

## Accountability Agreement 2023/4

|     |  |
|-----|--|
| 1   | <b>PURPOSE</b>   |
| 1.1 | <b>Strategic Objectives and Mission</b><br><br>The College's purpose is set out in its mission statement contained within its latest strategic plan, which was finalised in February 2023. Our mission is to deliver <b>learning that works</b> .<br><br>The College's curriculum and provision derives from its mission to deliver <b>learning that works</b> which: <ul style="list-style-type: none"><li>• provides learners with the opportunities, experiences and skills to move into their intended career destinations</li><li>• promotes social mobility</li><li>• enables employers to access the skills needed for Gloucestershire to be prosperous for all.</li></ul><br><b>Providing Learners with the opportunities, experiences and skills to move into their intended career destinations</b><br><br>Gloucestershire College (GC) has a broad offer encompassing full time programmes for 16-18 years olds, a large adult provision, and a significant Apprenticeship provision as well as other workplace learning. The offer is inclusive and responds to all types of learners, such as those with learning difficulties/disabilities, provision for the unemployed, education and training, and higher education (HE). The focus of provision is principally technical education and training, taking into account local skills strategies and needs in particular those identified by the LEP/LSIP.<br><br><b>Promoting social mobility</b><br><br>The College exists for all learners to give them skills to be successful in their future lives and careers, with a focus on developing practical, professional and technical skills. Social mobility is a key ambition so in particular we support learners: <ul style="list-style-type: none"><li>a) Who have been less academically successful at school</li><li>b) Are from disadvantaged backgrounds</li><li>c) Who may have not achieved grade 4/C in English and maths at KS4</li><li>d) Who have special educational needs – both in foundation learning and across mainstream curriculum.</li></ul><br>GC does not deliver A Levels but works in partnership with Dene Magna school to provide an A Level offer as part of a longer-term ambition to raise aspirations and attainment in the Forest of Dean. Amongst adults GC has a wide-ranging offer that supports them back into work or to enable them to progress in their careers. This extends to work in prisons, supporting offenders into careers and reducing re-offending.<br><br><b>Enabling employers to access the skills needed for Gloucestershire to be prosperous for all</b><br><br>The College works with local employers so that they can access required skills through: |

- a successful AoC Beacon Award recognised apprenticeship provision
- developing the professional and technical skills of our learners to prepare them for the local and national workforce
- supporting in the training and upskilling of the current workforce
- working with agencies such as GFirst LEP and Gloucestershire Skills Advisory Panel to identify and address local skills needs

GC has embraced many of the Government initiatives to raise skills levels and respond to the pandemic such as ‘Kick Start’ and ‘Bootcamps’ in areas such as digital and HGV. The College’s Institute of Technology offer, focussing on Cyber and Engineering, opened in 2021. GC has worked with partners to position its Cheltenham Campus as a cyber training hub within the proposed Cyber Business Park in Cheltenham. Our Cyber Degree Apprenticeship (developed with UWE) is the first in England endorsed by the NCSC.

In order to realise our mission, six over-arching strategic goals have been set for this plan period, covering:

**Skills and Purpose:** “...work with key partners ....to enrich the curriculum and meet skills needs, enabling and facilitating economic development and prosperity ...”

**Strategic Position, Recruitment and Reputation:** “...position the College to take advantage of opportunities to grow in our areas of expertise...”

**Learner Experience, Progress and Achievements:** “...Teaching, learning and the learner experience will continue to be central to everything we do. We will provide a safe, stimulating and challenging learning environment rooted in outstanding teaching and learning, with a curriculum offer that enables learners to achieve and promotes social mobility...”

**People and Culture:** “...We will develop as an employer of choice that attracts and retains talented, motivated individuals...”

**Finance, Resources and Facilities:** “...We will ensure that our financial position continues to be robust, enabling us to continue to invest in staff and physical resources...”

**Social Value:** “...We will continue to be driven by social purpose, aligning our activities to the UN Sustainable Development Goals.””

