



CHESHIRE & WARRINGTON

Local Skills Improvement Plan

Emerging Priorities

Version 2

5th May 2023

Sarah Emes-Young – LSIP Project Manager
Sarah.Emes-Young@SCCCI.co.uk

Contents

1	The Local Labour Market	3
2.	Key Findings from the Employers Skills Survey 2023	4
2.1	Skills Demand	4
2.2	Skills Supply	4
2.3	Key Sector Findings	5
2.4	Most important skills & attributes for businesses over the next three years:	5
2.4.1	Manufacturing	5
2.4.2	Health & Social Care	6
2.4.3	Life Sciences	6
2.4.4	Digital	6
2.4.5	Net Zero	6
3	Strategic Priorities	7
4	Generic Priorities for Consideration	8
5	Manufacturing Sector	9
5.1	The Sector	9
5.2	Key Manufacturing Occupations	10
5.3	Skills Gaps & Upskilling	11
6	Health & Social Care Sector	13
6.1	The Sector	13
6.2	Key Occupations	14
6.3	Skills Gaps & Upskilling	15
7	Life Sciences Sector	16

7.1	The Sector	16
7.2	Key Occupations	16
7.3	Skills Gaps & Upskilling	17
8	Digital Sector (Cross Cutting Theme)	19
8.1	The Sector	19
8.2	Key Occupations	20
8.3	Skills Gaps & Upskilling	20
9	Low Carbon / Green Skills Sector (Cross Cutting Theme)	22
9.1	The Sector	22
9.2	Key Occupations / Skills Gaps & Upskilling	23
10	Employability Competencies	24
11	Appendices	25

1 The Local Labour Market

In June 2022, around 437,400 people were employed in Cheshire and Warrington, representing 75.7% of residents aged 16-64 in the area.

The employment rate in Cheshire and Warrington has remained consistently higher than that for England with the April 2021 – March 2022 employment rate at 76.8% being 1.4% higher than the rate for England (75.4%).

Employment rates in Warrington and Cheshire West and Chester have been consistently higher than for England. The pre-pandemic employment rate for Cheshire East whilst higher than the rate for England, is now below the English level for five consecutive quarters and was 74.1% in April 2021 – March 2022.

Those aged 16-64 in employment followed similar trends with Warrington and Cheshire West and Chester being consistently above that for England and the percentage for Cheshire East being below the English level for the last five consecutive quarters.

The current age profile of the Cheshire and Warrington population is older than that for England and is forecast to continue. By 2030, the population in Cheshire and Warrington aged 60-69 and aged over 80 is forecast to grow at a faster rate than for England.

The working age population (16-64) is shrinking and constitutes a lower percentage of the total population for Cheshire and Warrington in all three Local Authorities than is the case for England and the Northwest (ONS). The population is set to age further, increasing the number of retirements and so driving replacement demand in the labour market.

Cheshire and Warrington sub region comprises 42,025 businesses, representing a decline of 1.5% compared to the business count in 2021. 46% of businesses were in Cheshire East, 33% in Cheshire West and Chester, and 21% in Warrington. 90% of businesses in Cheshire and Warrington employed fewer than 10 people. Only 0.5% of businesses employed more than 250 people.

Challenges for the region include:

- An ageing population and increasing levels of economic inactivity in 50+ age group which will reduce the pool of labour in the region.
- A demand for 71,000 more people qualified to Level 3 or above by 2027.
- Employers in Cheshire and Warrington are more likely to have skills shortage vacancies in high skill roles and more likely to have bottom line business impacts because of skills shortages.

Opportunities, however, include:

- A large, well-positioned manufacturing base.
- High employment levels in priority sectors such as health & social care, which are important within the context of Covid-19 and an ageing population.
- The Net Zero North West Cluster Plan, with focus in Cheshire and Warrington.

2 Key Findings from the Employers Skills Survey 2023

2.1 Skills Demand

- Employers reported a short-term demand for labour with two thirds indicating their intention to recruit new employees in the next 12 months.
- Two out of three respondents reported that over the next three years customer service and employability skills will be important for their business.
- 55% of respondents considered that access to funding for staff training would be beneficial for their business. Around half of respondents identified the importance of short, flexible training courses.
- Employer demand for apprenticeships exists, with roughly one third of respondents indicating that they recruited apprentices in the past 12 months, predominantly at Level 2 (Intermediate) and Level 3 (Advanced). One third of respondents also indicated their plans to recruit apprentices over the next 12 months.

