Funded by UK Government

NELSIP North East Local Skills Improvement Plan

Advanced Manufacturing including EV

Creative Industry and Content

Defence, Security and Space

Life Science, Pharmaceutical and Process

2026 – 2029

Offshore Wind and Renewable Energy

Tech, Digital and AI

Adult Social Care

Construction

NORTH EAST AUTOMOTIVE ALLIANCE

North East Combined Authority | Kim McGuinness North East Mayor

This Local Skills Improvement Plan has been approved by the Secretary of State in accordance with the requirements of section 1 of the Skills and Post-16 Education Act 2022, and the relevant published statutory guidance.

Introduction

The North East Local Skills Improvement Plan (NELSIP) for the period 2026–2029 serves as the definitive statutory framework for aligning technical education and training with the strategic economic requirements of the North East Mayoral Strategic Authority (MSA) region. The report establishes a comprehensive evidence base for skills required by employers in key sectors in the region in the short and medium term, from entry Level up to Level 8. The report builds on previous Local Skills Improvement Plans for the North East region and the North of Tyne region, both first published in 2023. The NELSIP spans the North East MSA geography and supports the regions vision outlined in the North East Local Growth Plan and the New Deal for North East Workers, ensuring local employer demand-led skills investment. This collaborative framework ensures regional education investments is directly aligned to the UK Moden Industrial Strategy, National Sector Plans and their emerging Sector Job Plans, and the Get Britain Working White Paper.

The NELSIP process is supported by a robust evidence base built directly upon existing regional activity to enhance and progress previous analysis, validated through over 1,200 stakeholder touchpoints including structured interviews, surveys, and workshops. Working collaboratively with employers of all sizes, employer representative bodies, skills providers and local stakeholders, the NELSIP will ensure the region's skills provision meets current and future employer needs, aligns provision and demand in a dynamic macro-economic environment, and fuels the region's growth and human capital ambitions.

What the LSIP is	Why it is relevant for them	Who it is intended for
A plan to determine future skills requirements that enable growth in high value sectors and support foundation sectors that are vital to a successful regional economy.	It is a strategic framework that connects the UK's Modern Industrial Strategy, the Local Growth Plan and the New Deal for North East Workers with the regional insight of short- term and medium-term industry skills needs to support growth and competitiveness across the eight key sectors.	• Employers of any size, including small and medium and micro-sized enterprises • Employer Representative Bodies (ERBs) • Skills England • North East MSA • Local Councils • Local Chambers of Commerce and Business Representative • Further and Higher • Education providers, including universities colleges, sixth forms and independent training providers (hereafter referred to collectively as "providers") • All regional partners, and green businesses. • Trade unions • Jobcentre Plus, the new Jobs and Careers Service • Department of Work and Pensions
A strategic governance framework that drives regional alignment in support of regional and national priorities, including the Local Growth Plan and the New Deal for North East Workers.	The NELSIP represents a transition towards a joint ownership model that integrates pre-existing regional insights with economic strategic planning. It builds directly upon the extensive sector skills analysis and consultation undertaken to identify growth opportunities and technical skills requirements.	
A three-year plan that provides a mechanism for aligning skills provision to employer demand.	It is a unified and stronger industry voice in shaping training provision, solving skills gaps, collaborating to overcome recruitment challenges, and activating regional collaborations between training providers and industry lead.	
Actionable regional strategic priorities and deployment plan focused on technical education and training from entry level up to and including level 8 post-graduate qualification, in line with employers' needs.	Providers are mandated under the Skills and Post-16 Education Act 2022 to review and align their provision with the regional employers' needs identified in the plan.	
A framework required to consider the skills needed to directly and indirectly contribute and support Net Zero targets, climate change adaptation, and environmental goals.	It recognises the need to grow the regional skills base and delivering the workforce needs required for the Clean Power 2030 Mission.	
A strategic plan that addresses supply and demand challenges in the labour market and supports Get Britain Working Plans.	The LSIP provides employer insights on skills needs, supporting Jobcentre Plus, and the new Jobs and Careers Service to guide individuals toward technical training required in priority areas.	

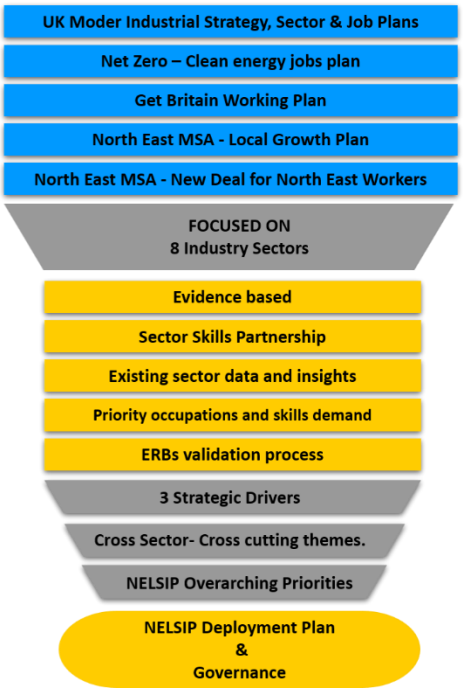
Aligning with the National & Regional Priorities

NELSIP considers the strategic and economic context for the North East region, and the implications for workforce and skills in the first section of this report. The NELSIP focuses on eight priority sectors supporting translation of the UK Modern Industrial Strategy into regional action. This framework ensures local action supports wider UK competitiveness by mapping regional activity to two distinct categories; Frontier Industries, focus on Advanced Manufacturing, Clean Energy Industries (covering Offshore Wind & Energy Transition), Digital and Technologies (covering Tech, Digital & AI), Defence, Security, and Space, and Life Sciences (covering Life sciences, pharmaceutical and process industries) and Foundational Sectors, focus on Construction, and Adult Social Care.

NELSIP recognises the importance of the new framework for the regional economy, through the North East MSA, established in May 2024, and is aligned with and supporting the Local Growth Plan and New Deal for North East Workers, connecting key national and regional priorities, including the UK's Modern Industrial Strategy, Sector Plans, Net Zero, the Get Britain Working Plan.

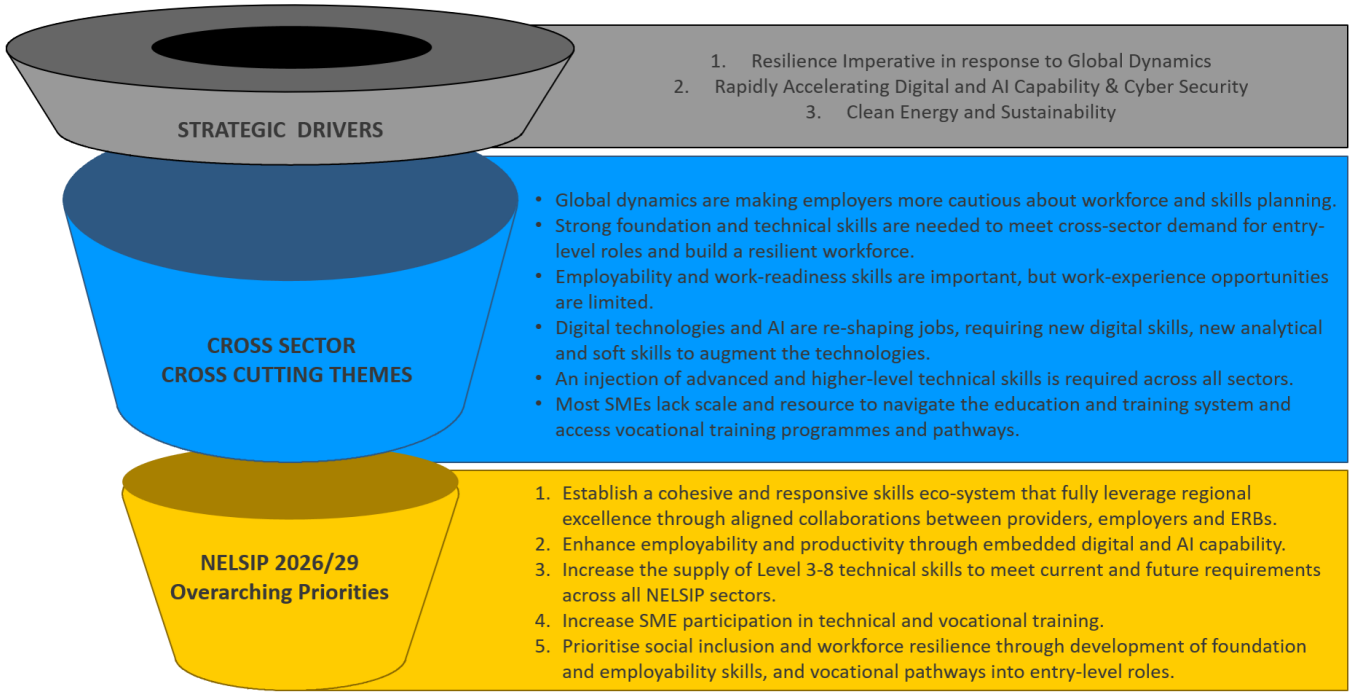
NELSIP – A process that…

- **Grounded** in national and regional strategy & policy
- **Focused on high-impact outcomes** – from entry level jobs & qualifications through to Level 8 post-graduate specialisms.
- **Employer focused and evidence-based**, collaborating with employers and sector focused ERBs to identify skills demand mapped to industrial classification codes (SIC – SOC20).
- **Engages all strategic partners** through a consultative process underpinned by over 1,200 regional touchpoints, including structured interviews, surveys, and stakeholder meetings.
- **Highlights transferable cross-cutting themes** that recognise strategic drivers and systemic challenges that need to addressed.
- **Identifies specific, actionable priorities – deployment plan.**
- **Defines stakeholder accountability** moving towards a joint ownership modelt led by a Strategic Oversight Board.
- **Provides a robust NELSIP governance** to coordinate regional activities and drive co-designed, impactful changes.



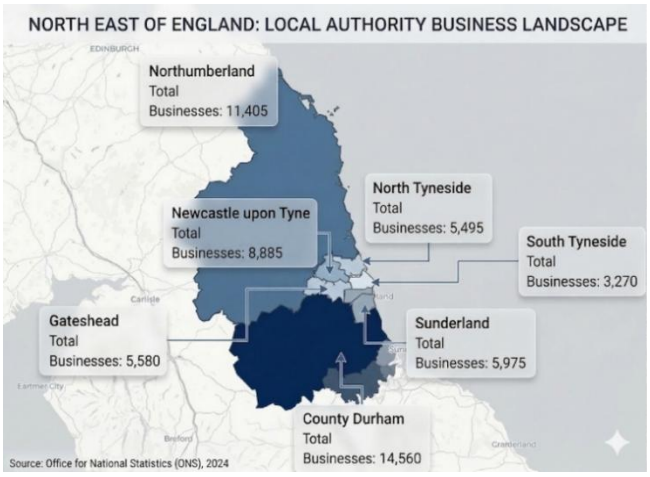
The NELSIP also recognises the very dynamic prevailing context for employers in the key sectors in the North East, identifying three strategic drivers that have significant implications for workforce and skills planning. This includes a dynamic global economic backdrop, the rapid development and transformational impact of digital technologies and AI, and the transition to clean energy. The NELSIP considers the key sectors in the North East in this context, identifying the workforce and skills implications and key themes that cut across the sectors.

The NELSIP provides a framework for aligning regional labour supply with the workforce and skills needs of the eight priority sectors. It brings together previous regional analysis and the latest sector evidence and employer insight to identify short and medium-term skills requirements and coordinated actions needed to address those needs. It also highlights the key challenges and cross cutting themes, alongside analysis of priority occupations, their associated skills requirements, how current needs are being met, and the emerging skills each sector will require. The report concludes by setting out five overarching priorities to guide the response of employers, education and training providers, employer representative bodies and key regional stakeholders. It also outlines the actions needed to deliver the workforce and skills required to achieve the ambitions of the Local Growth Plan and the New Deal for North East Workers.

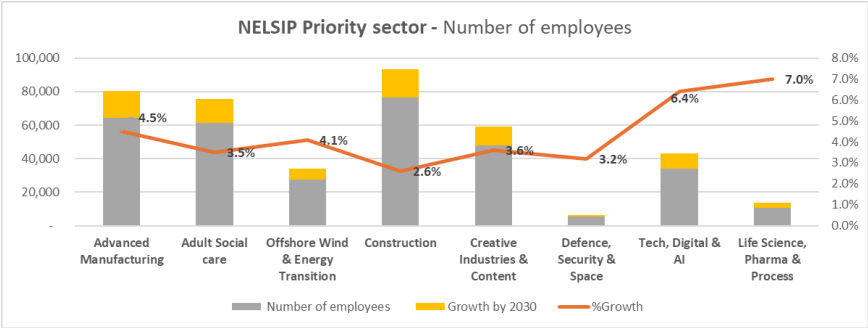


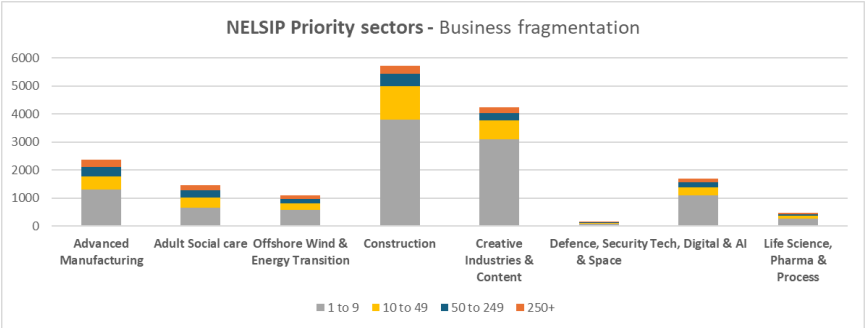
The NELSIP governance arrangements reflect the importance of aligning key stakeholders in the North East to provide strategic oversight and monitor progress and represents a transition towards a joint ownership model which combines employer-led insight with the economic strategic planning of the North East MSA. The strategic oversight board includes representation from North East MSA, the North East Automotive Alliance (NEAA), the designated Employer Representative Body (ERB), and representatives from employers, ERBs in key sectors, Higher Education (HE) Institutions and Further Education (FE) Colleges, Independent Training Providers (ITP) and other key stakeholders. The strategic oversight board is supported by Sector Skills Partnerships that translate priorities into coordinated sector-level actions, and will monitor progress against the plan, retain oversight of the cross-cutting themes and systemic challenges that span all key sectors and identify additional strategic actions. Furthermore, the governance structure will act as the principal mechanism for synchronising regional demand signal with the Department of Work and Pensions (DWP), Jobcentre Plus and Trailblazer programmes to embed a two-ways flow of intelligence that directly support the regional deployment of Get Britain Working Plan to transition residents from economic inactivity into employment in the priority sectors.

Section 1 - North East Region – Strategic and Economic Context



The North East has a £54 billion economy, it is home to two million people and over 55,000 businesses who employ a workforce of around 900,000 across urban centres of Newcastle, Sunderland, and the city of Durham, as well as widespread rural and coastal communities. It is the second largest Mayoral Strategic Authority by geographic area in the country. It has a strong industrial heritage, world class capability in sectors such as advanced manufacturing, offshore wind, and life sciences, pharmaceutical and process industries, and is connected internationally through four deep-water ports and an international airport. It is playing a leading role in the transition to clean-energy and sustainability, through offshore capability and the manufacture of electric vehicles, and has ambitions in emerging sectors such as Digital and the Creative industries. The region is home to four Universities and nine Further Education Colleges, and has strong representation from the catapult network, including Offshore Renewable Energy, Digital Catapult NE&TV, NE Satellite Application Centre and High Value Manufacturing Catapult. Accordingly, with Nomis official census and labour market statistics regional employment is highly dispersed – SMEs account for 99.5% of the 55,170 businesses in the region, and 67% of employment, with 98% of all businesses employing less than 50 people. The graphic above shows the regional business community composition for the key NELSIP priority sector and the growth forecasted by 2029, based on Lightcast data via Data City platform.





Long-term Structural Challenges

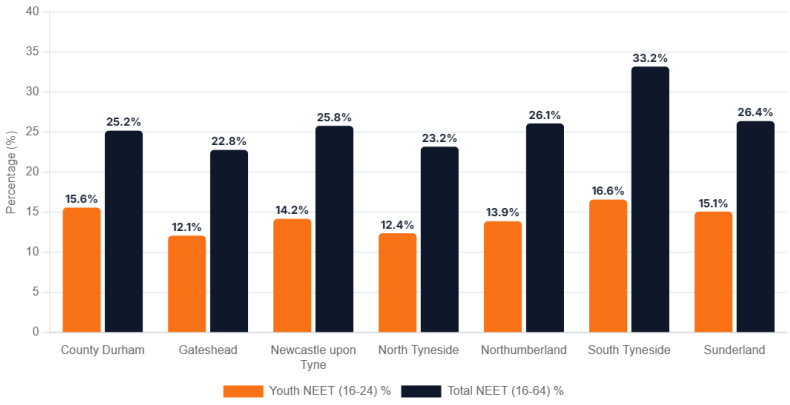
The region faces some persistent structural challenges. Regional productivity remains low impacting the availability of high-value jobs – GVA per hour is 14.6% below the UK average (£36.20 vs £42.40 GVA per hour). This reflects an economy weighted towards employment in public services, while higher GVA sectors are under-represented. There are relatively few international businesses with headquarters in the region, reducing the opportunities for high-value work associated with advanced product development. In terms of R&D spend per head, the North East attracts around two-thirds the national average (ONS, 2022).