**1.2 Our Provision**

Our provision is important because:

- We provide the largest FE offer in the County preparing people to enter the labour market, enhance their and play an active part in our Community
- We are the primary destination for those who have been less successful at school, providing opportunities to develop successfully in their lives
- We provide the largest employer offer in the County

**1.3 The Contribution that it makes**

From 2022 Colleges have had a new statutory duty to assess how effectively they meet skills needs. This is then further assessed through the new Enhanced Inspection Framework. In response to that the College's Strategic Plan specifically identifies meeting skills needs as a core objective. In September 2022 the College undertook its first review of how effectively it meets needs against the criteria identified by Ofsted which was considered by the Board of governors and will become an annual item for consideration.

In November 2022, the College was subject to an Ofsted inspection. Ofsted assessed that the College made a reasonable contribution to meeting skills needs, highlighting the following:

*Senior leaders work effectively at a strategic level with a range of external stakeholders. This has enabled leaders to respond well to the local skills needs in cyber, construction and engineering by developing further the curriculum offer for apprentices. For example, employers such as Renishaw Plc inform the content of the engineering apprenticeship curriculum; the University of the West of England have collaborated with leaders and developed new cyber degree apprenticeships; organisations such as Cheltenham Borough Council, the Department for Work and Pensions and Gloucester City Council work with leaders to develop adult learning programmes in response to unemployment, and community organisations, such as Gloucestershire Action for Refugees and Asylum Seekers, help leaders meet the learning needs of young Syrian and Afghanistan asylum seekers by working together to develop ESOL programmes.*

*Senior leaders involve stakeholders in construction, engineering, finance, professional services and cyber security in the design and implementation of the curriculum. As a result, most learners study a curriculum that has a well-informed content that helps to meet the local skills needs. For example, leaders worked with Gloucestershire Hospital NHS staff to develop the new health and science curriculum, including work placements for learners. However, in a few subject areas, such as business and art and design, managers do not involve stakeholders sufficiently well in the planning and/or teaching of the curriculum.*

## **2 CONTEXT AND PLACE**

### **2.1 Gloucestershire**

The College is the largest provider of FE within the County, with a significant offering to employers. In addition, it has contracts to deliver key Government priorities with authorities in areas such as London, Manchester, Lancashire and the West of England.

In common with other areas, the Gloucestershire Skills Strategy 2022-2027 identified skills shortages in a number of sectors, with these shortages forecast to become more acute. Central to this shortage is the demographic change being experienced. Whilst the population of the County will increase by 7.1%, the working age population is only projected to increase by 0.9%, which is far below the expected growth in demand across the local economy.

The College's catchment is characterised by a high proportion of private and selective schools. Whilst overall attainment across the County is broadly consistent with the national picture, attainment and social mobility amongst disadvantaged groups is amongst the poorest in England.

## 2.2 Our Provision

The make-up of the College's provision is different to the sector with a lower % of 16-18 work than most Colleges. The College's income is split as follows:

| Learner Group               | Income % |
|-----------------------------|----------|
| Programmes for Young People | 32%      |
| Adults                      | 18%      |
| Employers                   | 20%      |
| HE                          | 8%       |
| High needs Learners         | 16%      |

The core groups we work with in each area are set out below:

