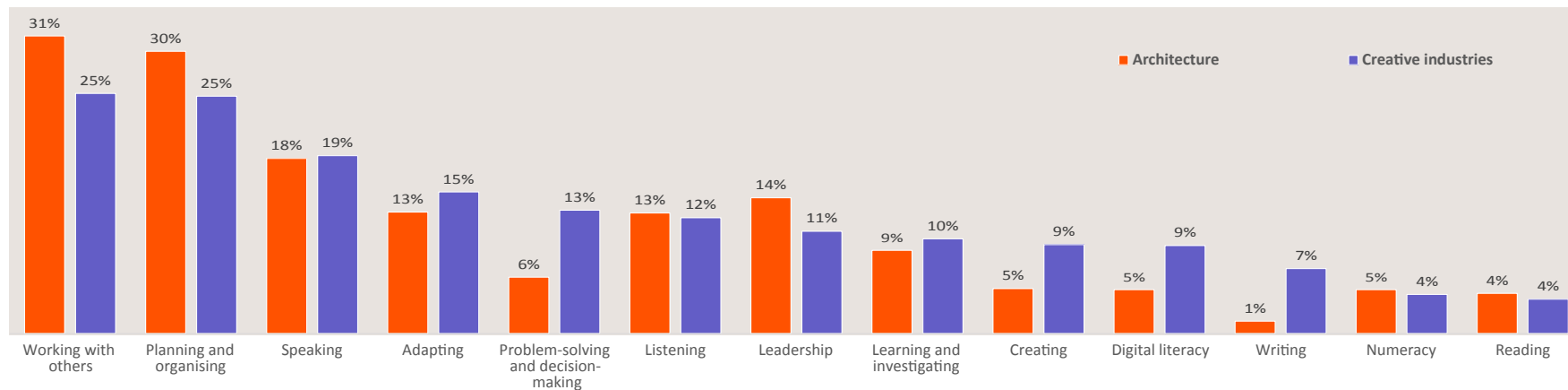
Previous research has also highlighted the growing use of new digital technologies like AI to deliver sustainable designs, such as through advanced digital modelling techniques and environmental simulations, suggesting that there may be a growing demand for multiskilled workers in the future (RIBA, 2025a).

More broadly, roundtable participants highlighted significant future skills needs related to knowledge and interpretation of building regulation and guidance, given their increasing complexity, as well as new legislation such as the UK Government's Planning and Infrastructure Act 2025.

**Figure 31: Core skills needs in next three to five years, 2025**

*Q: Which, if any, core or 'transversal' skills do you feel will need improving among your staff over the next three to five years?*

Base = establishments with upskilling needs (n = 50)



# 8. Employer investment in skills

The CESS enables an assessment of the impact of skills challenges on employers in the architecture sector and allows comparison to the creative industries as a whole. Survey data suggests, like wider evidence (Metro Dynamics, 2022; ARB, 2021), that skills deficiencies are an important business concern for the sector, although architecture employers were more likely than creative industries employers to state that skills challenges will have no impact on their work (45% vs 31%).

The most common impacts reported are having difficulties meeting deadlines (19%), increased workload for other staff (17%) and increased operating costs (16%).

More positively, the majority of architecture employers were taking action to overcome skills challenges (see also ARB, 2021). The most common approaches taken include increasing training for the existing workforce (which is a mandatory requirement for registered architects) (46%). Architecture employers were also less likely than the creative industries average to take actions related to hiring new talent (10% vs 20%), outsourcing work (4% vs 17%) and redefining existing job roles (1% vs 7%).

Other approaches that survey respondents and roundtable participants highlighted include providing mentorship opportunities and internal knowledge-sharing sessions as well as the use of personal development plans and training plans (see also Carey, Giles and O'Brien, 2023) and reducing the number of projects taken on.

Figure 32: Impact of skills challenges, 2025

Q: Thinking now about all occupations in which you have skills challenges – that is, either where you cannot recruit someone with the right skills or where the people doing these jobs do not have all the skills that they need – what impact are these skills issues having on this site?