Economic inactivity is high – workforce participation and social inclusion are a substantial challenge - economic inactivity is the highest in the UK at 26.3%, driven largely by poor health (31.3% of the inactive resident). Only 14.5% of inactive residents want work, and the employment rate (69.2%) trails the national average. Youth disengagement is acute, with a NEET rate of 14.1%, the highest in England. Whilst regional FE Colleges are performing well in terms of employment outcomes, achieving a 60% sustained employment rate compared to 56% nationally, academic attainment levels present weaknesses within the talent pipeline. The North East has the highest proportion of residents without qualifications (10.7%), and only 17.6% of pupils achieve top GCSE grades, increasing demand for remedial education and limiting progression to advanced technical training. Residents qualified to Level 3+ (61%) and Level 4+ (38%) are below the national average (ONS – 2025). The table below, shows the breakdown of NEET by geographic area, data, derived from the ONS Annual Population Survey and DfE Management Information, provides the definitive breakdown for the 2025 period.

Local Authority	Employment Level (2025 Est.)	Proportion Economically Active (%)	Total NEET (16-64) %	Youth NEET (16-24) %	NEET (16-18) %	2025 vs. UK Benchmark
MSA Region Total	**897,500**	**73.7**	**26.3**	**14.1**	**5.4**	**-5.6**
County Durham	236,000	74.8	25.2	15.6	5.9	-4.5
Gateshead	94,500	77.2	22.8	12.1	5.0	-2.1
Newcastle upon Tyne	128,400	74.2	25.8	14.2	7.4	-5.1
North Tyneside	98,200	76.8	23.2	12.4	2.7	-2.5
Northumberland	135,500	73.9	26.1	13.9	4.7	-5.4
South Tyneside	64,500	66.8	33.2	16.6	5.4	-12.5
Sunderland	123,700	73.6	26.4	15.1	5.9	-5.7
UK Average	*34,310,000*	*79.3*	*20.7*	*12.8*	*4.0*	

Note on Statistical Weighting: *The regional total of 26.3% represents a population-weighted aggregate rather than a simple arithmetic mean. This calculation accounts for the differing sizes of the working-age populations across the seven local authorities, where larger districts carry more weight in the final regional participation rate.*

The analysis highlights consistently high levels of economic inactivity across the North East, particularly in South Tyneside, which has the highest levels of economic inactivity (33.2%) and Youth NEET (16.6%).



The skills and qualification pipeline into higher-level professional and technical jobs is weak relative to other regions. Apprenticeship participation is declining – a trend that has continued following a 62% reduction in annual apprenticeship starts with SMEs in the four years following the introduction of the Apprenticeship Levy in 2017. Social background can influence young people to enter the workforce in low-wage entry level work, which may attract a short-term pay premium over educational or vocational pathways that provide a better long-term return. Only 15% of non-local Higher Education students in the region stay in the region following graduation.

The North East has a low proportion of adults with NVQ3+ ((4.2 pp below the UK average) and NVQ4+ (7.1 pp below the UK average) qualifications relative to other regions, impacting the workforce supply to enable growth of good jobs in the key sectors in the region (ONS 2024). To support the national target of 10% of young people entering Level 4/5 technical education by 2040, which is established directly in Post-16 Education and Skills White paper alongside the statutory target to ensure two-third of young people are in higher level learning by the age of 25, the NELSIP highlights the need for integrated progression pathways between FE Colleges and HE Institutions to reverse the region's low NVQ4+ attainment. These routes will need to leverage the Lifelong Learning Entitlement (LLE) and Growth Skills Levy to provide modular, work-based progression.

Aligning with the UK Modern Industrial Strategy

The NELSIP focuses on eight priority sectors translating the UK Modern Industrial Strategy into regional action. This framework ensures local investments supports wider UK competitiveness by mapping regional assets to two distinct categories:

- **Frontier Industries:** NELSIP supports the high-level technical skills demanded by the Modern Industrial Strategy's focus on Advanced Manufacturing, Clean Energy Industries (covering Offshore Wind & Energy Transition), Digital and Technologies (covering Tech, Digital & AI), Defence, Security, and Space, and Life Sciences (covering Life sciences, pharmaceutical and process industries).
- **Foundational Sectors:** The Modern Industrial Strategy emphasises the underpinning importance of foundational industries, including Construction, and Social Care. The NELSIP ensures high-volume skills pipelines for these sectors, recognising their importance in supporting growth in other sectors and providing critical public services.

UK Modern Industrial Strategy	Skills England	North East MSA -Local Growth Plan	NELSIP Key Priority sector
Advanced Manufacturing	Advanced Manufacturing	Advanced Manufacturing, including EV	Advanced Manufacturing, including EV
Clean Energy	Clean Energy	Offshore wind and energy transition	Offshore Wind and Energy Transition
Creative Industries	Creative Industries	Creative industries and content	Creative industries and content
Defence	Defence	Defence, security and space	Defence, Security & Space
Digital & Technology	Digital & Technology	Tech, digital and AI	Tech, digital and AI
Financial Services	Financial Services	Knowledge Intensive Professional Services (KIPS)	
Life Sciences	Life Sciences	Life sciences, pharmaceutical and process industries	Life sciences, pharmaceutical and process industries
Professional and Business Services	Professional and Business Services	Knowledge Intensive Professional Services (KIPS)	
Foundational Sectors	Construction	Foundational Economy	Construction
Foundational Sectors	Health & Social Care	Foundational Economy	Adult Social Care

Aligning NELSIP with the North East MSA Local Growth Plan and New Deal for North East Workers

The North East MSA, established in May 2024, provides a new framework for the regional economy through its Local Growth Plan, and its New Deal for North East Workers, the region's principal human capital strategy. The North East Local Growth Plan sets out a ten-year vision to transform the region by 2035 and outlines five core missions. The New Deal for North East Workers is a key component of the North East MSA's vision for a better region, setting out the employment and skills improvements that residents, businesses and economy need to thrive. It provides a 5-year strategy from 2025 to help more people in the North East get good jobs. It focusses on improving skills and qualifications, reducing unemployment and inactivity, supporting economic growth, and expanding opportunity across the region. The five core Missions of the Local Growth Plan and the key priorities of the New Deal for North East Workers are outlined below, and the direct interdependence with NELSIP is detailed.

NE Local Growth Plan Mission	New Deal for North East Workers Key Priorities	NELSIP Alignment
Mission 1 - **Home to a growing and vibrant economy for all:** Aims to create thousands more good jobs, leading to higher employment and rising the individual wages. **Mission 2: Home of the green energy revolution:** Aims for the North East to lead the low-carbon economy and transition to Net Zero. **Mission 3: A welcoming home to global trade**: Aims to exceed national Foreign Direct Investment (FDI) rates and increase international visitors. **Mission 4: Home of real opportunity:** Aims for improvements in skills, digital inclusion, and health outcomes, and a substantial reduction in child poverty. **Mission 5: A North East we are proud to call home:** Aims to deliver more affordable housing and a green, integrated transport network.	1. Build a bigger, better skilled, more diverse workforce 2. Creating career pathways that enable employers to recruit and retain skilled staff 3. Targeted support to improve employment rates for all residents 4. Tackling barriers that prevent residents getting into, and getting on at work	**Mission 1:** Ensuring skills provision enables businesses to fill vacancies and expand. **Mission 2:** Focussing on workforce and skills needed to grow the Offshore Wind sector and support the transition to Electric Vehicles. **Mission 3:** Focusing on workforce development to maintain competitiveness and support innovation in sectors of international importance, including Advanced Manufacturing, Life Sciences, pharmaceutical and process industries, Defence Security and Space. **Mission 4:** Emphasising the provision of foundation and technical skills that enable inclusive growth and improve life-chances by providing wider access to work, good jobs, and careers. **Mission 5:** Ensuring construction and infrastructure sectors have the capacity to deliver major rail, bus, and housing projects.

The NELSIP also supports the local deployment of the "Get Britain Working Plan" (GBWP) by feeding employer demand signals and technical skills requirements into the Jobcentre Plus and Jobs and Careers Service. This flow of information ensures that activation programs designed by the North East MSA and the DWP guide participants toward technical training in the eight priority sectors, transitioning them from inactivity into good jobs in key sectors. Existing initiatives including Connect to Work and the Economic Inactivity Trailblazer support the necessary upskilling to transition residents from long-term sickness or disengagement into employment and good jobs. NELSIP emphasises the importance of work experience in developing employability and work-readiness that enable workforce inclusion, consistent with the policy objective of The Youth Guarantee.

NELSIP aligns with national and regional priorities on equality of opportunity and social inclusion, recognising that addressing skills shortages requires widening labour market participation. It focuses on broadening the talent pool by removing structural barriers to skills and employment. The plan targets under-represented groups - including those who are economically inactive, living with health conditions, learning difficulties, or disabilities, in areas of deprivation, or under-represented by gender or ethnicity - based on local labour market evidence. NELSIP also recognises the importance of inclusive pathways and targeted support to address barriers such as transport, childcare and digital exclusion, ensuring that skills provision is accessible, supports employer demand, and contributes to sustainable economic growth.

NELSIP identified that employers are operating in a rapidly changing environment shaped by three strategic drivers with significant implications for workforce and skills planning, reinforcing the need for agile business planning, a flexible workforce with transferable skills, and coordinated actions. The three overarching strategic drivers are:

1. Resilience imperative in response to Global Dynamics

Prevailing global dynamics including a backdrop of international conflict, protectionist trade policy, aggressive competition from new market entrants and the UKs competitiveness, are all disruptive and have profound implications for national security, energy supply, international trade, investment, and regulation. National and local economies have experienced disruption as access to natural resources, energy, international supply chains have been impacted, resulting in inflationary pressure across the economy. Opportunities to localise global supply chains are being sought, local energy sources are being reconsidered, and there is a clear and explicit shift toward digital, cyber, AI and electronic warfare as core priorities within overall defence investment. Uncertainty is affecting business confidence and investment decisions. Although these dynamics are largely outside of the control of stakeholders in the North East, they highlight the importance of actions to support a responsive and resilient local economy with a flexible and highly skilled workforce. This will include a workforce with strong and transferable foundation skills, higher technical and digital skills, and adaptable behaviours. This in conjunction with agile operational models and robust local infrastructure will be important to the competitiveness of the regional industrial base.

2. Rapidly Accelerating Digital and AI Capability

The accelerated convergence of AI and industrial digitalisation introduces both opportunity and risk across all sectors in the economy. From predictive maintenance in Advanced Manufacturing to data-driven diagnostics in Health & Social Care and Building Information Modelling (BIM) in the construction sector, digital adoption is one of the key determinants of regional competitiveness. The adoption of robotics and automation is an operational imperative across the region's high-value clusters, specifically: Construction, Advanced Manufacturing & Engineering, Offshore Wind, Process & Pharma, and Space & Defence. In "harsh environment" applications, such as underwater turbine maintenance or satellite servicing, robotic intervention is essential to reduce human risk in extreme or contested locations. Risk is reflected in both reduced competitiveness due to slow adoption of these technologies, and in the structural disruption caused by the displacement of work through AI. The UK's physical automation infrastructure continues to lag internationally**.** Within the industrial manufacturing and engineering base, the UK accounts for only 2.2% of the global robotics market. Those sectors engaged in transactional processing, including the digital sector, will experience disruption and restructuring. Some sectors, such as Manufacturing and Construction, may retain a high proportion of manual tasks, but AI will extend beyond administrative efficiency to reshape professional careers. This will not only require a workforce at all levels with digital skills, alongside the analytical, interpersonal and cyber security skills needed to work effectively with new technologies meeting increasingly stringent security and compliance requirements.

3. Clean Energy Transition and Sustainability

Although the Green energy transition provides a strategic opportunity for the North East, largely due to the significant expansion of the offshore wind sector serviced by the region, including the Dogger Bank Wind Farm, the transition to clean energy is providing more immediate challenges to local industry, currently navigating the "Energy Paradox". The infrastructure investment that is required to enable the transition and the high cost of green energy is adversely impacting operating costs. At the same time, international conflict is impacting on energy supply and cost of other power sources. Several growing key sectors in the region are high energy users, including Manufacturing, Pharma, and Tech. Energy efficiency is a priority for them, with many seeking automation solutions to reduce consumption. The transition also brings wider uncertainty. Forecasting the timing and scale of market demand for new green technologies, such as heat pumps and electric vehicles, is difficult, requiring businesses to invest in infrastructure and workforce development ahead of clear demand signals. In addition, the rapid expansion of offshore wind in the North East is increasing demand for electro-mechanical skills that are also needed across other key sectors. Together, these challenges underline the need for a coordinated workforce response. The NELSIP aligns with Net Zero legislation and skills for Net Zero, distinguishing between "Deep Green" roles, such as high-voltage engineers, and broader "Green Enabler" skills, such as carbon literacy, to help meet a projected 34,200 new clean energy jobs by 2030.

Key Workforce Implications

- **Planning workforce and skills development during uncertainty is challenging**. Employers, education and training providers will need to collaborate closely to anticipate longer-term capability needs that may not be visible in current, more cautious demand signals. In some cases, providers may need to build delivery capacity ahead of demand at scale.
- **SMEs lack scale and find it challenging to navigate this dynamic context and develop the workforce capability their require**. They can be agile and responsive but will need assistance to secure and develop the capability they need, whilst providers need support to aggregate demand from SMEs.
- **Stronger transferable foundation skills and advanced/higher technical skills will be needed to increase the flexibility and resilience of the current and future workforce.** This will include numeracy, literacy, communication, and digital skills, as well as employability and social skills. Advanced/higher level technical and digital skills will provide most flexibility, and access to good jobs.
- **Digital technologies, including AI, will transform the nature of work.** To translate this into an opportunity for "a growing and vibrant economy for all" across the North East region:
  - Employers will need to anticipate how digital and AI technologies will affect productivity, growth and career pathways, and identify new ways of developing core functional competence in early stages of careers.
  - Regional and sector-level analysis will be needed to anticipate the extent of redundancy/displacement due to AI, and plan, appropriate re-skilling and redeployment interventions.
  - Digital skills will be needed at all levels, with greater emphasis on AI, cyber security, and the cognitive, analytical and social skills needed to work effectively with digital and AI technologies.
- **A challenging economic outlook and a dynamic employment market represents a risk to social inclusion.** Achieving the "opportunity for all" envisaged in the Local Growth Plan will require additional action to develop foundation and employability skills, assist with pathways into entry-level roles, and develop inclusive employment practices.
- **Managing energy as a critical variable is driving cross-sector demand for specialised technical skills.** The shift to energy-efficient systems requires workers to manage energy as a critical variable across all priority sectors. Advanced Manufacturing and Offshore Wind must move from general engineering to high-voltage and low-carbon specialisms, while Construction builds capability in decarbonising heating through retrofits and heat networks. Life sciences, pharmaceutical and process industries and Tech require advanced energy monitoring to manage the high costs of sterile processing and data centres. Operational costs and the costs associated with energy transition present challenges across all the other key NELSIP sectors.
- **Meeting the scale of the clean energy opportunity and supporting the Government's Clean Energy Jobs Plan** and wider missions to drive growth and expand opportunity will require both specialist and system-wide skills development. The North East must grow the pipeline of specialist "Deep Green" roles, including high-voltage engineers and electro-mechanical technicians, while embedding broader "Green Enabler" skills, such as carbon literacy, energy efficiency and sustainability awareness, across the wider workforce.

Section 2 - Local Skills Needs

NELSIP 26/29 – Evidence Framework and Methodology

The NELSIP is built upon a robust, evidence-based framework that aligns regional labour supply with the specific requirements of eight sectors in the region. The development of the NELSIP followed a rigorous, additive process that prioritised the integration of existing knowledge to build on previous analysis undertaken in the previous LSIPs, Local Growth Plan and New Deal for North East Workers. The NELSIP was supplemented by qualitative and quantitative intelligence inherited from ERBs, ensuring that the insights of industry leaders remained at the heart of the analysis. HE Institutions and FE Colleges occupied also played a central role in the development of the NELSIP as strategic partners, primarily through Colleges for North East England and Universities for North East England as key strategic regional alliances. Working as system architects, they helped identify short and medium term skills demand and provided insight into current and future programmes aligned to the 5 NELSIP priorities. Moving forward into the deployment phase they will play a central role in the development and delivery of programmes aligned to the NELSIP. By aligning these regional inputs with the latest intelligence from the Skills England dashboard, the NELSIP creates a unified narrative that connects local employer needs to the evolving national and regional economic landscape. This section considers both the short-term skills needs affecting current recruitment and workforce supply, and the medium-term skills needs expected through to 2029 as sectors respond to technological change, investment and shifting demand.