| Programme                   | Description   |
|-----------------------------|---|
| Programmes for Young People | <p>As above we take learners on a wide range of vocational programmes. We do not offer A Levels ourselves but work with Dene Magna school to provide this offer in the Forest of Dean.</p> <p>We have an offer for learners of all abilities and are the primary destination for learners who have been less successful at GCSE. Recruitment patterns are characterised by low prior attainment in maths and English, and social disadvantage.</p> <p>Learners benefit from our extensive networks with employers and the work placement opportunities that provides, as well as the close links and knowledge that our tutors possess.</p>   |
| Adults                      | <p>We work with adults across the County on programmes to get them into employment, facilitate their progression in employment, or enable them to retrain into other sectors. Programmes range from ESOL and programmes for the unemployed, to intensive programmes for retaining through e.g. HGV Bootcamps.</p> <p>We also offer programmes beyond the County through contracts with WECCA, Greater Manchester and London. These programmes meet a range of needs for these authorities, but of particular note is the Rail Engineering offered in prisons which enables learners to transition into secure employment and reduce reoffending rates whilst providing employers with much needed staffing.</p> |
| Employers                   | <p>Our employers' programme is based on an extensive Apprenticeship offering but also full cost, professional and HE programmes. Whilst the bulk of the work has traditionally been at Levels 2 and 3, the offer at higher levels has expanded significantly.</p> <p>Our work is predominantly with businesses (rather than public sector etc), with 70% within Construction and Engineering. We have seen significant growth in Cyber and Digital in line with local priorities.</p>   |

|                     |  |
|---------------------|--|
| HE                  | The College's FT HE offering has traditionally been to provide progression routes for our Level 3 learners. With the removal of the Student Number Cap on Universities it is becoming increasingly challenging to maintain this offer in some areas. Our PT offer focusses on meeting the needs of employers e.g. Construction, Engineering, Computing etc |
| High Needs Learners | We work closely with the Local Authority on our High Needs Programme. The discrete provision has been re-modelled in recent years and expanded by introducing provision for learners with more complex needs, at the request of Gloucestershire County Council. Support also exists for High Needs Learners on mainstream programmes across the College.   |

## 2.3 Our Campuses

The College is the largest provider of FE training to employers within the County. Whilst it serves the whole County, its campuses are set in the primary conurbations of Gloucester and Cheltenham, and across to Cinderford in the Forest of Dean. Each of the campuses have been built in the last 20 years, and each located as part of regeneration schemes in those areas.

### Gloucester Campus

Our Gloucester campus is set in a prime location in the heart of the City as the anchor tenant within the Gloucester Quays regeneration scheme.

Around 70% of our work is delivered from Gloucester, with provision across all curriculum areas except Hospitality and Agriculture.



### Cheltenham Campus

Our Cheltenham campus is located next door to GCHQ and is focussed primarily on Adult, Professional and Higher programmes. It is home to our Cyber provision and IOT facilities, and also comprises several zones occupied by employers, including start up innovation space operated by Hub 8.



## Forest Campus

The College's Cinderford campus was opened in 2019 and provides a broad 16-18 offer. The campus also makes an A Level offer, provided in conjunction with Dene Magna school.



### 3 APPROACH TO DEVELOPING THE ANNUAL ACCOUNTABILITY STATEMENT

From 2022/23 Colleges have had a new statutory obligation to consider how well they meet skills needs, and this is assessed through the new Enhanced Inspection Framework. This Accountability Statement is one of the outputs within the Government's framework for meeting skills needs.

The College has been a member of the Gloucestershire Skills Advisory Panel which was responsible for developing a 2022-2027 skills strategy for Gloucestershire for GFirst LEP. As part of this work the SAP engaged with stakeholders involving employers, community bodies and government agencies across all aspects of the Gloucestershire economy, as well as drawing on input from sectoral boards operated by GFirst LEP.

Given the recent completion of this work, this has been used as the basis for the College to identify needs. This has been built on further through:

- Involvement with Employer Representative Bodies, such as Constructing Excellence, Cynam and others
- Feedback from our Business Consultants and other staff who are in regular contact with employers
- Analysis of local skills reports
- Consultation with other education providers, including schools, colleges and universities
- Feedback from community groups such as GARAS, Job Centre Plus

This led to the creation of a position statement approved by our Board of Governors in September 2022. The College was inspected in November 2022 and Ofsted concluded that the College works well strategically to understand and meet employers needs.