2.2 Skills Supply

- Just over half of respondents have experienced recruitment challenges within the last 12 months.
- Recruitment challenges were mainly attributed to there being fewer young people entering the labour market with suitable skills, knowledge and behaviours (two thirds of respondents).
- Particularly difficult jobs to fill include caring and clinical roles in the Health and Social Care sector as well as engineering, skilled trades and technical roles.
- The poor quality of applications was cited as the biggest factor affecting employers' ability to recruit, followed by factors relating to experience and qualifications.
- Customer service skills, employability skills, planning and organisational skills and technical, practical or occupation specific skills were reported as being the most important to employers over the next three years.
- Areas where the biggest reported shortages were for technical, practical and occupation-specific skills, employability skills and skills relating to low carbon / net zero.
- Interpersonal skills such as time management and work prioritisation were seen as the most difficult skills to find in applicants.
- 40% of employers considered that the time available to enable their staff to undertake training is a barrier.
- While 70% of employers reported that they knew where to access training services to support their needs, a significant proportion of employers (39%) indicated that they do not have any relationship with training and education providers in the Cheshire and Warrington area.

2.3 Key Sector Findings

- By a significant margin, the best represented Cheshire and Warrington target sectors in the survey sample were Health and Social Care and Manufacturing (collectively 43% of the sample).
- 93% of respondents in the Health and Social Care sector reported short term demand for new employees, while only 41% reported demand in the Manufacturing sector.
- Employability and customer service skills were identified as top priority skills for Manufacturing and Health and Social Care sectors for the next three years.
- From caring through to clinical roles, recruitment at all levels has been a significant recent challenge in Health and Social Care with three quarters reporting difficulties.

2.4 Most important skills & attributes for businesses over the next three years:

- Respondents indicated that the skills that were likely to be most important to them over the next three years were customer service, employability skills, planning and organisational and technical, practical or occupation specific skills.
- In terms of how this is translated into skills shortages or gaps, 43% of respondents reported that technical, practical and occupation-specific skills shortages were being felt to a great extent.
- Similarly, 35% of respondents reported employability skills shortages being felt to a great extent.

Specifically relating to the sectors we are focusing on, we found that:

2.4.1 Manufacturing

- The top three skills and attributes highlighted by this sector that they would need over the next three years were highlighted as: Employability Skills (78%); Technical, practical or occupation specific (75%); and customer service (73%).
- Core employability skills are a key component of employers' current requirements, including communication, resilience and team working skills.
- Attendees suggested that more could be done to improve employer engagement with schools and colleges to facilitate direct interaction with young people, promote awareness of opportunities and pathways in the sector and to offer support with life/employability skills such as interviewing and CV writing.
- Chronic recruitment difficulties for skilled roles such as electricians and mechanical fitters are being observed.
- Supporting employees for whom English is their second language was cited as a specific challenge facing the sector. The shift towards automation has placed a requirement for staff who can confidently read error messages; this was reported as an area where there are currently skills shortages, particularly in parts of Cheshire & Warrington where schools are attended by a large proportion of EAL (English as an Additional Language) pupils. Currently, the existing support offered (e.g. English lessons) can be difficult to accommodate around shift patterns.

2.4.2 Health & Social Care

- The top three skills and attributes highlighted by this sector that they would need over the next three years were highlighted as: Employability Skills (80%); customer service (63%); and Leadership and managerial (63%).
- Labour shortage concerns within this sector were not linked to skills.

2.4.3 Life Sciences

- The demand for digital skills (including at a basic level) has become more important to meet the requirements of greater remote working, necessitated by the pandemic.
- Employability and generic skills such as work ethic were also cited as important fundamental skills for early career / emerging talent within the sector.

2.4.4 Digital

- Half of employers reported that digital and creative technology was essential for their business, with Microsoft applications, foundational digital skills and internet-based problem solving representing the most sought-after digital skills.
- Employers indicated that skills shortages in foundational IT skills and digital literacy were the most conducive to being addressed through short, flexible training courses.
- The top IT and Digital skills specifically referred to were: Basic Microsoft Office Skills (85%); being safe and legal online (~70%); using the internet to find solutions to problems (~70%); and foundational digital skills (~70%).
- More technical skills (e.g. web development, data analysis, graphic design and app programming and development) were reported as being needed by a much smaller proportion of employers.