Base = establishments with skills shortages or skills gaps (n = 56)

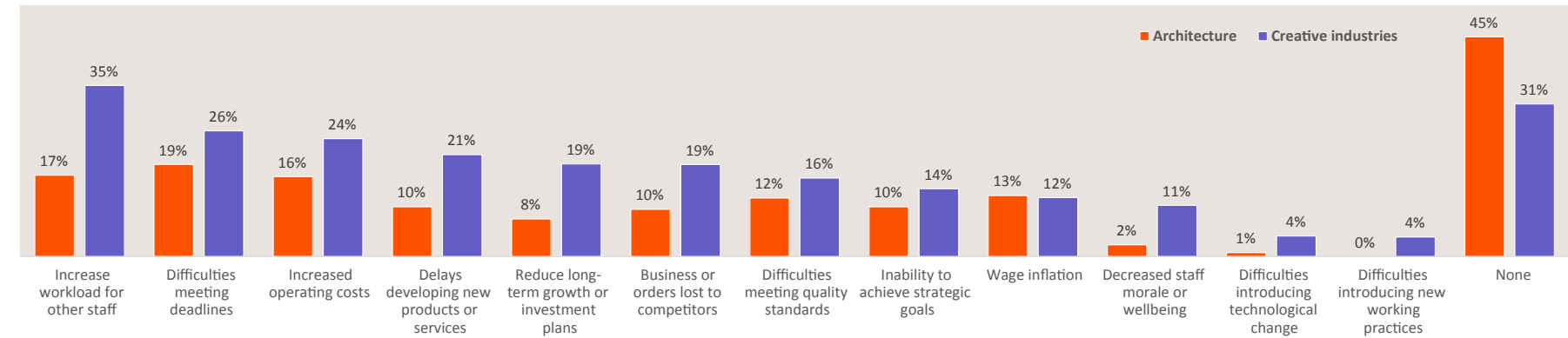
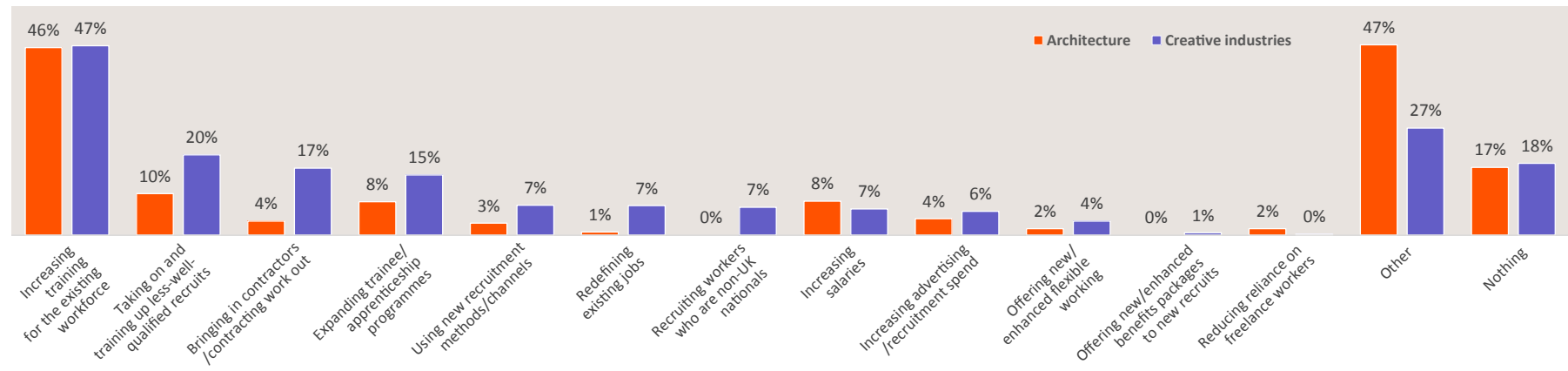


Figure 33: Response to skills challenges, 2025

Q: What, if anything, is your site doing to overcome these skills challenges?

Base = establishments with skills shortages or skills gaps (n = 56)



Source: CESS 2025

## 8. Employer investment in skills (continued)

Considering the skills challenges architecture employers are facing, and the anticipated need to develop new skills in the years ahead, an important question is whether architecture employers are investing sufficiently in upskilling and reskilling their workforce.

The CESS provides an indication of the extent of employer training provision arranged or funded by architecture employers relative to the creative industries over the past twelve months. This includes not only training for employees, but also that provided to agency staff, the self-employed or freelance workers.