As well as using this work to create our accountability statement, we have engaged in the creation of the Local Skills improvement Plan being developed by Business West, and reviewed the initial findings. The LSIP does not set out to provide a comprehensive review but instead covers four key sectors. However, in conjunction with our other work we believe we have a reasonable assessment of skills needs in the markets within which we operate. The

|            |   |
|------------|---|
|            | <p>timing of the LSIP in this first year necessarily means there are limited opportunities to impact the curriculum offer for 2023/24 but we look forward to working in partnership with Business West and other stakeholders to identify how we can most effectively meet needs.</p> <p>In addition, we have reviewed the key priorities articulated by Government.</p> <p>The FE Colleges within Gloucestershire have exchanged and discussed each other's accountability statements as part of this process.</p>   |
| <b>4</b>   | <b>CONTRIBUTION TO NATIONAL, REGIONAL, LOCAL PRIORITIES</b>   |
| <b>4.1</b> | <p><b>Skills Needs</b></p> <p>As well as discussions with stakeholders, employers and other providers, areas of focus in meeting skills needs have been identified from 4 main sources: our Ofsted inspection, the LSIP, the Gloucestershire Skills Strategy and national priorities. There are many other needs across many sectors that we are meeting and this document is not intended to provide a comprehensive statement of all of our work on skills.</p>   |
|            | <p><b>4.1.1 Ofsted inspection, November 2022</b></p> <p>Ofsted reviewed the College's contribution to meeting skills needs as part of the inspection. As above, they commented favourably on many aspects but did identify one area for development: <i>"...in a few subject areas, such as business and art and design, managers do not involve stakeholders sufficiently well in the planning and/or teaching of the curriculum"</i></p>  |
|            | <p><b>4.1.2 Local Skills Improvement Plan (LSIP)</b></p> <p>The Local Skills Improvement Plan for Gloucestershire is being developed by Business West. Initial findings have been made available with the full report due at the end of May 2023. These timings necessarily allow only limited changes to our planned curriculum offer for 2023/4, but will inform our development and planning for 2024/5. Once the results are published, we will begin work with Business West, stakeholders and other providers to identify how we can best address the needs identified.</p> <p>The LSIP focussed on four key sectors so is not intended to provide a comprehensive overview of the entire economy. Of the four sectors, the College does not offer provision in Agriculture.</p> <p>The LSIP identifies for each sector in scope existing shortages in key occupational areas, as well as developing skills needs in relation to technological changes and net zero. The findings from the sectors we cover are set out in Appendices A-D and summarised below:</p> |

| Sector  | Existing Shortages  | Developing needs from technological change   | Emerging needs from net Zero  |
|---|---|--|---|
| <b>Construction</b>                           | Wood Trades; Electrical Trades; Bricklayers (most acute); and also Groundworkers; Plumbers, Heating and Ventilation and also Scaffolders.   | Heat Pump technologies; Solar PV / Electrical Storage, EV Charger Installation, Modern Methods of Construction (MMC), and Energy / Performance Assessment.                 | Understanding of the net zero framework and how their businesses would need to adapt.   |
| <b>Digital</b>                                | Critical gaps are cyber security professionals and software engineers and designers. Gaps exist across other disciplines including : IT Business Analysts, Architects and Systems Designers, IT and Telecomms Professionals, Data Analysts and Project Managers | AI / Machine Learning and Natural Language Processing (such as ChatGPT); Cloud Development; Application Security and Internet of Things; Automation; Blockchain; and AR/VR | Systemic sustainability within service provision e.g. data centres; energy efficiency; sustainability standards and the regulatory environment. |
| <b>Advanced Engineering and Manufacturing</b> | Machine Fitters and Operatives; Project Managers; Data Analysts; Electrical Engineers; Mechanical Engineers; and IT Business Analysts, Architects and Systems Designers   | AI; Automation, Robotics and Cobotics; Sensors, Data, AI & Analysis; emerging materials, composites, lightweight, 3d printing and decarbonisation                          | Energy efficiency; sustainability assessments; decarbonisation of fuels; the regulatory framework and corporate responsibilities.               |

Employers also identified needs to develop critical workplace skills, including:

- Work readiness, especially for new entrants – work ethic, attitude, communication, time-keeping, hybrid working, collaboration, problem-solving, general people skills
- Communications – business etiquette, face to face, written, client interactions
- Business Skills: Sales, Communications, Procurement, Accounting, Administration, Budgets, Financial forecasting
- Contextualised Leadership & Management Training e.g., for Advanced Engineering
- Project management

Employers identified business challenges they would like to be able to address more effectively including staff recruitment, culture, staff retention and mentoring; tax in small companies; dealing with mental health and resilience challenges amongst the workforce.