2.4.5 Net Zero

- Only one in four employers attached short term importance on skills relating to low carbon and the transition to net zero, rising to two in five among larger employers.
- Despite the proportion attaching importance to these skills in the short term, nearly 90% of employers reported that they were experiencing skills shortages in relation to low carbon / net zero related skills to some extent or to a great extent.
- More work is needed to understand the impact of Net Zero across all sectors.
- Specific skills referred to include: Retrofit (Construction industry) - for example installation of photovoltaics, air source heat pumps; and soft skills.

3 Strategic Priorities

Cheshire & Warrington LEP's Local Skills Report (January 2022), identified government priority sectors as follows:

- Manufacturing
- Construction
- Transport and Storage
- Information and Communication
- Health and Care

A range of methods of engagement were used to identify key sectors to be covered in the C&W LSIP. These included:

- Employer Skills Survey
- 1-2-1 conversations
- Sector focus groups
- Virtual events
- C&W Chambers of Commerce meetings
- Discussions with sector representative bodies
- Presentations at local events and networks
- Utilising data and skills reports already available
- SDF and IOT plans

The following sectors were selected for phase 1 LSIP:

- Manufacturing
- Health & Social Care
- Life Sciences

Cross-cutting themes have been highlighted as:

- Digital (although there are elements which are standalone)
- Net Zero

4 Generic Priorities for Consideration

Following employer and stakeholder engagement, we have identified the following priorities for consideration:

- There is a requirement for educational professionals that understand different sectors and have the relevant skills to train future workforce.
- Careers guidance needs to be in-line with local opportunities, noting schools would also need to be brought into this.
- There are significant concerns that young people moving into the world of work are not 'work-ready', for example, they do not have sufficient communication ability, behavioural attitudes are not appropriate, or they have unrealistic perceptions of what happens in the workplace.
- Embedding employability skills, digital skills and work experience further in the curriculum can help to address issues/shortages associated with quality, attitude and practical skills.
- Embedding Microsoft applications and social media in the school curriculum will help acquisition of these basic digital skills.
- There are difficulties in recruiting technical educational professionals due to salaries being higher in industry. Consideration should be given to exploring secondment opportunities between employers and colleges/providers.
- Employers need support in assessing their skills needs and future occupations they will need within their organisations, particularly SMEs.
- There is a lack of knowledge about T-levels and Bootcamps.
- Details regarding employers' requirements linking to the Net Zero agenda needs to be provided in layman's terms. Supporting employers to understand the implication of net zero and decarbonisation policies for their business through diagnosis of need, and the implication arising for future skills development.
- Mechanisms for incentivising investment in training through subsidy and flexible course provision require further investigation. This includes raising awareness amongst employers about what already exists, as well as informing new provision.
- The barriers to apprenticeship provision include costs of releasing staff, a lack of suitable candidates, and a mismatch between apprenticeship standards and employer needs. An Apprenticeship Strategy would provide a tailored response to demand and supply, including more demand-led provision which seeks to mitigate the impact of time off the job and provides a more bespoke solution to employer needs. The creation of more bite size and modular provision aligned to key competencies is an important prerequisite to meeting employer needs.

5 Manufacturing Sector

5.1 The Sector

The Manufacturing and Advanced Engineering Sector is a significant part of the Cheshire and Warrington economy. The area is home to a significant automotive cluster and 95% of UK car production lies within a 3-hour drive, presenting significant opportunities for the automotive supply chain.

The Manufacturing sector employed 42,000 people in Cheshire and Warrington in 2022. The sector employed a slightly higher percentage of the workforce than the UK average. The average wage per job in the sector was £38,000 and it contributed 17.5% of total C&W GVA.

Almost half of all the sector's employment was in four sub sectors:

- Manufacture of Motor Vehicles, Trailers and Semi-trailers
- Manufacture of Food Products
- Manufacture of Fabricated Metal Products, Except Machinery and Equipment
- Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations

The top ten occupations (4-digit SOC) employed in the Manufacturing sector in Cheshire and Warrington are set out in the table below. These account for 30% of all employment in the sector. Hourly wages for these occupations range from £9.86 (Packers, Bottlers, Canners and Fillers) to £22.36 (Production Managers and Directors in Manufacturing).