Positively, the CESS data points to higher levels of training in the sector than is indicated elsewhere (e.g. see Giles, Carey and O'Brien, 2025). Indeed, 86% of architecture employers provided some kind of development, higher than

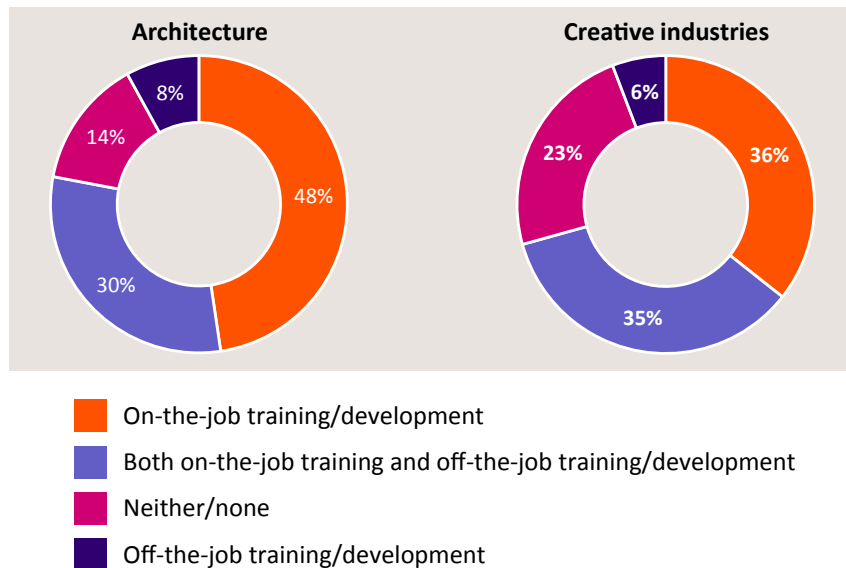
the 77% in the creative industries as a whole. This is consistent with broader research from the sector and may in part reflect training requirements for some occupations in the sector (ARB, 2021).

The most common training used was on-the-job training, at 48%. Positively, a significant proportion of training delivered in architecture is both on-the-job and off-the-job training, at 30%. Sector research suggests that levels of training are likely higher for entry and early-career roles (Metro Dynamics, 2022; ARB, 2021). However, while rates are high, there may be demand from workers for more continuing professional development than is currently undertaken (ARB, 2021).

Further examination of the barriers preventing architecture organisations from offering training shows that these largely reflect those seen across the creative industries. The most common barriers reported were lack of funds (30%), external courses being too expensive (19%) and staff being too busy to undertake training (19%). 19% also reported that staff are fully proficient and do not need training. Roundtable participants noted that barriers to training may vary by firm size, with time and cost pressures being particularly acute for smaller firms given pressures on service fees and budgets.

**Figure 34: Employer training provision, 2025**

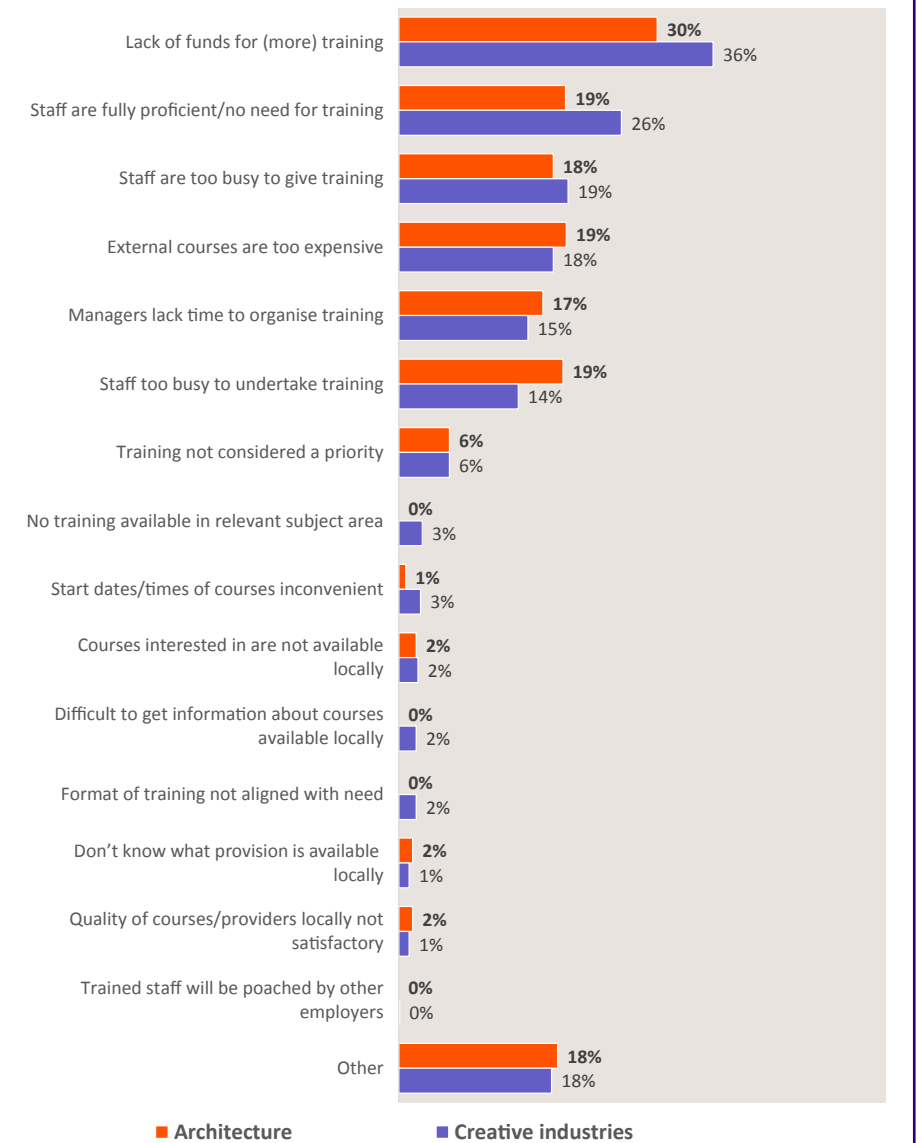
*Q: What, if any, training has your organisation arranged or funded over the past twelve months?*  
Base = all establishments (n = 104)