The LSIP also identified a range of core workplace digital skills needs, including:

- Core digital platforms: MS Office, especially Excel, Teams, Outlook; presenting and webinars; Google platforms
- Internal IT infrastructure, CRM systems
- Coding and software development
- Planning and Project Management
- Cloud storage, digitisation, data and analytics
- Data and security e.g. GDPR, breaches and responses, cybersecurity principles

#### **4.1.3 GFirst LEP Gloucestershire Skills Strategy**

The College was part of the Skills Advisory Panel tasked with developing the Gloucestershire Skills Strategy for GFirst LEP. The Skills strategy considered many sources of data in identifying skills needs including:

- LEP Business Groups
- Sector specific skills reports
- SAP
- Local industrial Strategy
- Local Skills Reports
- Pilot work e.g. LSIP

The report was developed in 2021 in the backdrop of the pandemic but before the war in Ukraine and the energy and cost of living crisis. The report identified that:

- Across all sectors significant challenges existed to recruiting staff with appropriate skills, and this was exacerbated following Brexit and the pandemic (the great resignation). Gloucestershire is impacted also by seismic demographic shifts in terms of the proportion of the county that are working age, and from being a net exporter of young talent (people go to university and do not return). There is a simple issue of insufficient people to meet all demand of all sectors.
- Although all sectors experience issues, the report identified a number of priority sectors for future development, as well as some generic skills issues across all sectors e.g., digital.
- The report identifies key skills gaps for future development, but also recognises the ageing population and that 90% of future roles are around replacement demand, so this also continues to be important e.g., 20% of construction workers and 25% of HGV drivers are over the age of 55.

There is some overlap between the LSIP and the Gloucestershire Skills Strategy, with the latter also identifying the following shortages:

- Business & Finance – accounting, sales, digital marketing
- Digital – especially cyber which is a strategic priority for the County
- Construction – Surveying
- Health Care – digital skills, user centred & personalised care, dementia, mental health, learning disabilities, autism
- Transport and logistics – HGV

#### **4.1.4 National Skills Priorities**

As part of the guidance in developing an accountability statement, the Government has set out the following on national skills priorities:

“The priority sectors are: Construction, Manufacturing, Digital and Technology, Health and Social Care, Haulage and Logistics, Engineering’ Science and Mathematics.

We would like you to prioritise delivery, where practical, through a small number of high-quality programmes that have been co-designed with employers and have a strong track record of delivering good outcomes for learners:

- T levels, Apprenticeships, Free Courses for Jobs, Skills Bootcamps, and Higher Technical Qualifications (HTQs).
- More essential skills up to Level 2 in English, mathematics, and Level 1 for digital.
- A limited list of transferable skills we think learners would benefit from in these National Skills Priorities. We will explore how we could provide guidance on this in future iterations but will look to use existing models such as the Skills Builder, rather than creating new frameworks. <https://www.skillsbuilder.org/> “