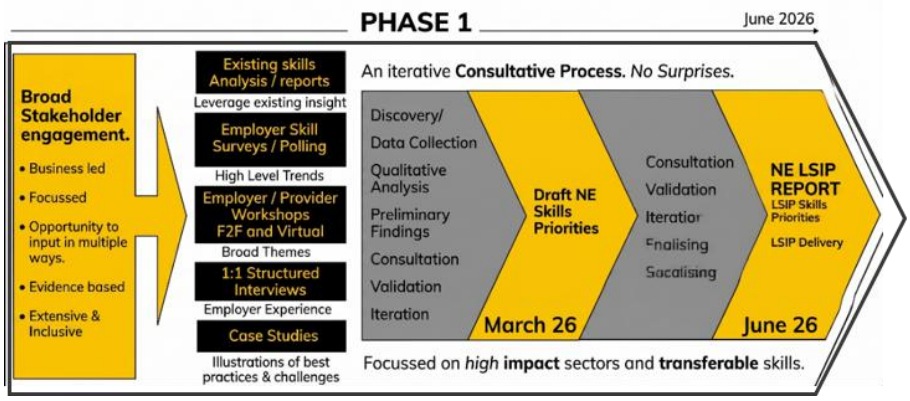
Advanced Sector Mapping, Priority Occupations and Quantitative Data Synthesis

To translate this strategic foundation into actionable insight, the NELSIP progressed to a granular sector mapping fully aligned with the Local Growth Plan. To overcome the limitations of traditional 2007 industrial classifications, we utilised Real-Time Industrial Classifications (RTICs) via the Data City platform. As a source already widely adopted by North East MSA and across industry, Data City allowed us to track over 400 emerging sectors and capture the active supply chain firms that standard data often overlooks. While we acknowledge the inherent challenges

in modelling real-time data, this platform provides a high-fidelity starting point for mapping priority occupations and future skills needs. This was further strengthened by cross mapping "Assessment of priority skills (published by DfE) with regional data sourced from Lightcast Data City (a recognised global industry standard for labour market analytics utilised by Skills England and North East MSA). This ensures a transparent link between national labour market intelligence and regional priority setting. Monthly job postings from January 2021 to December 2025 were averaged to mitigate anomalies and provide a reliable measure of current demand. A simple linear extrapolation was then applied to estimate projected demand levels through to mid-2029.

Employer Validation and Industry Intelligence

The data and sector intelligence were subjected to a rigorous, ongoing validation process involving extensive stakeholder engagement to ensure the demand fully matched with regional North East employers' demand. The validation process outcome indicates that ERBs and employers are more cautious than our initial Lightcast models suggested. A highly dynamic economic context is prompting many employers to take a cautious approach to workforce planning.



The stakeholder engagement activity involved over 1,200 touchpoints. This inclusive and iterative approach to stakeholder engagement is ongoing, and includes:

- **Sector Skills Groups:** Engaging sector focused businesses of any size across the NELSIP sectors.
- **Skills Sprints:** Workshops with partners to identify specific barriers and discuss short and medium term skills needs, system changes required.
- **ERBs and employers Insights:** Online surveys and consultations with national and regional employer bodies, sector-specific forums, and structured one-to-one interviews.
- **Skills providers:** Engaging cross-sector partners involved in the deployment of adult skills provision across the region, including FE Colleges, HE Institutions and ITPs.
- **Broader stakeholders:** Other key organisations within the skills eco-system, including local councils, RTO's and key Government agencies such as DWP.

These consultations were critical for refining demand signals for roles that are often under-represented in traditional data, such as entry-level operators and bricklayers. Furthermore, this dialogue allowed us to validate an acute regional need for specialised expertise and confirmed the accelerating transition towards emerging technical skills. Multiple methods of data collection were used and combined to maximise access to employer input for each of the eight sectors.

Type	Adv. Manuf.	Creative Ind.	Defence Security Space	Life Science, Pharma and Process	Offshore Wind Energy Trans.	Tech, Digital & AI	Adult Social Care	Constr.	Provider	Cross Sector
Meeting	14	3	1	9	9	4	1	10	42	37
Other	118				18	40			17	150
Struct. Interview	10	8	12	6	19	7	9	9	8	4
Survey	7		2	9	8	13		1		
Workshop	54			30	27	26	26	30	113	329
Totals	203	11	15	54	81	90	36	50	180	520
									Total	1240

Six areas of enquiry were used to ensure a consistent approach to data collection, providing a contextual understanding of employers' current and future skills needs, insight into the extent of workforce planning activity, awareness of how organisations are addressing these needs, and an opportunity for dialogue to explore underlying systemic issues.

Focus	Areas Covered
Workforce Composition and Labour Market Conditions	Analysis of workforce organisation structure, attrition rates, demographics and industry challenges.
Recruitment Challenges and Dynamics	Identification of "hard-to-fill" roles and Skills Shortage Vacancies, turnover trends, and the impact of geography and international recruitment on the labour pool.
Skills Gaps and Workforce Capability	Distinction between technical skill shortages and gaps in "soft skills" (e.g., communication, resilience) including digital literacy.
Training Provision and Development	Evaluation of internal training models, utilisation of the Apprenticeship Levy, and systemic barriers such as curriculum misalignment or lean production pressures.
Engagement with Education and Pipelines	Assessment of current partnerships with Schools, FE, and HE, including the effectiveness of T Levels, work experience, and industry-led outreach.
Future Skills Demand and Sector Outlook	Anticipated needs driven by strategic shifts (e.g., AI, Net Zero) emerging disciplines and leadership pipelines through 2029.

Refining the Demand Signal: Labour Shortages vs. Skill Shortages

The methodology of the previous NELSIP recognised that not all "hard to fill" jobs result from a lack of technical expertise or scarce skills, but that some arise from unappealing employment propositions and competition between employers for relatively low-skilled workers in a tightening labour market. The scope of this NELSIP requires a broader consideration of "hard-to-fill" jobs. It does this by identifying the foundation and employability skills important to these entry-level roles, as well as identifying emerging requirements, including increased digital literacy. The NELSIP does not seek to address specific structural recruitment challenges associated with these entry-level roles but does invite employers and Sector Skills Councils to consider outreach activity and positive assistance measures that can attract a more diverse workforce and enable increased inclusion. A focus on scarce technical skills is still important to employers though and is reflected in NELSIP. Employer Skills Surveys 2024 revealed a regional skill-shortage vacancy density of 37%, significantly higher than the national rate, driven by applicants lack the required technical skills, qualifications, or experience. This shortage is most severe in essential growth sectors: Construction records a shortage density of 45%, while Advanced Manufacturing, which drives £4.5 billion in annual exports, faces a 34% shortage density, directly impeding the adoption of Industry 4.0 technologies.

Policy & Governance Development

Planned policy changes will take effect during the period of the NELSIP. These include:

- A streamlined technical education framework built on 15 technical routes defined by the 2016 Sainsbury review.
- The launch of Technical Excellence Colleges for Construction (HICSA at Sunderland College) and Advanced Manufacturing (AM-TEC at New College Durham). New College Durham also anchor the North East Institute of Technology, a collaboration of 13 strategic partners across further education, higher education, and industry, providing a regional vehicle for Level 4-5 technical skills delivery in Advanced Manufacturing, Digital and Construction.
- The Government's 2025 Post-16 Education and Skills White Paper, setting out reforms to create a more coherent, employer-responsive post-16 system aligned with growth, opportunity and local labour market need.
- A revised post-16 qualifications landscape, including new Level 2 Further Study and Occupational pathways, and a three-route Level 3 system comprising A Levels, T Levels and V Levels.
- The launch of V-Levels in 2027, which will seek to complement academic and technical pathways (enabled by A-Levels and T-Levels) by combining practical learning with academic depth to support a more vocational pathway.
- A strengthened strategic role for Skills England and strategic authorities in aligning national and regional skills priorities, Local Skills Improvement Plans and Local Growth Plans.
- The launch of the Lifelong Learning Entitlement (LLE) in January 2027, providing a new funding system for those progressing through higher level qualifications, with a tuition fee loan entitlement equivalent to four years of study (currently £38,140).

It will be important that these changes are effectively communicated to learners and employers. Employers particularly report a level of confusion regarding education policy and funding. From April 2026, the North East MSA moved toward an "Integrated Settlement," giving the region more devolved authority to invest resources locally. A multi-year funding package, totalling approximately £1.7 billion over the settlement period, will consolidate over 30 fragmented funding streams into a single strategic budget.

Cross-Sector Skills Needs – Cross Cutting Themes

There are several common themes that cut across sectors which include shared skills needs or impact the future supply of skills needed by employers in the North East. These are outlined below, while a detailed short-term (immediate and emerging priorities over the next year) and medium-term (by 2029) skills priorities is detailed in each of the eight sectors overview.

- **Global dynamics are making employers more cautious about workforce and skills planning**

Macroeconomic uncertainty and shifting global conditions are prompting employers to take a cautious approach to workforce planning. Prevailing uncertainty is making it difficult to forecast future workforce requirements, and several providers are reporting a more cautious demand signal for apprenticeship starts in some key sectors. Although this presents a challenging dynamic in the near-term, it will be important for providers, employers, and ERBs to continue foresighting dialogue about their medium and long-term strategic capability requirements, particularly due to the emergence of new technologies. This can be a challenging area for providers, as it often requires them to invest in facilities or teaching capability in advance of volume demand from employers. They will likely require some level of assistance to do this. Best practice illustrates that proactive collaboration between Further Education, Higher Education, and employers, can help ensure a focussed approach to investment in the capability of provision for emerging skills.

- **Strong foundation and technical skills are needed to meet cross-sector demand for entry-level roles and build a resilient workforce.**

There is intense competitive demand to fill high-volume, entry-level roles across priority sectors. Employers report that this can result in disruptive employee turnover, and can drive cross-sector wage inflation, impacting competitiveness. Employers also report difficulty in recruiting into these roles, despite relatively high levels of unemployment in the region, Employers identify a simultaneous lack of technical expertise, work readiness, self-management and operational skills as hiring barriers (Skills Survey 2024).

  - **Advanced Manufacturing:** Production operatives and entry-level maintenance technicians.
  - **Offshore Wind and Renewable energy:** Wind turbine technicians and entry-level Installation engineers.
  - **Tech, Digital & AI**: Data technicians and digital support roles.
  - **Creative Industry and Content:** Different trainee entry level roles, including production accountants, floor runners, and camera.
  - **Life sciences, pharmaceuticals and process industries:** Laboratory technicians and science manufacturing technicians.
  - **Construction:** Plumbers, electricians, and retrofit installer assistants.
  - **Defence, Security and Space:** Operators, mechanical engineering and systems engineering.
  - **Social Care:** Care Workers and Band 2 healthcare support assistants.

Uncertain economic and market conditions also underline the importance of the foundation skills required for these roles in developing greater economic resilience in the region through a skilled and flexible workforce. Core foundation skills required across all sectors, can assist the workforce to flexibly move between employers and sectors if market conditions require it. These include numeracy, literacy, and basic digital skills, and employability and social skills in areas such as communication, and self-management. A strong focus on establishing thes foundation skills as young people progress through education will continue to be important. A foundation in Maths and English qualifications is particularly important in enabling access to progression opportunities through advanced and higher qualifications and into high-value jobs. Employers report that those who are no longer in education and are economically inactive often lack these foundation and employability skills, increasing the risk of prolonged inactivity and exclusion. It will be important that programmes to assist developing foundation and employability skills amongst this population continue. Further economic resilience is provided by more advanced technical and digital skills, which are highly transferable between sectors and enable access to good jobs and careers.

- **Employability and work-readiness skills are important, but work-experience opportunities are limited.**

Almost all employers emphasise the importance of employability and work-readiness skills. They expect new employees to be able to self-manage and conduct themselves appropriately in the workplace, and to be able to work both independently and as part of a team. Problem-solving, critical-thinking, communications, and team-working skills are all identified as important. Work-experience or entry-level apprenticeships have often been important in helping young people develop those skills. Conversely, young people often report that they find it difficult to secure relevant work experience. Absence of this experience also makes it difficult for those economically inactive to break the cycle of inactivity and unemployment. Entry-level apprenticeships are in decline, and many employers find it difficult to commit to provide work-experience placements for a variety of reasons, including operational pressures, safety/safeguarding, and hybrid/remote working limiting the availability of staff to supervise those on placement. AI and digitalisation are further impacting by changing the requirements for entry-level roles, particularly compounding issues facing many employers in the Digital sector with business models predicated on billing clients for productive time. Investing time in developing employees without prior experience in entry-level roles can represent a challenging inefficiency for smaller Digital employers.

Best-practice – bridging the experience gap for future Tech talent

The Tech Talent Pro model is an industry-leading employment initiative led by Sunderland Software City (SSC) supported by Sunderland City Council through the UK Shared Prosperity Fund (UKSPF). This framework is recognised for successfully bridging the digital "experience gap" for junior software engineers and web developers. The model places candidates on six-month full-time paid contracts to work on live client projects under the direct oversight of senior engineers. This structured environment targets individual skills development and facilitates direct transitions into permanent employment. Since 2021, the model has supported over 2,500 tech businesses and 100 non-tech organizations, helping hundreds of individuals progress into technical roles.

- **Digital technologies and AI are re-shaping jobs, requiring new digital skills, new analytical and soft skills to augment the technologies.**

Digital technologies, automation, and AI are transforming jobs across the key sectors, making digital literacy a requirement at all levels. More advanced digital skills are increasingly required to complement the application of advanced/higher level technical skills and need to be integrated into the curriculum for technical subjects. New skills needs are not only limited to digital skills. As automated systems handle more routine tasks, workers require new analytical and soft skills to interpret, verify, and augment these technologies effectively. This means moving beyond simple task execution to an environment where staff can critically evaluate and act on system outputs. Data security will be a core requirement, and cyber security capability will be needed across all sectors. AI will have a disruptive impact. Job displacement will extend beyond transactional, administrative work, to include professional roles and roles in the digital sector where AI agents reduce the demand for less advanced software development and testing. Further analysis of this impact in the region will be important and should inform reskilling and redeployment activity.

- **An injection of advanced and higher-level technical skills is required across all sectors**

Advanced and higher technical skills continue to be key to enabling innovation, productivity, competitiveness, and growth across high-value sectors. They also provide residents with access to good jobs and careers, and transferable skills that support a resilient economy. Emerging technologies and the sustainability imperative are emphasising the importance of technical skills. As markets, products, and workplaces are transformed through digital and emerging technologies, the importance of higher-level technical skills is increasing. Although prevailing economic uncertainty may have dampened the short-term demand-signal into training providers in some sectors in the region, employers all report the importance of these skills, the relative scarcity and cross-sector competition for the same skills, and the long-term need to increase supply. The focus of technical skills needs in each sector may be different (summarised in the table below and detailed in the sector overviews in this report and in Annex A), but there are also some common cross-sector underpinning skill sets. Advanced digital skills complement advanced technical skills in all sectors, and electro-mechanical technician skills, for instance, are a priority across Advanced Manufacturing and Off-Shore Wind and Renewable Energy.

Delivery of higher technical skills can be challenging for providers. Challenges include retaining subject matter experts to develop and deliver education and training, curriculum development as technology and needs change, facility investment, and maintaining delivery capability if volumes of learners are relatively low. In region-collaboration between providers, with employers, and across Further and Higher Education, will be important to effectively respond to these challenges. Collaborative centres of technical excellence, with reach across the North East region, can ensure the capability to deliver higher-level technical skills is sustained.

NELSIP Sectors	Priority Occupations (SOC 2020)	Technical Skill Injection Focus
Advanced Manufacturing incl. EV	Programmers and software development prof. (2134), IT business analysts, architects and systems designers (2133), Mechanical eng. (2122), Production managers and directors in manufacturing (1121), Electronics eng. (2124)	**Industry 4.0 & Mechatronics:** Shifting from purely mechanical engineering to robotics, PLCs, and digital twin in Level 3+ apprenticeships.

Creative Industry and Content	Programmers and software development prof. (2134), Marketing associate prof. (3554), Graphic and multimedia designers (2142), Financial managers and directors (1131), Sales accounts and business development managers (3556)	**Virtual Production & Immersive Tech:** Training in Unreal Engine and virtual production volumes for developments like Crown Works Studios.
Defence, Security and Space	IT business analysts (2133), Programmers and Software Developers (2134), Production eng. (2125), Electrical eng. (2123), Mechanical eng. (2122)	**Secure Systems Engineering:** Integration of security clearance readiness and "Secure by Design" principles into engineering courses.
Life sciences, pharmaceutical and process industries	Sales Accounts and Business Development Managers (3556), Programmers and Software Development Professionals (2134), Business and Related Research Professionals (2434), Chemical Scientists (2111), Other Researchers, Unspecified Discipline (2162)	**Sterile Manufacturing & Good Manufacturing Practise (GMP):** Specific modules for sterile environments and biologics, distinct from traditional chemical processing.
Offshore Wind and Renewable Energy	Electricians and electrical fitters (5241), Engineering technicians (3113), Electrical eng. (2123), Production and process eng. (2125), Mechanical eng. (2122)	**HV & GWO Standards:** Expansion of High-Voltage electrical engineering and Global Wind Organisation safety training.
Tech, Digital & AI	Programmers and software development prof. (2134), IT business analysts, architects and syst. designers (2133), Data analysts (3544), Business, research admin. professionals n.e.c. (2439), Production and process eng. (2125)	**Applied AI & Data Assurance:** Moving beyond basic fluency to agentic AI and its integration into business processes.
Construction	Civil eng. (2121), Quantity surveyors (2453), Constr. and building trades sup. (5330), Pipe fitters (5214), Chartered arch. technologists, planning offic. and consultants (2452)	**Retrofit & Heat Pumps:** A rapid pivot from gas boiler skills to low-carbon retrofit and heat pump installation for existing housing.
Adult Social Care	Care Workers/Home Carers (6135), Social Workers (2461), Residential/care managers (1232), Senior Care Workers - Home carers (6136), Social services managers (1172)	**Digital Care & Telehealth:** Training frontline staff in remote monitoring ("Virtual Wards") and digital care records to improve productivity.