From our Employer Skills Survey and further employer engagement work, we have found that:

- Age profile in manufacturing (specifically) is a labour supply challenge, with a generally older workforce profile. This reflected difficulties in attracting school leavers who do not see manufacturing as a sector where they can progress and develop a career.
- The sector is perceived as male dominated. This reflected difficulties when trying to recruit females.
- Digitisation and automation (in manufacturing) has not radically altered the skills requirement but requires slightly higher-level IT skills (more of a challenge given age profile of workforce and a need to build confidence and aptitude in these areas).
- Engineering qualifications are needed as single skilled (in preference to multi-skilled). This allows for greater knowledge in the area.
- Lean, Six Sigma and Business Improvement Techniques need to be integrated into other manufacturing linked qualifications, not left as stand-alone training, primarily organised in house.
- There is a view that CAD and Project Management could be integrated in STEM courses at L2/L3.
- Off the job training is disruptive. More agile training options need to be considered.

Through feedback received directly from Providers, we have found that:

- Offering courses at L2 supports students to progress to L3.
- Automotive and engineering courses alignment at L3 fits with employers expectations.
- There is a clearer occupational pathway with T-Levels, HTQs and HNCs.
- Electrical Engineering is promoted at college but needs additional promotion in schools.
- Lack of course uptake is a barrier to running successful targeted courses.
- There are less L3 females moving straight into industry; they tend to move on to HE and HNC.

5.2 Key Manufacturing Occupations

Top occupations in the Manufacturing sector in Cheshire and Warrington are recorded as follows:

Employer Need (Unique Job Postings)	Employees currently in employment in C&W (Dec 2022)	Provisional priority & possible funding sources	Green Economy Additional need	Possible funding source
Production Managers and Directors in Manufacturing (844)	2488	Degree Apprenticeships / HE	Understanding – Sustainability Leadership	Employer / LSIF
Metal Working Production and Maintenance Fitters (512)	1710	Apprenticeship L2 and L3	Awareness	Employer / LSIF
Sales Accounts and Business Development Managers (558)	1455	Full time FE/ HE Apprenticeships	Awareness	Employer / LSIF
Food and Drink Process Operatives (67)	944	Apprenticeships L2 and L3	Awareness	Employer / LSIF
Elementary Storage Occupations (3027)	1285	Apprenticeships L2 and L3	Awareness	Employer / LSIF
Packers, Bottlers, Canners and Fillers (318)	1082	Apprenticeships L3 and L4	Awareness	Employer / LSIF
Assemblers (Vehicles and Metal Goods) (82)	1051	Apprenticeships L2 and L3	Awareness	Employer / LSIF
Chemical and Related Process Operatives (136)	944	Apprenticeships	Understanding	Employer / LSIF
Production and Process Engineers (461)	909	Full time FE/ HE	Understanding	Employer / LSIF

		Apprenticeships L3 and L4		
Vehicle Technicians, Mechanics and Electricians (1248)	731	Apprenticeships up to L5	Understanding	Employer / LSIF

Source Lightcast Jan 2023

5.3 Skills Gaps & Upskilling

Employer Need	Priority for Existing Workforce (skills gaps and upskilling)	Priority for the Future Workforce (add content into Apprenticeships, 16 to 19 and AEB as appropriate)
Supply Chain Apprenticeships	Apprenticeship	Apprenticeship
Health & Safety Apprenticeships	Apprenticeship	Apprenticeship / incorporated into other courses
Food Hygiene Certification	Short course	Incorporated into other courses
FLT Training (potentially included within Engineering courses)	ITP provision	ITP provision
Lean / Six Sigma / Business Improvement Techniques as part of other qualifications	Full cost programmes / Apprenticeship L3 and L4	Apprenticeship at L3 and L4
Project management	Apprenticeship L4	Apprenticeship at L3 and L4, and within T-Level
Ability to complete paperwork (CV writing, job application forms, paperwork relevant to the job)	Short course LSIF	16-19 full time additionality AEB DWP pre-employability
Basic IT skills (Outlook, Word, Excel and other Office programmes)	Short course LSIF	16-19 full time additionality AEB DWP pre-employability
Higher level IT skills	Apprenticeship	16-19 full time additionality
Health & Safety	Short course	16-19 Full time additionality
Upskilling for emerging green technology	Short course LSIF	16-19 full time additionality