#### 4.2 Aims for 2023/4

This document does not cover all our initiatives in 2023/4 to better meet skills needs. For the purposes of the accountability statement, our initiatives to help meet skills needs include the following aims:

| Theme                     | Accountability Statement goals for 2023/24  |
|---------------------------|---|
| Employer engagement       | 1. Extend and formalise the involvement of employers in the design and delivery of the curriculum.  |
| Core workplace skills     | 2. Launch “which three skills” programme to enhance workplace skills, with engagement with > 90% of Full Time Learners.   |
| Net Zero and Construction | 3. Incorporate sustainability unit within all Construction programmes, with take-up by at least 200 learners.<br>4. Develop a Green Construction Centre in Cheltenham, to open for the 2024/5 academic year.<br>5. Introduce new HTQ in Construction Management, targeting 10 learners.<br>6. Expand capacity in Wood Occupations, to increase enrolments by 20 learners. |
| Digital                   | 7. Continue to support the development of the Cheltenham Cyber Park.<br>8. Introduce L6 Degree Apprenticeship in Digital Technology Solutions (Software Engineering pathway), targeting at least 10 new learners in the first year.<br>9. Introduce L4 DevOps Engineer Apprenticeship pathway, targeting at least 10 new learners in the first year.                      |
| Health and Social Care    | 10. Launch HTQ in Health Care Practice at Level 4 and 5, targeting at least 10 additional learners in the first year.   |
| Haulage and Logistics     | 11. Offer Rail Engineering and HGV Bootcamps, targeting at least 50 learners.   |

These are set out in more detail below.

#### 4.2.1 Employer Engagement

Our Ofsted report identified a need for greater involvement of employers in the design and delivery of the curriculum in a few areas. To address this we will:

- Extend our Industry Professional Day to incorporate a meeting skills needs agenda so staff both update their industry skills and gather information on employer needs to bring back into the curriculum
- Formalise the process of sharing skills needs information gathered from employers by the apprenticeship hub and employability team with the curriculum teams
- Monitor the involvement of employers in curriculum design and implementation via ongoing sample checks completed by the teaching and learning team
- Embed an evaluation of the meeting skills needs criteria into schemes of learning, performance reviews and course/school level evaluations

#### 4.2.2 Core workplace skills

Core workplace skills is identified as a common theme across the LSIP. To make steps towards this, we will look to further develop employability skills of learners entering the workplace by the launch of our “which three skills” programme. Mapped to the National Skills Builder, this will embed three transferable skills in each programme (**confidence** plus two specific to the subject sector) and gather evidence of distance travelled.

In addition, we will look to further develop work experience, CPD activities and social action projects for Full Time learners.

#### 4.2.3 Net Zero & Construction

The College has invested to meet skills needs identified. During 2022/3 we have opened a dedicated End Point Assessment centre, to free capacity in our main Construction centre; launched a state of art Electric Vehicle (EV) training centre in Gloucester, and offered bootcamps in EV; invested in ducting and equipment to enable us to offer programmes around EV charging and installation; and gained experience from completing our own £5.5m retrofit programme.

Initiatives planned to enhance our offer in 2023/4 include:

- Expanding capacity in Wood Occupations
- Introducing a new HTQ in Construction Management
- Launching a FT Level 3 Electrical programme
- Embedding sustainability units into the curriculum of all construction programmes
- Offering short on-line programmes in sustainability
- Developing programmes for social housing providers with significant retrofit programmes
- Preparing to offer the Construction Site Management Apprenticeship pathway from 2024/5.