- **Most SMEs lack scale and resource to navigate the education and training system to access vocational training programmes and pathways.**

SMEs make up 99.5% of regional enterprises, and account for 67% of employment in the region. They are critical to the regional economy, but many do not participate in the education and training system. In the North East, apprenticeship starts with SMEs reduced significantly in the period following the introduction of the apprenticeship levy, both nationally (down 49% in 4 years from 2015/16) and in the North East (down 62%), but this trend has continued in recent years. SMEs report several barriers to participation. This often includes the wage costs associated with the significant off-the-job training required for advanced technical programmes (up to a year on some technician programmes), having staff capacity to supervise on-the-job training, and lack of resource to navigate training provision and funding arrangements. Innovative training providers have addressed this administrative issue by providing a brokerage model that supports the SME by assisting with the recruitment and administration of apprentices.

Businesses

UK Business Counts (2025)

	North East (Numbers)	North East (%)	North East (Numbers)	North East (%)
Enterprises				
Micro (0 To 9)	48,170	87.3	63,760	87.5
Small (10 To 49)	5,740	10.4	7,430	10.2
Medium (50 To 249)	990	1.8	1,310	1.8
Large (250+)	275	0.5	375	0.5
Total	55,170	-	72,875	-
Local Units				
Micro (0 To 9)	55,140	80.5	73,145	80.5
Small (10 To 49)	10,780	15.7	14,200	15.6
Medium (50 To 249)	2,210	3.2	3,010	3.3
Large (250+)	360	0.5	475	0.5
Total	68,490	-	90,825	-

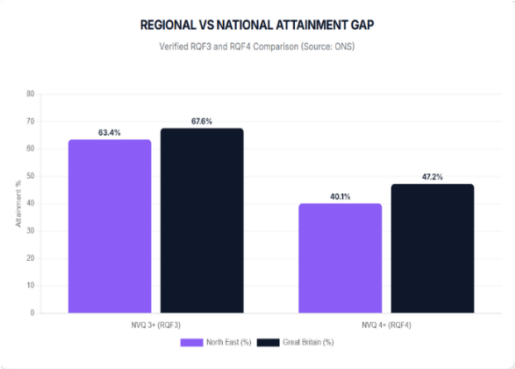
Source: Inter Departmental Business Register (ONS)

Best-practice – College and Employer partnership to enable innovative apprenticeship delivery model

Over the last decade, PlanBEE has redefined apprenticeships in the built environment standing as an exemplary model for driving SME engagement across the region. Developed in the North East by Ryder Architecture and Gateshead College, with over 70 leading employers nationwide, it is the first programme of its kind, with apprentices completing six four-month placements across diverse roles and organisations. This equips them with the skills and understanding needed for this fast-paced industry, with 97% progressing into employment.

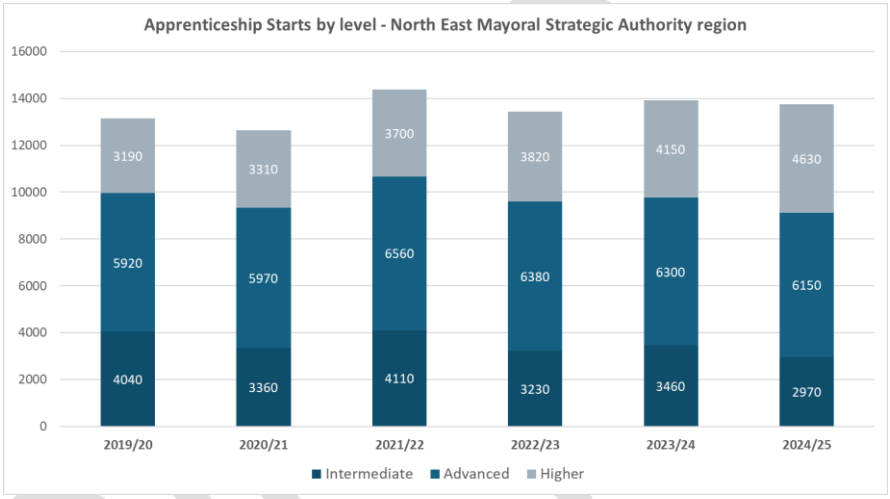
Recent activity in the North East highlights the value of combining high-quality technical training with brokerage support for SMEs. Approaches that help employers navigate recruitment, administration and training arrangements can make apprenticeship delivery more accessible and attractive to smaller businesses. Targeted funding has also helped mitigate cost barriers. The Training for Growth pilot, sponsored by Sunderland City Council through the UK Shared Prosperity Fund 2022–25, supported 10 local SMEs to recruit 17 Level 3 advanced apprentices. The Growth and Skills Levy offers further flexibility by allowing shorter modular training, initially in AI, digital and engineering, and by introducing grants for employers recruiting apprentices aged 16–24 who are unemployed. While these reforms are broadly welcomed, continued growth in SME participation is therefore likely to depend on innovative delivery models and structured support.

Current state – Education & Training Provision in the North East



A relatively weak qualification pipeline impacts workforce supply into good technical jobs.

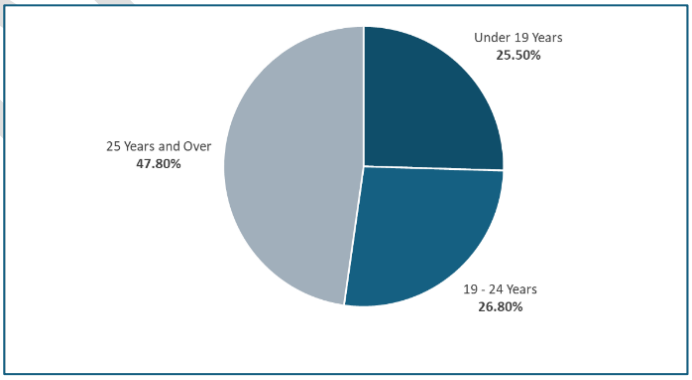
The skills pipeline into higher-level professional and technical jobs is weak relative to other regions, reflecting relatively low attainment in the foundation qualifications required to progress into these roles. The North East has the highest proportion of residents without qualifications (10.7%). The previous NELSIP reported that Level 4+ Maths and English attainment at Key Stage 4 in the region is in line with national levels, but only 17.6% of pupils achieve top GCSE grades. This impacts their ability to progress to advanced/higher qualifications and technical training. Residents qualified to Level 3+ and Level 4+ are below the national average – 61% at Level 3+ and 38% at Level 4+ (ONS – 2025). The North East has the lowest proportion of adults with NVQ3+ and NVQ4+ qualifications relative to other regions (7.1 percentage points below the UK average at NVQ4+), impacting the workforce supply to enable growth of good jobs in the key sectors in the region.



The apprenticeship pipeline – more focus needed on technical skills in key sectors, entry-level pathways, and enabling SME participation

Apprenticeships are important in ensuring an adequate supply of technical learners into the workforce. Presently the mix of apprenticeships being undertaken in the North East, both in terms of subject and qualification level, are not well aligned with the future needs of the key sectors in the region and the New Deal for North East Workers. Aligning supply and demand for apprenticeships within the region is challenging, local providers are generally successful in enabling the progression of those completing apprenticeships (93% find a job or progress to further training) but they account for less of 25% apprenticeships delivered in the region. In line with a national trend, annual apprenticeship starts in the region progressively halved between 2015/16 and 2019/20, but since the Covid pandemic they have remained relatively stable in the range of 13,000-14,000 starts per year.

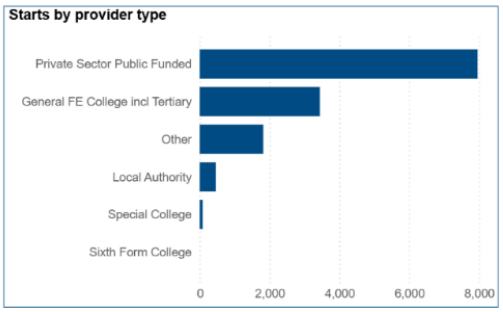
The outcomes being enabled through apprenticeships has changed significantly during this period. Many employers are using apprenticeships to provide professional development for their existing workforce, rather than to provide those entering their workforce with the key technical skills they need for a career pathway in their sector. Consequently, higher level apprenticeship starts (Level 4+) have increased by 45% since 2019/20, and Intermediate apprenticeship starts, (Level 2) have reduced by 27%. Almost half (47.8%) of starts in 2024/5 were aged 25+. Professional development and progression into higher level qualifications and jobs is a positive step, but this appears to be at the expense of those joining the workforce in entry level roles.



The mix of levels of apprenticeships does vary across sectors. Construction for instance still does generally use apprenticeships to develop the core technical skills for young people entering the sector – 83% of the apprentice starts in the sector in 2024/5 were at Level 2/3 and 77% were employees age 24 and under. In Engineering & Manufacturing the Level 3 Technician Apprenticeships continue to be the key vocational platform for technical roles and career paths, accounting for 69% of apprenticeship starts. 60% of Digital Technology apprenticeships are Level 4+, which should be expected due to the skills requirements in advanced digital roles.

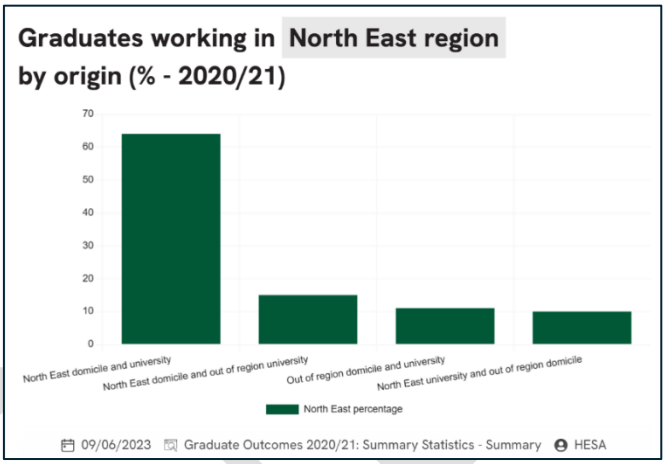
The mix of apprenticeships in the region does not align with the sector and skills priorities reflected in the Local Growth Plan and this LSIP. 20.4% of apprenticeship starts in 2024/25 were in Business, Administration & Law route (2,800 starts), around double the number in Engineering & Manufacturing Technologies route (1,530 starts), and significantly higher than Construction, Planning and the Built Environment (1,860), and Care Services (1,350) and Health and Science (1,280).

Inclusive participation in apprenticeships continues to present a challenge. Ethnic diversity is under-represented (4.7%), despite a 14% increase on prior year in 2024/5. The reduction in Level 2 apprenticeship starts also impact the participation of those with a learning difficulty/disability (LLDD), and those from the most deprived areas. The North East MSA region has a lower proportion of LLDD on apprenticeships overall (13.4%) than the national average (16.1%). The previous NELSIP reported that the proportion of those from the 20% most deprived areas on Level 2 apprenticeships was almost double that on higher apprenticeships (Source: Sutton Trust, 2022).



Aligning apprenticeship outcomes with regional priorities is challenging due to the proliferated nature of the apprenticeship market, and the amount of choice available to employers. In 2024/25 less than a quarter of apprenticeship starts in the North East MSA region were delivered by FE Colleges in the region (3,330), whilst 58% (7,960) were delivered by ITPs. The ITPs with largest share of the North East market are national providers which have specialised in apprenticeship delivery since the introduction of the apprenticeship levy.

Higher Education – more opportunity to influence the supply of a higher qualified workforce in North East. The North East MSA region is home to 4 universities, hosting around 100,000 students in 2024/5, with around 70,000 of those being UK residents. A high proportion of those living in the North East who go to university chose to study in the North East (70%), and many of these (three-quarters) will also stay in the region for work after graduating. Those from the North East who study outside the region also frequently return to the region following graduation. Consequently, 79% of the 2020/21 cohort of graduates working in the region had lived in the region prior to going to university (HESA). However, this highlights that the region struggles to attract and retain graduates who do not have prior roots in the area. Only 15% of those studying at North East universities, but previously domiciled outside the region, stay in the North East to work, and only 11% of the 2020/21 graduate cohort working in the region were graduates who had moved to the region to work, having not previously lived or studied in the North East. A key underlying factor behind this outward migration is the low volume of regional university spin-out companies currently being scaled. Without a higher volume of these ventures, the local market lacks a sufficient baseline of high-value, R&D-intensive roles to anchor a sustainable graduate pipeline. Retaining these individuals is critical because graduates in technical and STEM fields are significantly more likely to secure full-time employment and enter high-skilled work.



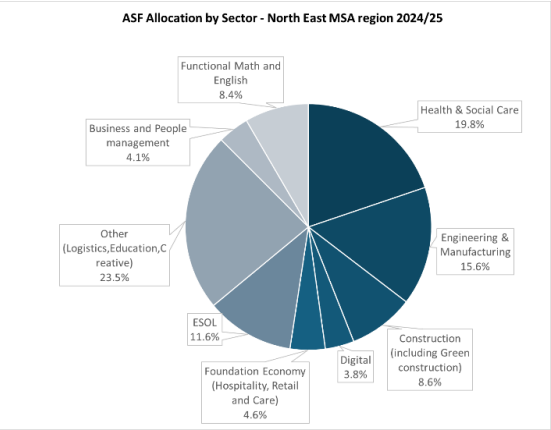
Specifically, 82% of science subject graduates find themselves in high-skilled employment post-graduation compared to 73% of non-science graduates. The North East MSA region has Universities with definite strengths in STEM subjects, but it will be important to increase retention following graduation, by providing undergraduates with a perspective of career paths and opportunities in the region. The NELSIP also highlights the importance of the region's low HE participation rate by establishing multi-institutional credit transfers and modular step-on/step-off pathways. This allows Level 2 and 3 vocational learners to progress flexibly into Higher Technical Qualifications (HTQs) and degrees, removing systemic barriers to higher-level skills. HE Institutions have several opportunities to influence the supply of higher qualified workforce into the local economy, which include:

1. **Universities partnering with FE Colleges provide a seamless vocational pathway and support centres of technical excellence through the application of research capability in key sectors.** Progression through vocational Higher Technical Qualifications (HTQ) is often provided by both FE Colleges and HE Institutions. Employers and learners often report complexity and inefficiency due to curriculum not being aligned, and prior learning not always being fully recognised, particularly if a learner move between different FE and HE providers. Opportunities to create a more collaborative and seamless pathway through HTQ would be appreciated by employers, and the introduction of Technical Excellence Colleges should provide an opportunity to simplify this collaboration. Universities can enrich the vocational curriculum by leveraging their capability to support centres of technical excellence. Best practice case studies from catapults, particularly the High Value Manufacturing Catapult, demonstrate that collocating research excellence with vocational training centres, such as the AMRC Training Centre at the University of Sheffield, can materially enhance the vocational training curriculum. The added-value in this curriculum can also provide a stronger proposition for SMEs – 80% of the apprentices at the AMRC Training Centre are employed by local SMEs attracted by the innovation and productivity benefits their businesses realise through the enhanced training their apprentices receive. There are good examples of collaboration between HE Institutions and FE Colleges in the North East. Newcastle University has been a partner within the North East Institute of Technology (NEIoT) led by New College Durham. The Institute of Electrification and Sustainable Advanced Manufacturing (IESAM), a partnership which includes all the Universities in the region, the NEIoT, and Newcastle College. IESAM seeks to leverage the expertise of the universities in Power Electronics, Machines & Drives (PEMD) and in Battery Technology to support the strategic requirements of the advanced manufacturing sector, particularly by enriching the delivery of progression to Level 6+ through degree apprenticeship programmes for engineering technicians. Newcastle College also hosts an Energy Academy, which partners with employers in the Off-Shore sector and the sector catapult (OREC), which is expanding following £8.48m investment approved by the North East MSA.

2. **Employers in the North East partnering with HE Institutions to provide project opportunities to undergraduates and promote attractive career options to those graduating from local universities.** To improve retention in the North East of those graduating from local universities but not domiciled in the North East, it will be important for employers to promote attractive graduate opportunities and careers in the region. Relationships with undergraduates can be developed by supporting project opportunities and/or internships, which could enable fast-track graduate recruitment. ERBs could play a facilitatory role in coordinating this activity on behalf of employers and promoting careers in the broader sector.