		AEB
Digital Transformation	Short course LSIF	16-19 full time additionality
Automation	Short course LSIF	16-19 full time additionality
Electrical Engineers	Apprenticeship	16-19 full time, Apprenticeship
Mechanical Engineers	Apprenticeship	16-19 full time, Apprenticeship

6 Health & Social Care Sector

6.1 The Sector

The Health and Social Care sector employed 58,000 people in Cheshire and Warrington in 2022. The sector employed a lower percentage of the workforce than is the case nationally. The average wage per job in the sector was £27,000 and it contributed 6% to Cheshire and Warrington's GVA.

The demands on the sector which are reflected across the UK are replicated and amplified in Cheshire and Warrington which has a higher than national average ageing population. This is exacerbated by the increase in pressures on key services as a result of the Covid pandemic.

The top ten occupations (4-digit SOC) employed in the Health and Social Care sector in Cheshire and Warrington are set out in the table below. These account for about 60% of all employment in the sector. Hourly wages for these occupations range from £9.23 (Cleaners and Domestic) to £24.08 (Medical Practitioners).

EMSI data indicates employers experience greater recruitment difficulties regionally vs nationally. There are high staff turnover rates in Cheshire & Warrington at 30% and males are under-represented.

Through feedback received directly from employers within the sector, we note that:

- Combined roles would be preferable (e.g., Support Worker with health care and youth work skills)
- There is a generational gap with digital skills/capabilities, the need for which is becoming greater given trend towards digitalisation and digital health care service delivery.
- Skills requirements focus on temperaments and attitudes, such as emotional resilience and softer skills such as sensitivity and boundary skills (e.g., talking to family members) which can be lacking among younger people entering the sector (also self-assessment and self-regulation).
- Customer service skills also a useful competency for the sector which presents an opportunity to look to the retail sector for workers seeking a career change.
- There are challenges with recruitment, citing factors such as the need for driving licence and own car and the requirement to work unsociable hours.
- There is a strong knowledge of where to access external training, with preference toward face-to-face learning, but that this should be undertaken flexibly.

Through feedback received directly from Providers, we note that:

- Current programmes are academic and not skills based.
- The T-Level “blip” has impacted this area significantly and results have therefore been delayed.
- Work placements are easier to find within the NHS rather than other employers.
- Within the care sector, students need to be at least 18 years old and have a driving licence and access to a car. This is a barrier for learners.
- The recruitment challenge within this sector leads to employers not being able to release employees to support student workers. (A vicious cycle).
- There is currently no or limited digital content at L3 in this sector.
- Some providers include resilience and personal care in this sector is being provided as an “add on” to the curriculum. They are working with other business to provide this (e.g. local funeral director).

6.2 Key Occupations

Employer Need (Unique Postings from Jan 2022 - Dec 2022)	Employees currently in employment in Cheshire & Warrington	Provisional priority & possible funding sources
Nurses (6375)	9553	Nursing Degree Apprenticeship
Nursing Auxiliaries and Assistants (1539)	4942	Healthcare support worker and senior L2/3 Apprenticeships Nursing Associate L5 / L5 Assistant Practitioner
Medical Practitioners (1024)	3483	Degree / PHD
Cleaners and Domestics	1644	Apprenticeship L2
Other Administrative Occupations (4821)	1559	Apprenticeship L2
Nursery Nurses and Assistants (794)	1385	Apprenticeship L2 / L3
Receptionists (1539)	1388	???
Medical Secretaries (169)	955	Apprenticeship L3
Care Workers and Home Carers (7033)	???	Apprenticeships/Care Certificate

		Possible recruitment and employability training via JC+/Bootcamp/AEB
Senior Care Workers (282)	???	???