|                 |   |
|-----------------|---|
|                 | <p>Most significantly, we have been working with partners to develop a new Sustainable Construction Centre in Cheltenham, planned to be constructed during 2023/4, to provide capacity and facilities for emerging Net Zero skills as well as existing shortages in the Construction sector.</p>  |
|                 | <p><b>4.2.4 Digital</b></p> <p>We have been working with partners towards the vision to position Cheltenham as a centre for excellence nationally and internationally for all things cyber. The College's Cheltenham campus is adjacent to GCHQ and the proposed cyber business park. We have made strides securing £3m of Institute of Technology funding to develop Cyber Training facilities; secured £1m of LEP funding to create an innovation zone for start-up cyber businesses; and worked with UWE to develop a range of programmes up to level 6. We offer the only Degree Apprenticeship in Cyber Security in England that is endorsed by the National Cyber Security Centre.</p> <p>During 2023/4 will continue to develop our cyber and digital offer including:</p> <ul style="list-style-type: none"> <li>• Continuing to offer T Levels</li> <li>• Offering new programmes in 2023/4 including the Degree Apprenticeship in Digital Technology Solutions (Software Engineering pathway); and the Level 4 DevOps Engineer</li> <li>• Developing a new Games Level 6 top up with UWE, to be launched in September 2024</li> <li>• Develop Business Analyst Level 4, to be launched September 2024.</li> </ul> |
|                 | <p><b>4.2.5 Health and Social Care</b></p> <p>Health and Social care demand is forecast to continue to grow. The College does not offer nursing, as this is offered by University of Gloucestershire, although many of our Health and Social care and Access students progress onto these programmes. In 2023/4 we will:</p> <ul style="list-style-type: none"> <li>• Introduce the HTQ on Health Care Practice at Level 4 and 5</li> <li>• Increasing capacity in Adult Nursing T Level</li> </ul>   |
|                 | <p><b>4.2.6 Haulage and Logistics</b></p> <p>To contribute towards the skills needs around haulage and logistics, the college will:</p> <ul style="list-style-type: none"> <li>• Continue to offer Rail Engineering across a range of locations across England, including new contracts in Lancashire</li> <li>• Offer Bootcamps in HGV Training</li> <li>• Explore apprenticeships to support the Aviation sector.</li> </ul>  |
| <p><b>5</b></p> | <p><b>CORPORATION STATEMENT</b></p> <p>On behalf of the Gloucestershire College corporation, it is hereby confirmed that the plan as set out above reflects an agreed statement of purpose, aims and objectives as approved by the corporation at their meeting on 25<sup>th</sup> May 2023. The plan will be published on the College's website within 3 months of the start of the new academic year.</p>   |

**6**

**HYPERLINK**

When published on our website, our accountability statement will be found at:

<https://www.gloscol.ac.uk/about-us-and-jobs-at-gc/about-us/gloucestershire-college/>.

## APPENDIX A: CONSTRUCTION SECTOR SKILLS NEEDS FROM LSIP

### Existing Shortages

| Role   | R | A | G |
|--|---|---|---|
| Woods trades (joiners/carpenters etc) and interior fit out | x |   |   |
| Electrical Trades  | x |   |   |
| Bricklayers  | x |   |   |
| Scaffolders  |   |   | x |
| Groundworkers / labourers / plant operatives               |   | x |   |
| Plumbers and HVAC  |   | x |   |

### Demand from technological changes in the sector

Skills will be needed in surveying & assessing, installing & commissioning, and repair and maintenance in:

| Technology  | Requirement   |
|---|---|
| Heat pumps/solar thermal<br>Estimated 1,751 additional jobs by 2030 <sup>15</sup> | <ul style="list-style-type: none"> <li>• Energy/EPC assessors Retrofit assessors</li> <li>• Project managers</li> <li>• Plumbing and heating engineers</li> <li>• Low carbon heating technicians</li> </ul> |
| Solar power/electrical storage  | <ul style="list-style-type: none"> <li>• Solar power installers</li> <li>• Roofers</li> </ul>   |
| EV charger installation   | <ul style="list-style-type: none"> <li>• Electricians</li> </ul>  |
| Insulation including retrofit<br>Estimated 1,265 additional jobs by 2030          | <ul style="list-style-type: none"> <li>• Insulation installers</li> <li>• Plasterers/dry liners</li> </ul>  |
| Offsite/modular/Modern Methods of Construction (MMC)                              | <ul style="list-style-type: none"> <li>• Project managers</li> <li>• Site Management</li> <li>• Carpenters/joiners Assembly and installation operatives Plumbing and electrical</li> </ul>                  |
| Energy/Performance Assessors, whole unit/fabric                                   | <ul style="list-style-type: none"> <li>• Energy and Efficiency Assessors</li> </ul>   |