Adult Skills provision – effectively promoting inclusion

The deployment of Adult Skills Funding (ASF) and Skills Boot Camps in the region suggests that devolved control of education and training funding can effectively enable prioritisation of regional key sectors and skills, and support the priorities identified in the New Deal for North East Workers. In 2024/5 £67.66 million of ASF funding was invested, enabling 37,000 residents to achieve 85,000 learning aims, with a 91% achievement rate, demonstrating high levels of learner retention and progression. ASF plays an important role in enabling inclusion, with nearly half of all learners residing in the 20% most deprived wards**.** Furthermore, over one in four learners declared a disability or health condition. In AY 2024-25, the ASF successfully moved 3,926 unemployed learners into work and supported 5,006 residents in progressing to higher-level qualifications.



The graph illustrates that ASF funding deployment has aligned well with supporting skills development for key NELSIP sectors, as well as addressing foundation skills including numeracy, literacy, and English language for Speakers of Other Languages (ESOL). Participation is largely focused on preparation for life & work (42% of enrolments), and in programmes developing basic skills, or qualifications at or below Level 2. Around 10% of learners are on Level 3 programmes.

Skills Bootcamps: Accelerated Pathways to High-Value Roles.

Skills Bootcamps represent a flexible, high-impact model for rapid upskilling accessible for all the training providers (HE Institutions, FE Colleges and ITPs). In the most recent Wave 5 of Bootcamps, the North East invested heavily in Green Power (£2.87m), Digital (£2.08m), and Construction (£1.72m). The programmes largely result in positive outcomes, with 82% of learners completing the course and 79% achieving a successful outcome, such as entering new employment or gaining a promotion. Milestone tracking indicates that 1,384 learners entered new employment as a direct result of Wave 5 Bootcamps.

Key Sectors in the North East

This section summarises the profile, core challenges, and skills priorities, whilst highlighting what's happening in the region, what should be retained, the changes are needed and potential impact for each of the eight NELSIP sectors. In line with statutory guidance, sector is defined and mapped adopting the SIC and RTIC Classifications, validated by ERBs, and benchmarked against ONS baselines. For each industry, the top 10 regional priority occupations (SOC 2020) are identified by cross-referencing Skills England's national framework with Lightcast labour market analytics. While Data City and Lightcast establish the foundational growth forecasts, these figures are directly refined through validation workshops with ERBs and industry leaders to mirror true regional demand. Importantly, ERBs highlighted that certain clusters of roles require identical skill sets despite holding different job titles; these groupings have been captured in Annex D utilising Skills England's CASCOT web tool (Warwick). Standard online data often overlooks the regional "hidden job market." A significant volume of vacancies, particularly local entry-level roles, supply chain positions, and niche technical specialisms are filled directly through word-of-mouth or employer networks rather than public advertisements. The analytics below therefore highlight the most visible, hard-to-fill vacancies across the region. The following sector overview presents the data across two distinct timelines:

- Historic: Average 2021–25 monthly job posting
- Forecast: Forecast by 2029 forecast monthly job posting

Advanced Manufacturing including Electric Vehicle

Nationally, the UK's Modern Industrial Strategy transitions manufacturing toward a high-value, R&D-intensive model, aiming to nearly double annual business investment to £39 billion by 2035 under the Invest 2035 framework.

In the North East, the sector is the "beating heart" of the UK's electric vehicle (EV) transition, producing 38% of all UK passenger vehicles. The cluster generates £5.5 billion in GVA annually (10.5% of the regional economy), with output growing nearly 20% since 2018. Driven by automation levels five times the UK average, regional employee productivity is three times higher than the national and EU benchmarks. The local ecosystem features 2,384 employers, heavily shaped by micro-businesses and SMEs with 37-year legacy of lean methodology and high productivity. Main sector challenges are:

- Global Competition & Supply Volatility: Chinese brands hold a 20–30% cost advantage due to cheaper battery chemistries, while persistent memory chip shortages leave assembly lines unstable and unpredictable.
- ZEV Mandate Compliance Pressures: Manufacturers faced £5.5 billion in industry costs in 2025 in electric vehicles discounting.
- The High Cost of Tech in production and repair: Modern cars are essentially high-performance computers on wheels. Integrating AI for features like autonomous navigation increase manufacturing costs and exponentially raises consumer repair expenses.
- Recruitment and Aging Workforce Crisis: 36% of manufacturing vacancies are flagged as "hard-to-fill" (vs. a 24% cross-industry average). The workforce shortage is exacerbated by an aging workforce (28% of staff aged 55+) risking knowledge loss upon retirement.
- SME Tech Hesitation: While large firms automate smoothly, small and medium suppliers face a 43% hesitation rate regarding AI implementation due to high setup costs and operational complexity.

What is Currently Happening

- Industrial Scale-Up: Driving Nissan's £3 billion EV36Zero vision for EV manufacturing and renewable integration, alongside the operational AESC Gigafactory (15.8 GWh)—the UK's largest operational battery facility.
- The MADE NE Hub: A £14.6 million open-access innovation and training environment established within the North East Investment Zone offering SMEs and large organisations access to state-of-the-art, industry-standard hardware. Collaborating with Nissan, local authorities,

and regional education institutions, it bridges skills gaps in Electric Vehicle (EV) and battery technology, while simultaneously accelerating regional adoption of industrial digitalisation, automation, and robotics.

- The National Battery Skills and Training Academy: Led by New College Durham is a strategic collaboration with Newcastle University and regional partners to deliver technical qualifications and apprenticeships in battery production, electric vehicle technologies, and energy storage systems.
- The Institute of Electrification and Sustainable Advanced Manufacturing (IESAM) bridges the gap between research and vocational delivery to drive the Clean Power 2030 Mission and the net-zero transition. This strategic partnership, led by Newcastle University and integrating regional universities, FE colleges, and the NEIoT, leverages academic expertise to deliver higher-level skills for the Power Electronics, Machines, and Drives (PEMD) supply chain.
- Nissan Skills Foundation recently celebrated 10 years of dedicated engagement, that has involved over 85,000 young students across the North East, utilising programs like Nissan Blue Citizenship and F1 in Schools to build early STEM aspirations.
- New College Durham has been designated the role to lead the regional Advanced Manufacturing Technical Excellence College (AM-TEC). Operating as a collaborative regional platform, AM-TEC utilises a hub-and-spoke model to coordinate delivery across partners, providing integrated pathways that support SME engagement and workforce upskilling.
- Inclusive Models: Projects like the IPAM (South Tyneside), which demonstrate successful social inclusion in high-tech sectors, supporting 60 economically inactive residents into high-tech automotive roles, converting social barriers into a production-ready talent pipeline.

Key sector Short-term and Medium-term Skills Priorities (2026-2029) by Priority Occupations (SOC 2020)

- **Short term:** North East manufacturing employment is projected to grow by 4.5% annually, from 64,380 to 80,229 by 2030. The industry is rapidly pivoting from traditional mechanical workflows toward automation and net-zero technologies, creating a critical need to close the "Level 4 gap" where 66% of future roles require higher qualifications but higher apprenticeships account for only 7% of current provision. Soft skills are equally Important, cross-disciplinary cooperation, communication, and personal resilience have become primary career differentiators to combat a critical decline in the practical workplace readiness of younger recruits.
- **Medium term:** The "Swiss Army Knife" Technologist (Digital + Technical) - Modern manufacturing demands hybrid professionals who can safely leverage AI-enabled workflows, PLCs, and digital twins to optimise plant productivity without sacrificing core, foundational engineering principles.

SOC20	SOC20 unit label	Historic	Forecast	Skills Requirements
2134	Programmers and software development professionals	177.7	240	Software eng., coding and system architecture; expert depth in full-stack dev and Agile deployment.
2133	IT bus. analysts, architects and syst. designers	145.7	204	Data modelling, system mapping and design.
2122	Mechanical engineers	56.2	73.1	CAD/FEA software, thermodynamics, and material science to design and test mechanical components.
1121	Production managers and directors in manufacturing	35.5	44.4	Lean manufacturing, supply chain logistics, and resource / plant optimisation.
2124	Electronics engineers	12.9	16.8	Design of circuit boards and semi-conductors; expertise in signal processing and embedded systems integration.
5250	Skilled metal, electrical and electronic trades supervisors	12.1	8.8	Multidisciplinary oversight of trade standards, site safety, and technical troubleshooting.
2126	Aerospace eng. n.e.c.	7.6	11.4	Aerodynamics, propulsion systems, and aerospace materials compliant with civil/military standards.
5231	Vehicle technicians, mechanics and electricians	7.3	21.3	Advanced diagnostics for ICE and EV systems; electronic control units (ECU) and mechanical repair.
2129	Engineering professionals n.e.c.	7.3	9.5	High adaptability to niche engineering disciplines, from environmental audits to structural testing.
5213	Welding trades	7.1	21.3	MIG/TIG welding, metallurgical properties, and structural integrity standards.

What Changes Are Needed and Potential Impact

- Digital Integration: AI and digital skills must be embedded into all engineering qualifications at every level.
- Unified Strategy: A single "Regional Advanced Manufacturing Training Plan" to coordinate demand and prevent duplication.
- SME Support: De-risking technology adoption and reversing the 50% decline in SME apprenticeships participation.
- Targeted Gender Diversity Outreach: Scale up explicit inclusion initiatives (such as the IPAM social inclusion pilot framework) to push female representation past the current 26.1% baseline toward broader benchmarks.

Reinforcing the North East's leadership in advanced manufacturing and Industry 4.0 will strengthen supply chain resilience and attract inward investment. The initiative will create high-wage vocational pathways, support economic inclusion and reduce inactivity. It will also position the region at the forefront of green technology and the transition to a digitally enabled net-zero economy.

Creative Industry and Content

Nationally, Nationally, the creative industries are a priority growth sector under the UK's Modern Industrial Strategy, targeting a £50 billion GVA increase by 2030 through a major focus on "Createch"— the convergence of creativity and technology. This is supported by a £369 million R&D commitment for 2026–2030. Current policy also addresses AI disruption by prioritising human creativity.

In the North East, the sector is experiencing a renaissance as the UK's fastest-growing hub for film and television production, following a 131% surge in regional spend and a 90% increase in filming days since 2022. The industry supports 47,745 regional jobs (5% of the workforce) and has led the UK with 67% employment growth over the past decade. The sector is heavily defined by freelance-dominant models and short-term volatility, with over 45% of the workforce operating as independent freelancers. Main sector challenges are:

- Fragmented Demand Signals: The freelance dominance of the industry creates a volatile demand signal, making it difficult for skills providers to establish long-term vocational pathways or structured workforce planning. Shifting regulatory frameworks, including IR35 responsibility adjustments and Making Tax Digital (MTD) rules for sole traders earning over £50,000, place additional administrative strain on creative micro-businesses.
- Talent Retention: Historically, the region has struggled to retain talent due to a lack of large-scale infrastructure and the tendency for national commissioners to favour established networks in London and Manchester. The availability of junior roles is limited in 2026, and many entry-level roles have been reduced post-pandemic.
- Work readiness Gaps: Technical services report a disconnect between academic qualifications and practical industry requirements, necessitating the "resetting" of graduates into trainee roles to learn basic kits and production workflows.
- Diversity and Inclusion and attrition challenges: Significant gaps remain, as women hold only 21% of Director/CEO roles in video games and 30% of managerial posts nationally. Ethnic minorities hold just 12% of executive roles in film and TV. Exit rates for women are higher than in other sectors, often driven by low pay and working hours that are incompatible with caregiving responsibilities.

What is Currently Happening

- Studio Infrastructure: Following a £38.5 million public funding commitment, Phase 1 construction on Sunderland's £450 million Crown Works Studios begins in July 2026. This 125,000 sq ft expansion and refurbishment of the Doxford Printworks will generate 8,450 jobs by 2033 and £336 million in annual GVA. Simultaneously, North East Screen's Filming Friendly infrastructure has driven a 90% increase in long-form production filming days since 2022.
- Talent Pipelines: The £4 million Create Talent Programme delivers technical career pathways for underrepresented groups across music, screen, writing, and publishing. This works alongside Newcastle's new Centre for Writing to develop disadvantaged talent and attract publishers. Ground-level infrastructure is preserved through shared hubs like The NewBridge Project and Generator North East, which insulate freelancers and safeguard regional identity. To bridge technical and artistic sectors, the Tech Talent Engine digital tool has expanded to track emerging pathways in gaming and Visual effects (VFX) clusters.
- Broadcaster partnership and collaborations: Strong broadcaster relationships sustain regional production capacity. Notably, the BBC Partnership has contributed £18.6 million in GVA and 293 long-form jobs via local commissions.
- Funding: To protect the region's creative micro-business ecosystem, the national £45 million Redrice Ventures fund explicitly targets funding gaps for seed-stage businesses. Operational cost pressures are further mitigated by permanent business rates reforms for eligible grassroots music venues and independent cinemas with rateable values under £500,000.

Key sector Short-term and Medium-term Skills Priorities (2026-2029) by Priority Occupations (SOC 2020)

- **Short term:** Regional creative roles are projected to grow by 3.6% annually to 58,987 roles by 2030, driven by a shift toward high-level leadership and "Createch" integration. To support large-scale studio operations, digitalisation, and virtual production, the sector's key priority is closing the gap between academic theory and industry-standard competence by developing practical, hands-on technical proficiency in camera and lighting roles. The sector is freelance-dominant, for this reason education pathways must integrate business modules covering self-employment, invoicing, and commercial awareness into FE/HE curricula. Additionally, addressing soft skills and leadership gaps—including communication, confidence, and navigating complex production hierarchies—is vital to ensure the workforce can manage real-world workflows effectively.
- **Medium term:** Hybrid Skills & AI Implementation - Demand is rising for "360-degree digital creatives" who can simultaneously shoot, edit, use graphics tools, and apply emerging AI technologies. To navigate toolchain changes ethically, the sector is prioritising AI literacy by upskilling "AI Implementers" who can execute high-value strategy while protecting rights-holder remuneration.

SOC20	SOC20 Unit Label	Historic	Forecast	Skills Requirements
2134	Programmers and software development professionals	15.1	10.5	Coding and IT system architecture; expert depth in full-stack dev and Agile deployment.
3554	Marketing associate professionals	7.03	6.12	Digital marketing suites, SEO/SEM tracking analytics, and cross-channel content distribution tools.
2142	Graphic and multimedia designers	6.7	7.3	Proficiency in UI/UX wireframing, motion graphics, and Creative Suite.
1131	Financial managers and directors	5.4	4	Financial forecasting, regulatory compliance auditing, and ERP systems.
3556	Sales accounts and business development managers	5.17	4.45	CRM platforms, data-driven lead generation, and cross-functional client relationship management.
2492	Newspaper and periodical journalists	4.1	0	Platform content management, investigative research, data-driven journalism techniques, and media ethics/compliance.
2452	Chartered architectural technologists	3.4	2.43	Advanced application, structural detail design, and translating concepts into building regulation compliance.
2133	IT business analysts, architects and systems designers	3.3	7.1	Bridges business logic and tech execution via data modelling and systems design.
2432	Marketing and commercial managers	3.2	3.3	Strategic market analysis, commercial risk assessment, brand equity optimisation, go-to-market data campaigns.

What Changes Are Needed and the potential impact

- Technical Skills Scale-Up: A massive expansion in training for lighting, rigging, sound, and VFX to service the volume of sound stages at

Crown Works. Emphasise practical technical learning, industry-standard equipment, and freelance business skills in the training provision.

- Creative Catalyst: Development of a vehicle to unlock private investment and grants for smaller creative businesses to scale.
- AI Integration and Copyright Advocacy: Taking a leadership role in navigating mandatory licensing and human-centric creative skills.
- Diversification of Technical Roles: Targeted efforts to increase female and minority representation in technical and executive roles.

The region is expected to deliver a £1.3bn annual GVA uplift by 2030, with a further £2bn from Crown Works over the next decade. This growth will create thousands of high-value jobs across production, finance, catering, and logistics. Collectively, it positions the North East as a leading global Createch hub and destination for international investment and production.

Defence, Security and Space

Nationally, The UK Defence, Security, and Space sectors are growing rapidly under the Invest 2035 framework, driven by geopolitical pressures with spending rising to 2.5% of GDP and a focus on supply chain resilience and the integration of AI and autonomous systems. Simultaneously, UK space ambitions are expanding through secure communications, satellite applications, and domestic launch capabilities, forming interconnected pillars of national resilience.