Source Lightcast Jan 2023

6.3 Skills Gaps & Upskilling

Employer Need	Priority for Existing Workforce (skills gaps and upskilling)	Priority for the Future Workforce (add content into Apprenticeships, 16 to 19 and AEB as appropriate)
Consistent/Certificated induction process across all Health & Social Care settings	For discussion/ development with Skills for Care	16-19 full time/ Apprenticeships
Midwifery L5	Upskilling to Degree level	No funding available / lack of interest from providers to support this in area
Physiotherapy L5	Upskilling to Degree level	No funding available / lack of interest from providers to support this in area
Basic RGN training for Personal Assistants	For discussion/ development with Skills for Care	16-19 full time / Apprenticeships
Leadership & Managerial including overarching business management skills	Short course	16-19 full time additionality
Basic IT skills (Outlook, Word, Excel and other Office programmes)	Short course	16-19 full time additionality / Apprenticeship
Digital Transformation	Short course	Embedded into existing courses
IT Skills relevant to software used	Short course	16-19 full time additionality

7 Life Sciences Sector

7.1 The Sector

Cheshire & Warrington has a thriving life sciences sector with strengths in sub-sectors including biotechnology, contract research organisations, drug discovery and wound care. Start-ups lead the way in the latest innovations and medical discoveries, alongside established world-leading life sciences firms. Top recruiters in Cheshire and Warrington include AstraZeneca, NHS, Atkins plc, Inchcape plc, Amec Foster Wheeler plc, Jacobs, and Mid Cheshire Hospitals NHS Foundation Trust.

Alderley Park is UK's largest single-site life science campus, with 7,000 jobs planned by 2025 and there are now over 160 bio-tech and life-sciences businesses in the Cheshire Science Corridor Enterprise Zone. Cancer Research UK Manchester Institute and Medicines Discovery Catapult are based in the sub-region.

Through feedback received directly from employers within the sector, we note that:

- There is a lack of scientific based apprenticeships (e.g. Laboratory Technician)
- Local training provision is not always up to date, particularly with digital skills and automation
- Higher level maths skills and data analysis are lacking
- “Fundamentals of Clinical Development” awareness needed within schools (STEM link) to enhance knowledge of the sector, as well as a greater understanding that the work outcomes are potentially life changing
- Lack of awareness of computer sciences linked to life sciences
- There is a requirement for cost effective local training. Currently, outsourcing skills training to Manchester and London, with links also to Nottingham Trent University.

Through feedback received directly from Providers, we note that:

- Links with Alderley Park have been difficult to establish. There are some links with Daresbury.
- Work placements preference appears to be for HE level.

7.2 Key Occupations

In 2021, there are about 12,500 science pathway jobs in Cheshire and Warrington of which 3,250 people in Cheshire & Warrington work in Life Sciences.

Circa 4,500 science pathway jobs are at Level 3, around 1,500 require a Level 4 and the remainder require qualifications at degree level and above.

On average there are about 600 openings for these types of jobs in Cheshire and Warrington each year.

There are more jobs like this in Cheshire and Warrington than the national average and this is expected to be the case for the next few years, including for jobs like Chemical Scientists, Laboratory Technicians and Biological Scientists.

Most roles in this pathway are at relatively low risk of automation.

In the last five years, employers in Cheshire and Warrington were as likely to repeat advertise these roles as average.

In this time, there have been about 9.5k job postings for this type of role in C&W. The average number of times a role gets advertised in Cheshire and Warrington has increased from 4 in 2016 to 8 in 2021. This may indicate that employers are more recently finding these roles harder to fill.

The most advertised roles in Cheshire and Warrington are for Science, Engineering and Production Technicians, and Engineering professionals.

7.3 Skills Gaps & Upskilling

Employer Need	Priority for Existing Workforce (skills gaps and upskilling)	Priority for the Future Workforce (add content into Apprenticeships, 16 to 19 and AEB as appropriate)
Quality Assurance L4	Apprenticeship Quality Practitioner L4	Apprenticeship Quality Practitioner L4
Engineering L6 – control technical support engineer	Apprenticeship	Apprenticeship
Validation L6 – Bio Pharmaceutical	???	???
Manufacturing Skills L2 - L6 specifically in bio pharmaceutical environment	Apprenticeship L4	Apprenticeship L4
Software Engineering (for automation)	Short course	Short course

Drug discovery training	Short course	Short course
Computer Science Degree Apprenticeship	Apprenticeship	Apprenticeship
Laboratory Technician Apprenticeship	Apprenticeship	Apprenticeship
Higher Numeracy (A Level upwards)	Short course	A Level
Statistics L3 upwards	Included in Higher Maths?	Included in Higher Maths?
Analytical skills to L4	Apprenticeship / Short Courses	Apprenticeship
Leadership & Managerial	Short course	16-19 full time additionality
Basic IT skills (Outlook, Word, Excel and other Office programmes)	Short course	16-19 full time additionality
Digital based on employer need	???	???
IT Skills relevant to software used	???	???