## APPENDIX B: DIGITAL SECTOR SKILLS NEEDS FROM LSIP

### Existing Shortages:

| Role  | R | A | G |
|---|---|---|---|
| Software development professionals, software engineers and programmers        | x |   |   |
| IT Business Analysts  | x |   |   |
| Architects and Systems Designers, and IT and Telecommunications Professionals |   | x |   |
| IT User Support and Operations Technicians                                    |   | x |   |
| Cyber security professionals  | x |   |   |
| Business, Financial and Management Professionals                              |   |   |   |
| Business/Data Analyst   |   |   | x |
| Project managers  |   |   | x |
| Systems architects  |   |   | x |

### Demand from technological changes in the sector

| Technology   |
|--|
| AI/Machine learning (including Large Language Models (LLM) and/or Natural Language Processing (NLP) such as ChatGPT) |
| Cloud development  |
| Application security Internet of Things (IoT) and connectivity security  |
| Advanced and new coding languages in coding, computer science, data science  |
| Automation   |
| Blockchain   |
| AR/VR  |

**APPENDIX C: ADVANCED MANUFACTURING AND ENGINEERING SECTOR  
SKILLS NEEDS FROM LISP**

**Existing Shortages**

| <b>Role</b>   | <b>R</b> | <b>A</b> | <b>G</b> |
|---|----------|----------|----------|
| Production and entry level roles: Machinists, fitters, operatives | x        |          |          |
| Project Management  | x        |          |          |
| Data Analysts   | x        |          |          |
| Electrical Engineers  |          |          | x        |
| Mechanical Engineers  |          | x        |          |
| IT Business Analysts, Architects and Systems Designers            |          | x        |          |

**Demand from technological changes in the sector**

| <b>Technology</b>   |
|---|
| AI  |
| Automation, robotics and cobotics   |
| Cyber Security  |
| Sensors, Data, AI and analysis  |
| Industrial digitalisation and digital design  |
| Advanced Manufacture – emerging materials, composites, light weighting, AI driven design, rapid prototyping, 3D printing, decarbonisation |
| Transformation systems integration and change management  |

**APPENDIX D: CORE AND NET ZERO SKILLS REQUIREMENTS IDENTIFIED FROM LSIP**

| Theme  | Needs | Construction   | Digital | Engineering & Manufacturing |   |
|--|-------|--|---------|-----------------------------|---|
| Critical Workplace, Core and Transferable Skills | 1.1   | Work readiness – work ethic, attitude, communication, time-keeping, hybrid working, collaboration, problem-solving, general people skills  | x       | x                           | x |
|  | 1.2   | Communications – business etiquette, face to face, written<br>Client interactions  | x       | x                           | x |
|  | 1.3   | Business Skills: Sales, Communications, Procurement, Accounting, Admin, Budgets, Financial forecasting   | x       | x                           | x |
|  | 1.4   | Contextualised Leadership & Mgt Training   | x       |                             | x |
|  | 1.5   | HR – recruitment, culture, staff retention, mentoring  | x       |                             | x |
|  | 1.6   | Project management   |         |                             | x |
|  | 1.7   | Business advice for small companies e.g. Tax   |         |                             | x |
|  | 1.8   | Mental Health and Resilience   | x       |                             | x |
| Core Digital Skills                              | 2.1   | Core digital platforms: <ul style="list-style-type: none"> <li>• MS Office, especially Excel, Teams, Outlook</li> <li>• Presenting and webinars</li> <li>• Google platforms</li> </ul> | x       | x                           | x |
|  | 2.2   | Internal IT infrastructure, CRM  | x       | x                           | x |
|  | 2.3   | Coding and software development  |         |                             | x |
|  | 2.4   | Planning and Project Management  |         | x                           | x |
|  | 2.5   | Cloud storage, digitisation, data and analytics  |         |                             | x |
|  | 2.6   | Data and security e.g. GDPR, breaches and responses, cybersecurity principles  |         |                             |   |
|  | 2.7   | Digital marketing  |         | x                           |   |
| Net Zero   | 3     | Sustainability – assessments, context and environment, regulation and reporting, responsibilities  | x       | x                           | x |