In the North East, the sector is an agile, high-value strategic contributor generating £1.75 billion in turnover and supporting 5,284 jobs. The region maintains the UK's highest proportion of Ministry of Defence (MOD) procurement spending allocated directly to SMEs at 35%. The cluster comprises 158 employers, heavily defined by highly specialized micro-businesses (55.1%) supporting critical platforms ranging from armoured vehicle structures and maritime components to military turbine technology and satellite R&D. Main sector challenges are:

- Recruiting challenges and Security Clearance Vetting Bottlenecks: Space employers struggle to attract STEM talent who are targeted by the finance and tech sectors while in the Defence sector national vetting requirements act as a recruitment bottleneck.
- Supply Chain Resilience: Geopolitical instability requires local supply chains to build in-house capacity for critical components.
- Cybersecurity and Agentic AI skills demand: High demand of staff expert in Cybersecurity and AI agents. Vision that Human high expertise and AI agents must collaborate to stress-test systems against adversarial and cyber-attacks to make the full system more reliable. A gap exists between the adoption of high-tech platforms and the workforce's ability to operate them.
- Specialised Talent Gaps: Roles such as orbital analysts require hybrid expertise in physics, data analytics, and geopolitics, which can take up to a decade to develop fully, while specialised senior roles suffer from a small national pipeline and limited transferability highly specialised roles.
- Gender Imbalance and aging workforce: The workforce is heavily male dominated, with women representing just 21.9% of the segment. Furthermore, only 5.5% of the workforce is under 21, creating demographic knowledge gaps that threaten long-term continuity.

What is Currently Happening

- Sovereign Space & Semiconductor Assets: The North East Advanced Material Electronics (NEAME) business cluster of over 30 companies (including Coherent, INEX, Kromek, Pragmatic, and Filtronic) specialises in advanced electronics beyond silicon. It employs 1,800 people, targets 2,700 new jobs by 2027, and feeds direct demand signals to shape Level 4+ training pathways.
  Regional infrastructure is anchored by a £50 million investment in North East Space Skills and Technology Centre (NESST) centre at Northumbria University (backed by UKSA and Lockheed Martin) alongside the £2.5m North East Space Communications Accelerator (NESCA) resilient communications program. Operating as a dual-purpose asset, NESST drives regional R&D while acting as a live skills pipeline, training advanced learners in secure-by-design aerospace systems alongside global industry partners. This ecosystem is further enhanced by Durham University's Space Policy and Research Centre (SPARC), which supports the region's strategic capabilities as a designated European Space Agency (ESA) Laboratory.
- Defence Innovation & SME Procurement Networks: The Defence and Security Accelerator (DASA) operating with the North East Regional Defence and Security Cluster (NERDSC) and Space North East England (SNEE) connects regional SMEs and universities with MOD and UKSA procurement contracts. This combined network provides innovation brokerage, capability assessments, and technical workshops to help local suppliers upskill, secure funding, and transition into high-value defence positions.
- Heavy Engineering Anchors & Specialized R&D Hubs: The region maintains deep, high-integrity fabrication expertise, highlighted by Pearson Engineering's £1.129m British Army Challenger 2 structural scanning contract, alongside major facilities for BAE Systems, Rolls-Royce, Leonardo, and Openworks Engineering. These industrial strengths are backed by elite innovation hubs, including the High Value Manufacturing and Compound Semiconductor Applications Catapults at NETPark, alongside Sunderland University's military medical technology programs.

Key sector Short-term and Medium-term Skills Priorities (2026-2029) by Priority Occupations (SOC 2020)

Short term: The sector expects annual employment growth of 3.2% for Defence and 2.9% for Space, with the regional workforce projected to reach 6,503 roles by 2030. Key sector skills priority is to reduce the technical gaps in software engineering, systems engineering, and high-integrity fabrication. Cross-disciplinary needs in the space sector include space law, sustainability, and orbital analysis. Employers also report significant soft skills gaps in communication, leadership, and workplace readiness among younger recruits

Medium- term: Priority skills are placed on Level 6 and above training in computing and engineering, while traditional manufacturing technologies remain a focus across all levels. Skills demand intensifies around digitalisation, autonomy, electrification, and AI-enabled systems.

SOC20	SOC20 unit label	Historic	Forecast	Skills Requirements
2133	IT business analysts	77.6	145	Bridges business logic and tech execution via data modelling, system mapping and design.
2134	Programmers and Software Developers	56.8	138	Software engineering, coding and system architecture; expert depth in full-stack dev and agile deployment.

2125	Production Engineers	40.9	186	Lean/Six Sigma, optimise high-volume manufacturing workflows and industrial automation.
2123	Electrical Engineers	39.3	121	Design/maintenance of electrical systems, PLCs and system integration.
2122	Mechanical Engineers	33.2	75	3D modelling, thermodynamics, and material science to design, prototype, and test mechanical components.
3543	Project Support Officers	33.2	58	Project management, risk tracking, and cross-functional coordination.
2135	Cyber Security Profess.	22.4	42.86	Network security, ethical hacking, data privacy and compliance.
2121	Civil Engineers	11.55	19.4	Structural design and project management for infrastructure, utilising BIM and sustainability auditing.
2124	Electronics Engineers	7.6	17.1	High-voltage integration, FPGA design, signal processing for Radar/Electronic Warfare (EW), and radiation-hardened circuitry.
2126	Aerospace Engineering	6.6	145	Aerospace design, aerodynamics, propulsion systems, and compliance with civil and military safety standards.

What Changes Are Needed and the potential Impact

- Secure Skills Pipeline: A dedicated training pathway that combines technical skills with pre-clearance security vetting preparation.
- Unified Strategy and investment capture: Establish a clearer defence and space identity and deploy more aggressive marketing of regional manufacturing resilience to secure a larger share of the UK defence budged.
- Demographic Structural Adjustments: Scale early-stage technical outreach to dismantle the gender imbalance and secure long-term knowledge continuity.

Strengthening the industrial base through long-term government contracts supports sustained regional economic growth and resilience. Investment in high-tech defence innovation drives spillover benefits into the civilian economy, particularly in cyber and advanced materials. It also enhances national security by securing domestic supply chains in an unstable global context, while creating high-wage, specialist engineering and vocational jobs.

Life sciences, pharmaceutical and process industries

Nationally, the UK Life sciences, pharmaceutical and process industries sector is a core pillar of the Invest 2035 strategy, aiming to position the nation as the third-largest life sciences economy globally (behind the United States and China). This is backed by £520 million Life Sciences Innovative Manufacturing Fund (LSIMF to attract mobile manufacturing investment, and a £600 million investment in the Health Data Research Service (HDRS) and the O'Shaughnessy reforms to slash clinical trial setup times to under 150 days.

The North East one of the UK's largest pharmaceutical clusters, generating a combined regional GVA exceeding £4.4 billion, or 6.39% of the regional economy. Driven by 482 employers ranging from global anchors to 57.2% micro-firms, the cluster outpaces the national average with an early 2026 growth rate of 1.69%. This dominance is highlighted by the UK's highest pharmaceutical GVA per head (£930) and an exceptional 152.5% real-terms growth between 2018 and 2023 - the fastest-growing pharmaceutical region in the nation. This intense activity is reflected in a Location Quotient of 4.66, meaning manufacturing is more than four times as concentrated here as the national average. Consequently, 80% of all regional products are exported, with total export values doubling over the past decade.
The sector's footprint spans five core subsectors, led by basic pharmaceutical products (SIC 21) at £2.717 billion (3.94% of GVA) and natural sciences R&D (SIC 72.1) at £710 million (1.03% of GVA). This is supported by chemical products (SIC 20) at £591 million (0.86% of GVA), electromedical equipment (SIC 26.6) at £288 million (0.42% of GVA), and medical instruments (SIC 32.5) at £95 million (0.14% of GVA). Global players anchoring this regional ecosystem include GSK, Organon, Sterling Pharma Solutions, Accord Healthcare, Pharmaron, and Piramal Pharma Solutions. Main sector challenges are:

- The "Pharma 4.0" Shift & Digital Deficits: Operations are shifting to AI-enabled workflows and Manufacturing Execution Systems (MES). However, a severe digital deficit exists, with only 31% of regional workers holding recorded digital training.
- High Regulatory and Recruitment challenges: Stringent compliance frameworks generate acute regional shortages for Qualified Persons (QPs) and senior Quality Assurance (QA) professionals.
- The Contract Development and Manufacturing Organisation (CDMO) market: Global biotech funding constraints have caused an industry downturn, resulting in reduced headcounts and forcing highly reactive, short-term recruitment across the cluster.
- Cleanroom Supply Vulnerabilities: The late-2025 administration of modular cleanroom specialist Merit exposed supply chain gaps, briefly disrupting construction on the vital £29.7 million NHS Medicines Manufacturing Centre at Seaton Delaval.
- Wet-Lab Incubation Constraints: Scaling small biotech spinouts remains heavily constrained by a distinct regional lack of early-stage capital and commercial "wet lab" incubation space.
- Work placement and upskilling challenges: While firms support T-Level placements, safety make challenge accommodate students under 18 in regulated laboratory environments.

What is Currently Happening

- Commercial API Expansion & CDMO Manufacturing Megaprojects: Sterling Pharma Solutions invested over £60 million to expand reactor capacity and build an onsite biomethane anaerobic digester, growing its Cramlington workforce to 650+. Pharmaron committed over £100 million to reconfigure its Cramlington site for large-scale commercial API manufacturing. Accord Healthcare completed a £50 million joint government investment on a site supplying 10% of NHS medicines. Simultaneously, the £29.7 million NHS Medicines Manufacturing Centre at Seaton Delaval provides an aseptic facility that secures national health resilience and a 20-year drug supply. Quotient Sciences (Alnwick) opened a GMP-compliant aseptic facility through a £6 million drug substance expansion.
- High Force Research: It is the UK's only independent Contract Development and Manufacturing Organisation (CDMO) and it doubled its workforce and opened a second facility at NETPark, exporting over 70% of its chemistry business to the US. NETPark Phase 3A

(Sedgefield) completed a £61 million, 232,000 sq. ft. expansion as an Investment Zone Growth Site, securing an additional £11.3 million to host three national innovation centres and fuel tenant expansions.

- East Durham College (EDC): Provides Level 2/3 Science Manufacturing Apprenticeships. Backed by £600,000 from the North East MSA, its Peterlee Campus houses the region's only immersive cleanroom laboratory, £500,000+ interactive 3D simulation suite, alongside environmental training expansions at Houghall.
- University-Industry R&D & Technical Pipelines: Industry-embedded university partnerships, specifically through the Centre for Process Innovation (CPI), support the scaling of advanced therapies and sustain 25 active university spinouts. Employers actively enrich curricula, guest lectures, and placements to maintain an industry-focused higher education pipeline. Additionally, the Strategic Development Fund's support for Science Manufacturing Technician provision has been successful to ensure a pipeline of Level 3-5 technicians.

Key sector Short-term and Medium-term Skills Priorities (2026-2029) by Priority Occupations (SOC 2020)

- **Short Term**: The sector is projecting 7.0% annual growth reaching 13,708 roles by 2030. Employers note a critical need for graduates with stronger core organic chemistry depth - warning that combined studies degrees dilute the skills required for autonomous chemical synthesis. Additionally, there is immediate demand for better workplace readiness regarding GxP standards, scientific report writing, and a reinforced safety mindset.
- **Medium Term**: Pharma 4.0 Digital Gap - Regional demand is shifting toward hybrid roles blending scientific expertise with digital and commercial competencies. This transition requires proficiency in AI-enabled workflows and Manufacturing Execution Systems (MES), yet only 31% of the current workforce has recorded digital training.

SOC20	Unit Label	Historic	Forecast	Skills Requirements
3556	Sales accounts and Business development managers	8.9	9.5	Global market access, client engagement and management, CRM and data-driven lead generation.
2134	Programmers and Software Development Professionals	5.6	5.9	Coding and system architecture; full-stack dev and agile deployment.
2434	Bus. and research prof.	5.6	5.9	Market analysis, qualitative research, and strategic report synthesis.
2111	Chemical Scientists	4.7	4.8	Advanced laboratory techniques, chemical analysis, and Laboratory Information Management Systems for R&D.
2162	Other researchers, unspecified discipline	4	4.1	Research tools, data validation, and technical documentation.
2482	Quality assurance and regulatory professionals	3.6	3.7	Compliance frameworks, quality auditing, and technical standards oversight to ensure regulatory alignment.
1121	Production Managers and Directors in Manufacturing	3.2	3.3	Strategic oversight of Lean manufacturing, supply chain logistics, and resource allocation to optimize plant output.
2133	IT Business analysts, architects and Syst. designers	3.2	3.3	Bridges business model and tech execution via data modelling and systems design.
3111	Laboratory Technicians	3.1	3.2	Laboratory equipment maintenance, sample preparation, and adherence to safety and QA protocols.
3213	Medical and Dental Technicians	3.1	3.2	Medical/dental diagnostic technology, precision fabrication of prosthetics/orthotics, and sterile technical workflows.

What Changes Are Needed and the potential Impact:

- Digital Transformation: Embedding data science and AI literacy into all life sciences training to close the 69% digital training gap.
- Scaling Infrastructure: Accelerating Biosphere 2 and Durham Innovation District to provide essential "wet lab" incubation space. Build resilience and strengthening regional investment to reduce reliance on US capital and leveraging airport logistics for global trade.
- Diversity and Inclusion and talent pipeline expansion: Drive targeted initiatives like the Newcastle United Foundation's "EmPower" event to increase female representation. Promote initiatives to retain local STEM university students, and build a cohesive, industry-led cluster skills programme.
- Enhancing Investment and Export Networks: Reduce dependence on US funding, minimise friction, lead times, and operational costs for integrated global supply chains and simultaneously support export growth through new logistics routes from Newcastle International Airport.
- Strategic Technology Priorities: Invest in continuous manufacturing improvement, automation and sustainable manufacturing. Support onshoring of pharmaceuticals manufacture to mitigate extended supply chains and shortage of supply.

The North East can boost health resilience and economic growth by expanding high-wage healthcare manufacturing and reducing NHS reliance on imports, including approximately 1 million chemotherapy doses annually. Capturing a larger share of the global market provides long-term career security via thousands of high-wage, high-skilled regional jobs while securing domestic supply chains for vital medicines.

Offshore, Wind and Renewable energy

Nationally, the Offshore Wind and Renewable energy sector is positioned as a critical growth industry under the Invest 2035 strategy, aiming to double annual business investment to over £30 billion by 2035. The UK Government's Clean Power Action Plan (CPAP) establishes a target of 43–50 GW of offshore wind by 2030.

The North East leverages a deep maritime heritage dating back to the UK's first demonstration offshore wind farm at Blyth in 2000. The region's strategy aims to double the green energy workforce to 50,000 by 2035 and secure £3 billion in private investment, anchored by a

£160 million Investment Zone across the River Tyne and Energy Central in Blyth. The region hosts 1,105 renewable energy companies employing 27,549 staff, with a workforce expected to reach 34,200 by 2030. Main sector challenges are:

- Infrastructure Constraints: Ports lack the grid connectivity and physical capacity needed for next-generation floating platforms. Achieving the 10 Year Vision and Strategy requires investment in heavy cranage, laydown expansion, and ground-bearing upgrades for XXL components.
- Green Skills Gap and technical skills cross-sector competition: The rapid growth of the green energy sector has created a critical skills shortage, requiring urgent recruitment and upskilling as every 10% increase in UK industrial investment creates up to 12,500 new jobs. However, workforce transitions from oil and gas is a bottlenecked; despite 90% skills overlap, workers are frequently blocked by training reskilling pathway to support the transition. Simultaneously, local shortages are exceptionally acute for High-Voltage (HV) engineers and subsea electrical technicians and intense cross-sector competition for electro-mechanical skills among renewables, manufacturing, construction, and defence drives wage inflation.
- Recruitment Bottlenecks: High safety thresholds limit junior entry. Severe talent deficits affect onshore logistics, marine operations, and safety-critical roles, while small national talent pools restrict the hiring of harbour masters, pilots, and marine engineers. Inconsistent apprenticeship support weakens the entry pipeline, while limited knowledge-transfer frameworks risk the loss of critical expertise as senior experts approach retirement.
- Workforce Diversity Gap: The sector suffers from a stark diversity deficit; women comprise just 15% of the workforce, and ethnic minorities account for only 9.1%. Targeted recruitment and cultural shifts are required to expand the pipeline.