8 Digital Sector (Cross Cutting Theme)

8.1 The Sector

The Information and Communication sector employed 19,000 people in Cheshire and Warrington in 2022. The sector employed a lower percentage of the workforce than is the case nationally. The average wage per job in the sector was £41,000 and it contributed 4% to Cheshire and Warrington's GVA.

There are about the same number of jobs in this sector in Cheshire and Warrington as the national average.

Over the next ten years, about a third of jobs will need to be filled by new entrants because of retirements and similar.

All Digital jobs have a very low exposure to the risk of automation.

Through feedback received directly from employers within the sector, we note that:

- Relevant sector experience is difficult to find in applicants.
- Programming is included in more generalist qualifications, e.g., maths and physics, and is therefore not often cited on an applicant's CV, however is key in recruiting.
- As the market develops and salaries change, it will be more difficult to attract the right candidates.
- Up to date knowledge is critical as the sector continues to change.
- Candidates need to demonstrate their ability to build, including providing source code during the selection process.
- Financial constraints limit who is trained and on what.

Through feedback received directly from Providers, we note that:

- Short courses for older existing workers are being developed in conjunction with employers, including Essential Digital Skills at L1 and L3. However, not all are completing the end point assessment; they want the skill but not the qualification.
- Student interest does not match employer need; course uptake can be low.
- Cybersecurity courses at L3 do not match employer requirement. Students will need to go on to HE to gain this.
- There is a gap for HTQs in this sector, but there are a lack of tutors and assessors to deliver this. Providers are now considering sharing resources.
- Coding is not offered, due to lack of uptake.

8.2 Key Occupations

The top ten occupations (4-digit SOC) employed in the Information & Communications sector in Cheshire and Warrington are set out in the table below. These account for almost 60% of all employment in the sector. Hourly wages for these occupations range from £12.97 (IT User Support Technicians) to £27.96 (Information Technology and Telecommunications Directors).

Employer Need (Unique Postings from Jan 2022 - Dec 2022)	Employees currently in employment in Cheshire & Warrington	Provisional priority & possible funding sources	Green Economy Additional need
Programmers and Software Development Professionals (4048)	3010		
Information Technology and Telecommunications Professionals (966)	1827		
IT Specialist Managers (107)	1259		
IT Business Analysts, Architects and Systems Designers (2082)	940		
Sales Accounts and Business Development Managers (558)	915		
Information Technology and Telecommunications Directors (227)	698		
IT Project and Programme Managers (732)	689		
Web Design and Development Professionals (787)	592		
IT User Support Technicians (1891)	572		
IT Operations Technicians (1073)	565		

Source Lightcast Analyst Jan 2023

8.3 Skills Gaps & Upskilling

Employer Need	Priority for Existing Workforce (skills gaps and upskilling)	Priority for the Future Workforce (add content into Apprenticeships, 16 to 19 and AEB as appropriate)
PHP and WordPress upskilling	Short course	16-19 additionality

Coding specific apprenticeship	Apprenticeship	Apprenticeship – uptake concerns
Digital Marketing apprenticeship	Apprenticeship	Available, but not locally
Graphic Design apprenticeship	Apprenticeship	Available, but not locally
Social Media apprenticeship	Apprenticeship	
Developer L5	???	???
Digital Skills Trainers L3	???	???
Use of all types of software (Mac / MS and iPhone / Android)	Short course	???

9 Low Carbon / Green Skills Sector (Cross Cutting Theme)

9.1 The Sector

The Government's Net Zero agenda is driving changes to the way businesses operate. These changes will drive a review of the skills which will be required. Almost half (46.4%) of Cheshire and Warrington's jobs are in industries which will be significantly impacted by the low carbon agenda. These industries will need to reshape what they do in terms of production processes, energy consumption and reduction in emissions. This will require significant reskilling of the existing workforce.