Source: CESS 2025

**Figure 35: Barriers to training provision, 2025**

*Q: What, if anything, prevents your organisation from offering (more) training for staff at this site?*  
Base = all establishments (n = 104)



Source: CESS 2025

## 8. Employer investment in skills (continued)

Although the CESS points to higher levels of training in the context of considerable future upskilling needs – given the development of new technologies, construction demand and changing client needs – it is important that employers are supported to continue to invest in the skills of their workforce.

When examining the measures that would enable architecture employers to continue to invest in skills and training, a range of factors were considered important by respondents to the CESS. Unsurprisingly given the predominance of financial and cost-related barriers identified, tax relief on expenditure on staff training (81%) and financial subsidies towards the cost of training (81%) were by far the most commonly selected measures. These were followed by more flexible forms of training (59%) and information/

advice on finding training relevant to needs (46%). Notably, architecture employers were more likely than creative industries employers to report that specified measures would enable their organisation to offer more training – aside from opportunities to collaborate with other business to develop training aligned to business needs, for which the responses were equal. This suggests a particularly high level of demand for support for this sector.

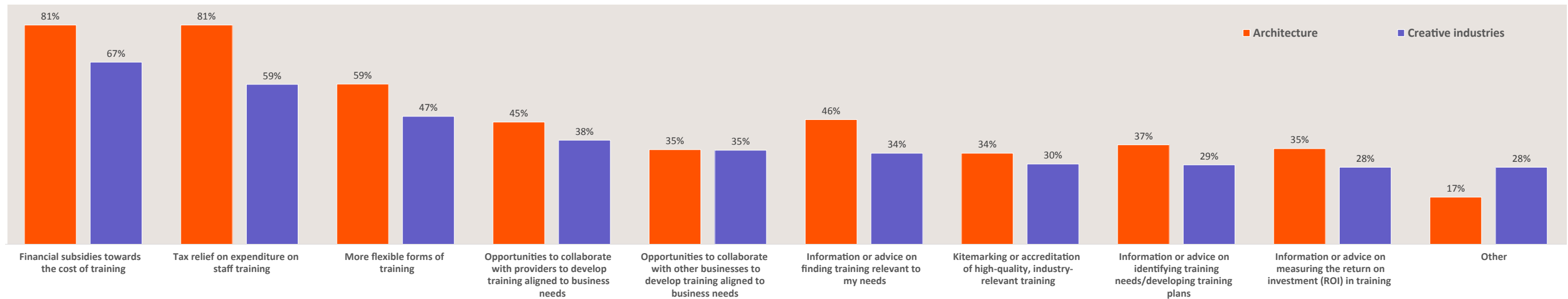
Roundtable participants also highlighted the need for greater collaboration between training providers – particularly higher education, the dominant route into the sector – and industry.

This was also identified as an enabling measure by 45% of architecture respondents to the CESS.

Finally, roundtable participants highlighted the importance of diversifying routes into the architecture profession, not least given the diversity challenges set out earlier in this report. Participants highlighted that Level 7 Apprenticeship routes into architecture offered a crucial alternative way into the sector, but that recent changes to government support for these risked further entrenching a reliance on higher education as the sole route to qualify to work in architecture and architectural technologist occupations.

**Figure 36: Enablers of employer investment in training, 2025**

*Q: What measures would enable your organisation to offer (more) training in future?*  
Base = all establishments (n = 108)



Source: CESS 2025

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