What is Currently Happening

- Green Energy Academy & Energy Campus: An £8.48m expansion in Wallsend, led by Newcastle College in collaboration with NEIoT, tripling capacity to 1,000+ annual learners. It offers green skills pathways from entry to postgraduate level. The campus features specialised subsea, offshore, and wind energy training spaces, including an Immersive Hybrid Reality (iHR) engineering simulation.
- Energy Central Campus (Blyth): A two-phase hub linking the operational vocational learning at Energy Central Learning Hub, with the developing Level 4 to PhD at Energy Central Institute, which connects regional universities with industry for deepwater technology R&D.
- The Offshore Renewable Energy (ORE) Catapult (Blyth): Global testing anchor undergoing an £85.6m UKRI upgrade (23MW rig, 150m blade hall) by 2028. Sustains vital industry-embedded university research in power electronics (Durham University), marine robotics (Newcastle University), and composite materials (Northumbria University).
- Flagship Project Portfolio: Dogger Bank Wind Farm (A, B, and C) is under-construction 3.6GW joint venture (SSE, Equinor, Vårgrønn) with a £26m local STEM scholarship commitment. Dogger Bank South is a 3GW RWE/Masdar project powering 3 million homes by 2031/32. Sofia Offshore Wind Farm (RWE) is a 1.4GW project supporting 2,000 peak construction jobs from its Port of Blyth logistics base. Norfolk Offshore Wind Zone is a 4.2GW RWE development leveraging the North East's specialized supply chain and management expertise.
- Emerging Seabed Leasing Pipeline: Crown Estate Round 6 plans indicate 6GW+ of new offshore wind capacity off the North East coast, strengthening long-term demand across the sector.
- Industrial Infrastructure and Supply Chain Anchors: Industrial Energy Parks is a large-scale logistical hub, Tyne Clean Energy Park (230 acres), Battleship Wharf (47 acres), and Swans/Neptune Parks (60 acres), deploying electrification, hydrogen, and e-fuels for green maritime operations. Smulders Projects UK (Wallsend) is a major steel fabrication facility employing 500+ people; operates an 18-month rotational traineeship. JDR Cable Systems (Hartlepool & Cambois) is a subsea cable manufacturer expanding via a new £130m Cambois facility, securing 270 Hartlepool jobs and creating 170 roles via a new "Apprentice Process Engineer" pathway and IMechE graduate tracks.
- The Collaborative Cluster Model: The "Energi Coast" approach has been effective in attracting international investment.
- Skills Bootcamps: Flexible, short-term training, such as welding bootcamps, co-delivered by Smulders and Newcastle College, to recruit trainee welders directly from the local community, have proven successful for rapid deployment.

Key sector Short-term and Medium-term Skills Priorities (2026-2029) by Priority Occupations (SOC 2020)

- **Short-term:** The sector demands a highly technical workforce split between specialist technicians and senior engineers, with a critical need for advanced grid and power engineering skills, including high-voltage competence, control systems, and automation, alongside subsea expertise in embedded systems and prototype engineering.
  Beyond technical expertise, operational success relies on a baseline of safety-critical competence and regulatory compliance, paired with the ability to collaborate within complex multi-contractor environments and acute soft skills like communication, teamwork, leadership, and emotional intelligence.
- **Medium-term:** The industry transitions to "Future-Facing Manufacture" and Fabrication 4.0, traditional methods are giving way to advanced techniques like robotic, laser, and vacuum welding, alongside the integration of digital twins for real-time quality assurance and predictive maintenance. This technological shift requires digital literacy across all career levels, spanning from basic tablet use and digital workflows to advanced data analytics and highly specialised, hybrid roles. Employers are actively seeking Orbital Analysts who combine physics with situational awareness, logistics coordinators capable of managing centralised control rooms for regional assets, and environmental professionals skilled in marine analytics and consenting services. Structurally, operations heavily lean toward higher-level technical roles, supported by continuous pipeline development through advanced PhD-level R&D talent.

SOC20	Priority Occupation	Historic	Forecast	Skills Requirements
5241	Electricians and electrical fitters	41.7	87.3	Electro-mechanical, HV eng., wiring regulations, circuit testing, and hardware fault diagnosis
3113	Engineering technicians	38.3	87.8	Machining and equipment maintenance including safety protocols and quality assurance testing.
2123	Electrical engineers	20.43	25.44	Design and maintenance of electrical systems, specifically integrating PLCs and modern power systems.
2125	Production and process eng.	16.7	5.1	Lean/Six Sigma and CAD/CAM software to optimise manufacturing workflows and industrial automation.

2122	Mechanical engineers	15.48	15.09	Thermodynamics, and material science to design and test mechanical components, CAD
5315	Plumbers, heating and ventilating installers - repairers	14.3	19	Piping, HVAC units, and heating infrastructure, safety measures.
2453	Quantity surveyors	12.07	18.3	Embed business experience with cost estimation software, contract management, risk analysis, and project budgeting.
5316	Carpenters and joiners	8.1	3	Timber structural fabrication, and precision woodworking.
1121	Production managers and directors in manufacturing	6.15	13.24	Lean manufacturing, supply chain logistics, and resource allocation to optimize plant output.
5242	Telecoms - network installers - repairers	4.75	36.8	Deploys diagnostics across fibre optics, cellular routing hardware, and physical network infrastructure.

What Changes Are Needed and the potential impact

- Pipeline Visibility: Improved coordination is needed to give SMEs clearer sight of future projects to encourage investment.
- Formalised Transition Pathways: Clearer mechanisms (bridging qualifications) are required for workers moving from high-carbon sectors.
- High-Voltage Training Investment: Specific regional investment in HV training facilities is needed to resolve grid connection bottlenecks.
- Curriculum Alignment: Training must be better aligned with offshore operational requirements. Employers report that existing frameworks are insufficient.

The sector is strongly supporting regional economic revitalisation transforming coastal communities into high-tech hubs of the green economy. Securing the North East's position as a contributor to UK energy independence. Providing high-quality vocational pathways that feed into sector job demand.

Tech, Digital and AI

Nationally, the UK's 10-year Modern Industrial Strategy aims to secure global tech leadership across six frontier areas: AI, quantum, cyber security, engineering biology, future telecoms (5G/6G), and semiconductors. Backed by £4 billion for digital/tech and £670 million for quantum, this investment is projected to boost UK productivity by 7% by 2045.

In the North East, the sector is a cross-cutting enabler, shifting from a vertical industry to a horizontal layer powering everything from automotive assembly lines to offshore wind farms and healthcare wards. In the period 2010 - 22, the North East led the UK with an unparalleled 387.4% growth in Digital GVA (£2.5 billion) to the regional economy. The landscape includes 1,679 employers, supporting a workforce of 33,808 people. The sector is dominated by micro-enterprises, which account for 65.5% of the total regional ecosystem. Main sector challenges are:

- Skills gap restricting business resilience and innovation: Approximately 70% of SME AI projects stall between pilot and production due to data complexities and 20–70% budget overruns restricting long-term innovation growth and competitiveness.
- Digital Infrastructure Challenges: AI and data centre expansion drive demand for hybrid software-hardware technicians while placing greater strain on regional energy grids due to high power consumption. This friction threatens the rollout of the AI Growth Zone and limits the sector's capacity to serve as a horizontal enabler. Furthermore, employers report a critical reduction in workplace readiness regarding applied technical practice, version control, and agile workflows.
- Diversity and pipeline constraints: Women represent only 28.5% of the workforce, and career-stage female attrition costs the UK economy an estimated £2 - £3.5 billion annually in lost productivity. Rapid digital shifts also mean technical knowledge becomes obsolete within 2 - 5 years, necessitating continuous pipeline expansion and upskilling.

What is Currently Happening

- AI Growth Zone and AI Skills development Fund: Established in September 2025 across Blyth and Cobalt Park, aiming to unlock 5,000 high-skilled jobs and up to £30 billion in private investment. It is supported by a £5 million investment to bridge the "workplace readiness" gap and upskilling. To further close the skills gap, recent Growth and Skills Levy Reforms also enable employers to allocate up to 50% of their levy funds toward short, flexible apprenticeship units (30–140 hours).
- Infrastructure & Compute Megaprojects: QTS Cambois Campus: Major developments are the £10bn QTS Cambois Campus 10 data centres (540,000 sqm) at Northumberland and the Stargate UK Partnership (OpenAI, NVIDIA, Nscale) at Cobalt Park establishing UK sovereign compute capacity.
- Strategic R&D Assets: Facilities like Stellium Data Centre (a low-latency UK Interconnection Hub attracting fintech), alongside the National Innovation Centre for Data (NICD) and PROTO, which provide critical R&D sandboxes for SMEs.
- The Digital Up North at Gateshead College: A curriculum benchmark embedding employer needs into advanced AI, machine learning, and data analytics with Level 3 to degree pathways at Newcastle and Northumbria Universities. Gateshead College also led a collaboration of nine regional providers to embed 20 new curriculum modules into Level 3+ programs.
- Tech First: A National strategy with regional implementation to build a stronger Tech workforce and support progression from education into employment. It includes initiatives like TechGrad (funding and placements for university students) and TechLocal (regional funding and talent-matching schemes), with a particular focus on retaining talent in the region connecting them with employers.

Key sector Short-term and Medium-term Skills Priorities (2026-2029) by Priority Occupations (SOC 2020)

- **Short-term:** Driven by the AI Growth Zone and digital megaprojects, the sector is expected to grow by 6.4% annually. Regional demand is shifting from routine coding to specialised "physical-digital engineering" roles. This evolution requires a Swiss Army Knife technologist professional who successfully merge deep technical capabilities with commercial vision and operational process knowledge, highly AI-competent, they are leveraging automated tools for day-to-day productivity without sacrificing foundational core engineering principles. High demand for real-time 3D workflows, secure AI-enabled development, full-stack engineering, cloud-native development and complex

data architecture to optimise and maintain high-performance GPU environments. Work readiness is equally important, a move away from theory toward portfolio-ready, project-based experience. Across all subsectors, soft skills are the primary differentiator, with success relying on cross-disciplinary collaboration, problem-solving, and agility in fast-moving environments.

- **Medium term:** The next three years mark a critical pivot from Generative AI to Agentic AI, autonomous software systems that reason, plan, and execute multi-step business workflows. Moving from text-prompting to the orchestration, configuration, and oversight of autonomous AI agents executing multi-step business workflows. Cyber Security & Infrastructure Protection: Threat detection, automated incident response, and proactive data security. Embed "secure-by-design" principles directly into software and hardware development training to build long-term resilience. AI-BOM Governance: managing the "AI Bill of Materials" to ensure data safety, jurisdiction, and regulatory compliance.

SOC20	Priority Occupation	Historic	Forecast	Skills Requirements
2134	Programmers and software development professionals	171.5	381.8	Design/Implement IT solutions. AI agentic, modern coding and system architecture; expert depth in full-stack dev and agile deployment.
2133	IT business analysts, architects and syst. designers	330.3	130.1	Designs digital infrastructure for smart factories - data modelling and systems design.
3544	Data analysts	115.6	57.2	Translate complex datasets into visual, actionable business insights predictive modelling and automated dashboard.
2439	Business, research admin. professionals n.e.c.	109.8	58.8	Policy and adm. system, agile project management, regulatory governance and research.
2125	Production and process engineers	95.6	109.9	Engineers to optimise manufacturing and industrial automation. Mechatronics, Industry 4.0 simulation, analytics, Lean/Six Sigma.
2135	Cyber security professionals	95.2	55.2	Design/Maintain security systems using zero-trust architecture, threat hunting, and automated incident response
2123	Electrical engineers	93.4	165	Design complex power systems. High-voltage engineering, microgrid management, PLC and high-density data centre power integration.
3132	IT user support technicians	84.6	44.8	Troubleshoots hardware, software, and connectivity issues.
2129	Eng. professionals n.e.c.	76.4	205	Specialist in niche manufacturing topic, cross-disciplinary expertise in additive manufacturing, digital twin modelling, and diagnostics.
3113	Engineering technicians	75.4	76.3	Assist in design and maintenance, PLC programming, electrotechnical maintenance, and physical sensor calibration.

What Changes are needed and potential impact

- Digital Literacy: Embed basic digital competency into all training programs to prepare the workforce for an AI-integrated economy.
- Swiss Army Knife Technologist Skills: Shift training focus from basic AI fluency to hybrid capabilities, blending advanced technical expertise with commercial vision and secure AI deployment.
- Work Experience & Employability Pathways: Expand structured work experience, internships, and placement schemes (such as TechGrad and Tech Talent Pro) to buffer against AI-driven entry-level job reductions and bridge the experience gap.
- Gender Gap Intervention: Scale targeted initiatives like "Girl Tech", the £4 million TechFirst Women's Programme, and the Tech Youth initiative. Combining these programs addresses the 28.5% female representation cap by inspiring young women early, widening sector participation, and recovering vital economic losses.
- Agile Curriculum Design: Shortens FE/HE update cycles to match faster skill changes, using modular training and live industry practice to strengthen applied learning alongside theory.

The AI Growth Zone and Cambois Campus infrastructure will anchor the UK's Sovereign AI capacity and drive a 7% national productivity uplift by 2045, narrowing the regional GVA gap. By expanding the pipeline, widening female participation via Tech Youth, and prioritising practical work experience, the region will protect junior workers from AI job cuts and route talent into 5,000+ high-wage roles by 2030. It has been estimated that every direct role in the AI Growth Zone supports a powerful local multiplier of six to seven additional community and supply chain jobs, these interventions will drive inclusive growth across the entire economy.

Adult Social Care

Nationally, the Adult Social Care sector is navigating a systemic crisis characterised by a widening gap between service demand and workforce supply, historically perceived as "low skill". The "Invest 2035" national framework is now pivoting toward the professionalisation of the "foundational economy," aiming to transform social care into a recognised career path with clear progression and competitive compensation. This shift is critical as domestic training pipelines have declined significantly, with apprenticeship starts in the sector falling by 76% since 2016/17.

In the North East the sector's health is directly correlated with the broader productivity and economic resilience of the region, as it addresses the needs of an aging population and those with long-term health conditions which are statistically more prevalent in this region than in the national average. The sector is currently supporting 61,196 individuals across a network of 1,455 employers facing highly localised challenges. When local authority and NHS-integrated roles are included, total posts are estimated at 95,000, with a persistent vacancy rate of 8.7% (5,100 roles). The workforce is 81% female and features the highest level of female leadership in the region (35% of Director positions), yet 71.4% of the workforce remains in entry-level roles. Small-scale domiciliary providers and large residential facilities must grow by 3.5% annually to keep pace with demand, with a requirement for 116,000 roles by 2040 to remain proportional to the population aged 65 and over. Main sector challenges are:

- Sector attractiveness, Recruitment and Retention Crisis: Persistent difficulty in recruiting staff driven by low pay and intense competition

from retail and hospitality sectors. Turnover in residential care can exceed 70% annually.

- The aging workforce: 29% of the workforce is aged 55+, creating a risk for a regional loss of institutional knowledge and urgent replacement demand, particularly in rural areas like Northumberland.
- Immigration Policy Pressures: Tightened UK visa rules regarding dependants have led to a sharp decline in international starts, creating an immediate need to re-engage domestic talent.
- Operational Funding Constraints: Local authority hourly rates and rising pension/wage costs restrict the capacity to invest in staff onboarding or professional development.
- Skills Mismatch and Perception: A gap exists between the perceived "low-skill" status of the role and the complex reality of managing dementia, neurodiversity, and medication.
- Management Pipeline Barriers: Reluctance among staff to accept roles with 24/7 regulatory accountability is creating a "pinch point" for leadership growth.
- Socio-Economic Barriers: High regional child poverty and rising childcare costs act as significant inhibitors to labour market entry for the predominantly female workforce.
- International recruitment for care workers is being scaled back with the funding for the regional displaced worker hubs set to cease at the end of March 2026. This will result in an increased focus on domestic recruitment.

What is Currently Happening

- The government is progressing plans to establish an Adult Social Care Negotiating Body as part of the Fair Pay Agreement process in adult social care. The consultation closed in January 2026, and the government's response and next steps are expected later in 2026, ahead of the proposed establishment of the negotiating body through secondary legislation.
- The New Deal for North East Workers is a MSA commitment focused on establishing fair pay, secure terms, and professionalized career pathways, particularly within the foundational economy. The SHINE Framework is a free employer accreditation program that serves as a core delivery mechanism for the New Deal for North East Workers. To improve regional job quality, SHINE assesses businesses across five pillars: workforce health/wellbeing, net-zero social responsibility, employee voice, inclusive upskilling, and fair pay. Employers progress through four recognition tiers, to directly align workplace practices with regional employment targets. Maintaining these high employment benchmarks is essential for tackling structural recruitment barriers.

Key sector Short-term and Medium-term Skills Priorities (2026-2029) by Priority Occupations (SOC 2020)

Short-term: The key skills focus is closing the Level 4 gap, supporting progression from Level 2/3 to higher-level technical and leadership qualifications. It's also key skills requirement developing domiciliary expertise in pressure care, sample collection, and complex medication management to reduce hospital admissions.

Medium-term: Digital Transformation is raising the need to upskilling the workforce to use paperless systems and tele-care technologies for health data monitoring. Prioritising emotional intelligence, relationship-building, and resilience for trauma-informed and dementia care. Leadership Development - Training senior staff to navigate Care Quality Commission (CQC) inspections and handle regulatory accountability.

SOC20	Unit Label	Historic	Forecast	Skills Requirements
1232	Residential/care managers	79.4	1082	CQC regulations, digital care record infrastructure, and workforce resource planning.
2461	Social Workers	154.4	176.6	Safeguarding frameworks, reporting, and digital tracking.
1172	Social services managers	10.7	95.4	Regulatory compliance, strategy, audit oversight, and care service delivery mapping.
6135	Care Workers/Home Carers	36.4	26	Person-centred support, emotional resilience management, clinical indicator tracking, and safe mobility.
6136	Senior Care Workers - Home carers	10.7	10.5	Medication, team shift coordination, incident reporting.