The current number employed in the 'Low Carbon and Renewable Energy Economy' (LCREE) in Cheshire and Warrington is estimated to be about 4,000. These numbers are set to grow. Ecuity has forecast a fourfold growth to 15,000 employed in the LCREE in Cheshire and Warrington by 2030. However, this growth could be more significant if the project portfolio developed by Net Zero North West is delivered. This includes several significant projects that will deliver change at scale including E-Port, HyNet, Protos, and Project Vanguard. Many of the initial jobs created in the growth of the LCREE will be in construction. The Construction Industry Training Board (CITB) believes that the areas that present the greatest challenges are in retrofit and in heat pumps.

Through feedback received directly from employers within the sector, we note that:

- Reskilling and / or upskilling the majority of the workforce is a current challenge, e.g. the move to electric car batteries, the move to hydrogen.
- Contractors are already finding it hard to maintain a steady workforce, with many employed on short-term contracts and a significant proportion reaching retirement age.
- The Cluster Plan will require focus on skills and this activity is already taking place, predominantly in conjunction with the University of Chester.
- Net Zero skills need adding into existing training as standard. Particularly in construction, there is a need for greater integration of construction and green / renewable technology courses and training made available in the local area.
- A view that there are many Government targets to meet and that individuals should be skilled in more than one of these areas to retain employment once a target is met in one field.

Through feedback received directly from Providers, we note that:

- Courses are often provided as an add-on or enhancement to another course.
- The green agenda is generally believed to be embedded within manufacturing courses.
- Providers are working together to maximise opportunity, e.g. working with Cadent on the Sustainable House.

9.2 Key Occupations, Skills Gaps & Upskilling

- For housing energy efficiency, the installation of loft insulation; solid wall insulation; cavity wall insulation; floor insulation; and high efficiency glazing.
- For solar photovoltaics, Level 3 Electrical Installations qualifications will be required to install grid connected solar.
- For nuclear, there will be demand for construction workers that have non-nuclear specific skills (including highly skilled roles in, for example, welding), as well as civil contractors and mechanical engineers.
- For anaerobic digestion (AD) there will be a requirement for specialist grid-connection engineers and operators who ensure grid connections are safe.
- For low carbon heat pumps, the current challenge is primarily one of training and upskilling the 133,000 existing Gas Safe engineers in the country.
- For carbon capture, utilisation and storage (CCUS) and hydrogen, there will be a requirement for the construction and operation of scale pilot projects for hydrogen production (e.g. Hynet) and the construction and operation of CCUS infrastructure in high emitting industrial clusters.
- For Electric Vehicles (EV), the construction and operation of EV charging infrastructure and the transition in manufacturing.
- For active travel equipment and infrastructure, the construction and operation of: walking schemes and networks; cycling infrastructure schemes and networks; and traffic calming schemes.
- For natural capital, creating, maintaining or restoring non-woodland ecosystems (e.g. wetlands); woodland ecosystems; saltmarshes and peatlands for carbon sequestration; and parks and urban green space.

10 Employability Competencies

Through all engagement methods that have taken place to develop these priorities, the following table highlights the key Employability Competencies that employers are citing as essential to their business:

Employer Need	Potential Actions
Communication skills	These skills are already covered in Apprenticeships/FT 16 to 19. We want to ensure they are incorporated into all occupational programmes and that a short course programme for existing employees is considered
Literacy	These skills are already covered in Apprenticeships/FT 16 to 19. We want to ensure they are incorporated into all occupational programmes and that a short course programme for existing employees is considered
Numeracy	These skills are already covered in Apprenticeships/FT 16 to 19. We want to ensure they are incorporated into all occupational programmes and that a short course programme for existing employees is considered
MS Office skills	We want to ensure tailored skills are incorporated into all occupational programmes.
Leadership & managerial	Management workshop / Bite size and modular provision/Up-skilling Apprenticeships
Organisation	Management workshop / Bite size and modular provision/Up-skilling Apprenticeships
Prioritisation of tasks within settings to deliver solutions	These skills are already covered in Apprenticeships/FT 16 to 19. We want to ensure they are incorporated into all occupational programmes and that a short course programme for existing employees is considered
Equality, Diversity and Inclusion Awareness	All levels workshop / Bite size and modular provision/Up-skilling Apprenticeships
Emotional Intelligence and Resilience (self-assessment and self-regulation)	All levels workshop / Bite size and modular provision/Up-skilling Apprenticeships
Problem Solving	All levels workshop / Bite size and modular provision/Up-skilling Apprenticeships

11 Appendices