What Changes Are Needed and the potential impact

- Professionalisation of Pathways: Establishing clear, high-wage progression routes to improve domestic retention.
- Embedded Digital Literacy: Making digital training a mandatory core component of all standard care qualifications.
- SME and Domiciliary Support: Addressing the unique travel and financial pressures faced by small-scale providers.

Reliable care provision removes key labour market barriers, particularly for women, increasing regional productivity and economic participation. Strengthening the foundational care economy also creates higher-wage vocational pathways that support inclusive growth. Improved care skills further enhance health outcomes while easing pressure on the NHS, building greater system resilience.

Construction

Nationally, construction is a foundational Industrial Strategy sector, a key driver is the 1.5 million-home national target, though only 342,100 were completed nationally during the baseline period. Delivery is supported by the Planning and Infrastructure Act's reforms to reduce consultations and streamline judicial reviews. While 90% of Homes England completions meet EPC A/B ratings, the sector faces headwinds: over 60% of firms have postponed or scaled back projects due to Building Safety Act complexities and high financing costs. Uncertainty is compounded by "higher for longer" interest rates and volatile energy markets.

In the North East, construction enables all physical growth and faces the region's highest employment demand through 2030. Supporting 76,331 workers across 5,715 businesses, the sector must reach 93,393 roles by 2030 (2.6% annual growth) to meet targets, including 9,000 new regional homes. Recording a resilient 1% completion increase in 2025, the region avoided national contraction. The landscape is fragmented where 66.5% micro-sized (<9 staff), 21% small, 7.6% medium, and 4.5% large. Main sector challenges are:

- Recruitment and Retention Crisis: Widespread shortages exist for experienced project managers, quantity surveyors, and tradespeople with 10+ years of experience. Furthermore, one-thirds of the current workforce is expected to retire or leave by 2035, generating more

pressure on their replacement strategy.

- Education Mismatch and Low Conversion: Job conversion rates from FE colleges to site employment remain low (approximately 20%), indicating a gap in practical readiness (where graduates lack the hands-on experience required by contractors). In addition the sector struggles to compete with the perceived attractiveness of other industries.
- Inclusivity: The region records the lowest female participation rate at 14.2%, with only approximately 3% in direct on-site work.
- Low Productivity: Slow adoption of digital tools and Modern Method of Construction (MMC), that is progressing slower than other regions. Furthermore, contractors' confidence remained in contraction through 2025 and early 2026 as high financing costs, material inflation, and Building Safety Act complexities led 60% of firms to postpone or scale back projects.
- Regulatory Bottlenecks: New oversight requirements, such as "Gateway 2" approval points, are noted as potential causes for delays in higher-risk developments.

What is Currently Happening

- Regional Infrastructure & Regeneration: Supported by a £1.85bn deal, delivery is accelerating on the "Angel Network" transport plan (including franchised buses in delivery preparation), the Washington Metro Leamside extension, and Mayoral Development Zones in Newcastle-Gateshead and Sunderland. Key regeneration projects include Riverside Sunderland, the re-scoped Crown Works Studios (where Phase 1 is proceeding with new public funding following private finance changes in 2025), the Aykley Heads development in Durham, the conversion of old power station sites into data centres. To fuel these pipelines and anchor the March 2026 "Building Your Future" campaign, 12–16 week construction boot camps deliver CSCS readiness and multi-trade tasters, while major firms sustain capacity by keeping 10–15% of their workforce as trainees or apprentices.
- Social Housing Innovation North East (SHINE) Partnership - OneMap: A GIS platform integrating data across 17 regional housing associations. It enables the coordination of large-scale retrofits and maintenance (e.g., damp and mould) across 35,000+ social homes in collaboration with providers like Karbon, Gentoo, and Thirteen Group.
- The Housing Innovation & Construction Skills Academy (HICSA) is a 4,000 square meter training facility located in Sunderland. It serves as the physical home for the region's Construction Technical Excellence Centre (C-TEC) designation, which was awarded to Sunderland College (Education Partnership North East). Operating under a hub-and-spoke model, the centre connects regional further education colleges with industry employers like Gentoo and Nissan. In January 2026, the facility launched a £1 million Adult Skills Programme funded, providing face-to-face site training for 227 residents with site-ready training.
- NEIoT Digital Ambassador Programme: Now in its third year, this initiative embeds industry expertise from firms like Arup and Turner & Townsend into nine colleges. It delivers masterclasses in BIM and digital construction to future-proof the regional workforce. This works alongside the expansion of VR/AR immersive tools for construction training to improve learner engagement.

Key sector Short-term and Medium-term Skills Priorities (2026-2029) by Priority Occupations (SOC 2020)

- **Short term:** Civil Engineering and Groundworks - To support the Angel Network and other infrastructure project future demand will centre on civil engineering, groundworks, electrotechnical roles, retrofit capable trades, and digitally enabled site operations. Continuing traditional trade qualifications is essential to address the "retirement cliff" in maintenance. Quality Safety and Compliance Roles: The Building Safety Act 2022 and the Planning and Infrastructure Act 2025 have generated an urgent requirement for technical inspectors, Clerks of Works, and fire safety professionals. Literacy challenges among some experienced tradespeople hinder qualification achievement and digital adoption. Employers also identify a need to upskill mid-career workers in leadership and people management to create the next generation of site supervisors. Additionally, communication, teamwork, customer service and supervisory capability are essential, particularly for early career staff working in occupied homes or on busy sites.
- **Medium term:** PAS 2035 compliant Retrofit and Low-Carbon Installation - The regional push to achieve EPC C ratings for all social housing by 2030 and the deployment of the Newcastle-Sunderland heat networks have created massive demand for tradespeople skilled in ventilation, damp/mould prevention, moisture control (damp and mould), high-efficiency insulation, and heat pump installation.
  Digital capability is no longer an optional skill set; it is a core requirement for modern construction sites. The growing use of Building Information Modelling (BIM), digital job ticketing, and handheld devices for live scheduling requires a workforce that is comfortable with data-intensive environments.

SOC20	Unit Label	Historic	Forecast	Skills Requirements
2121	Civil engineers	96.8	110	Design and PM infrastructure, BIM and sustainability auditing.
2453	Quantity surveyors	71.4	78	Cost estimation, contract management, risk analysis, and project budget tracking.
5330	Constr. and building trades sup.	64.1	72	Project scheduling, site health and safety governance, and managing cross-trade workflows.
5214	Pipe fitters	59.4	65	Industrial piping system fabrication, hydraulic/pneumatic testing, and precision welding.
2452	Chartered arch. technologists, planning offic. and consultants	33.1	36	Advanced application of BIM, structural design, and building regulation compliance.
2454	Chartered surveyors	26.4	28	Property/land valuation, structural defect diagnosis, land mapping, and legal compliance.
5316	Carpenters and joiners	23.1	25	Timber structural fabrication, and precision woodworking.
5319	Constr. and building trades n.e.c.	21.9	23	Restoration, specialised installations, and structural maintenance protocols.
3120	CAD, drawing and architectural technicians	21.6	23	2D/3D CAD drafting, architectural rendering engines, and updating technical schematics to engineering specifications.
5315	Plumbers, heating and ventilating installers and repairers	14.3	15	Structural design and project management for infrastructure, utilizing BIM and sustainability auditing.

What Changes Are Needed

- Scaling PAS2035 Retrofit Training: There must be a significant expansion of PAS 2035 and low-carbon technology training to meet the demand of the social housing upgrade and heat network pipelines.
- Digital Standardisation: Digital skills and Building Information Modelling (BIM) should be integrated as core components of all construction apprenticeships, rather than treated as optional extras.
- Recruitment and Sector attractiveness: Specific campaigns are needed to recruit a more inclusive workforce, linking construction careers with environmental sustainability and social value to attract diverse talent.
- Pathway to Management: Dedicated routes for upskilling mid-career tradespeople into supervisory roles.
- Improve Job conversion rates and work readiness: Approximately only 20% of FE colleges students' progress into role in the sector. Employers report a gap in practical work readiness.

The development of housing and infrastructure will play a key role in supporting regional growth by enabling greater economic participation. It will also help create clear vocational pathways that connect people into employment opportunities, strengthening the local workforce and supporting long-term prosperity.

Systemic Challenges across all the sectors

Addressing the cross-cutting themes and sector skills priorities identified in this report presents some key systemic challenges, addressing those challenges will require strong ambition, stakeholder alignment, frameworks for regional policy and action, and tenacious leadership. An efficient and effective skills eco-system require a level of cohesion that is currently not characterised across the fragmented employer and provider landscape in the North East region. Most employers focus on their own specific requirements, competing within the same sector and across adjacent sectors to attract and retain the workforce and skills they require. The prevailing dynamic and uncertain economic context, detailed in the three strategic drivers in this report, is further impacting the ability of employers to provide a confident demand signal for their future workforce and skills requirements. A focus on short-term needs can stifle planning and dialogue on longer-term strategic workforce planning.

It is envisaged that SSPs will need to play a more prominent role in the region, to ensure that there is more strategic dialogue with providers on emerging and strategic requirements. Despite recent examples of increased levels of collaboration between providers, and increased investment in training capability, provision across the region still lacks cohesion. This is largely just a consequence of the market that FE Colleges, HE Institutions, and Independent Training Providers operate in – often competing in adjacent geographies or overlapping offers to attract learners, employers, and investment. Universities and FE Colleges in the region are providing Higher Technical Qualifications, although there is a scarcity of staff available to deliver these qualifications, with FE Colleges particularly reporting challenges in attracting and retaining staff in technical subjects. This competitive landscape also extends beyond the region – most apprenticeships in the North East are now delivered by training providers from outside the region.

Type	Networking	Cooperation	Coordination	Codetermination
Level of collaboration	Low →			High
Suggested High level	Providers operate indpendently and are competing for investment, learners, staff, and employer engagement. Duplication of curriculum development and investment, no shared resources, and limited alignment between FE/HE. Employer engagement fragmented through competing local business development resources, often focussed on larger employers.	Ad hoc cooperation primarily driven to enable access to specific funding stream requirements for collaboration. Separate workstreams managed by individual institutions typically accountable directly to funding agency with some regional high-level coordination and governance through bid lead provider. Employer engagement fragmented through competing local business development resources, often focussed on larger employers.	Some ongoing strategic alignment and sharing of resources and investment. Involves a level of agreement on FE leadership/ segmentation for different areas of provision based on expertise/ capability. Avoided duplication and direct competition improves viability of provision of low volume and scarce specialist skills required by employers. Some improved cooperation with HE but Level 3+ progression pathways remain fragmented. More coordinated employer and sector-level engagement through lead providers in different subject areas.	Providers working to an agreed strategy for the region informed by employers current and future sector skills needs. Agreed roles and responsibilities, investment priorities, and areas of expertise. Resources shared across the region to leverage scarce expertise and capability. Close relationships with local HE providers to enable learner access and seamless pathway between FE and HE. Employers, including SMEs, attracted to acknowledged centres of expertise as a source of innovation/ productivity improvement through higher technical skills. More efficient employer and employer representative body engagement as resource is scaled and focussed on addressing systemic issues, rather than competitive or duplicative.

Skills and innovation are deeply connected, as regional research shapes future skills demand. Because the North East's R&D spending is only two-thirds of the national average, the NELSIP needs to recognise and develop in line with Research England, Higher Education Innovation Funding (HEIF), and the Knowledge Exchange Framework (KEF). This ensures that early-stage 'blue-sky' innovations are built into technical training courses long before widespread industry demand begins. Public funding has sought to improve collaboration across the region by making collaboration a requirement of new investment, including the Skills Development Fund, the North East Institute of Technology, and the Local Skills Improvement Fund, but this has tended to result in different tactical in-region collaborations tied to funding streams. This is characterised as "cooperation" in the maturity framework illustrated and is still relatively inefficient and difficult for employers to navigate.

New investment has undoubtedly improved facilities and training capacity in the North East, but employers and ERBs still lack clarity over which providers or collaborations should serve as the focal point for strategic partnerships. Employers, for instance, are unclear how the new Technical Excellence Colleges will co-exist with The North East Institute of Technology which has overlapping specialisms, and which of these should be the focal point for their engagement. A more mature level of collaboration, described as "codetermination" in the model, would involve providers working to an agreed regional strategy, with clear roles and responsibilities, and areas of expertise. This codetermined

approach would still need to provide accessible place-based learning, particularly for 16-18 learners or for those economically inactive, but would enable more efficient investment in facilities and in teaching resource, which could be shared and leveraged across the region. Devolution of skills funding, such as ASF and Skills Bootcamps, has improved alignment of provision with regional skills priorities delivered through local providers. However, progressing to a more mature codetermined approach as part of an efficient, cohesive, and responsive skills eco-system will present substantial challenges. In regions where a more integrated approach to investment, skills, and economic growth has been achieved, it has required significant aligned ambition and tenacious leadership.

A focus on SME engagement is needed. As previously stated, SMEs account for a significant proportion of employment in the North East region, and underpin the regional economy, but largely do not engage with the education and training system and apprenticeships in SMEs are in decline – traditionally the backbone of level 2 demand, this has implications to future progression and attainment. There are several systemic reasons for this – SMEs report that they find the system complex, lack the scale and resource or capability to navigate it, and highlight the challenges of both funding significant off-the-job training for advanced technical apprenticeships and supervising on-the-job training in small resource-constrained organisations. Some perceive that training providers are less interested in them than larger employers, and it will be more efficient for providers to engage with employers that can commit to providing a larger number of learners. There are examples of addressing these systemic barriers to SME access, including the PlanBEE programme at Gateshead College, the Training for Growth pilot activity which incentivised SMEs to recruit apprentices, managed by the North East Automotive Alliance and sponsored by Sunderland City Council through the UK Shared Prosperity Fund, and other best-practice learning from outside the region. To enable widespread engagement of SMEs in the North East a regional framework will be required that incorporates learning from best-practice and includes:

- High quality advanced technical training that translates into added value to SMEs through improved innovation and productivity.
- Brokerage models that ease the administrative burden and complexity for SMEs.
- Grants or financial assistance that help address cost-pressures associated with employing apprentices.
- Further expansion of the Gatsby Accelerated Apprenticeship pilots which provide alternative routes for those unsuccessful in apprenticeship applications whilst also overcoming key barriers to employer participation.

The disruptive impact that AI will have on the workforce and the economy in the North East will require a systemic response. The potential impact is already evidenced among those organisations, globally, that have been early adopters of AI. Those in white-collar administrative and professional roles are most likely to be impacted, along with those in the Digital sector where AI will replace basic coding tasks. SSPs should undertake a risk-assessment of the likely level and timing of impact for their sector. The need for policy interventions in the region to support reskilling and redeployment into roles within key sectors for those displaced from work will need to be considered.

The value of work-experience and work-readiness skills is uncontested, but a dilemma regarding facilitating work experience opportunities still needs to be resolved. Employers frequently report that those entering, or seeking to re-enter, the workforce lack employability or work-readiness skills. Work-experience placements, apprenticeships, and sector-based work academies all provide opportunities to gain these skills. High levels of NEET across the region amplify the importance of enabling access to these skills and to employment. National policy and regional ambition are aligned, through the Youth Guarantee and the North East Ambition and progress that has been made through deployment of the Gatsby framework. However, engagement and capacity with employers still needs to be unlocked to realise these work experience opportunities. Improving SME participation in apprenticeships will help, but wider mechanisms for improving engagement with employers, simplifying the process of providing work experience without diluting the quality of experience, and monitoring progress through SSPs will be important.

Section 3 - NELSIP Priorities - Changes and actions needed to take priorities forward

This section sets out the recommended actions to support delivery of the five NELSIP priorities identified. These priorities respond directly to the key needs identified by employers and support the objectives of the North East Local Growth Plan and the New Deal for North East Workers. It outlines the proposed actions, intended outcomes and success measures to monitor progress. The detailed allocation of roles and responsibilities, including RACI ownership for each action, is set out in Annex B. It is recognised that those responsible for delivery will need to develop and own the detailed implementation plan for each recommendation. Many of the recommendations require systemic issues to be addressed, and their successful delivery will depend on sustained engagement and collaboration between employers, ERBs, training providers, the North East MSA, and wider regional stakeholders. An overview of the governance structure that will monitor progress against the NELSIP priorities is also included in this section.

NELSIP 2026/29 Overarching Priorities

1.	Establish a cohesive and responsive skills eco-system that fully leverage regional excellence through aligned collaborations between providers, employers and ERBs.
2.	Enhance employability and productivity through embedded digital and AI capability
3.	Increase the supply of Level 3-8 technical skills to meet current and future requirements across all NELSIP sectors.
4.	Increase SME participation in technical and vocational training
5.	Prioritise social inclusion and workforce resilience through development of foundation and employability skills, and vocational pathways into entry-level roles.

1. Establish a cohesive and responsive skills eco system that fully leverages regional excellence through aligned collaboration between providers, employers, and ERBs.

The North East has strong sector focused ERBs and extensive capability across the further education and higher education training providers in the region. This capability needs to be leveraged effectively through a collaborative skills ecosystem across ERBs, employers and training providers, maximising synergies, focussing investment, and removing duplication. By utilising regional Sector Skills Partnerships (SSPs) and capitalising on ERBs strong employer networks, provider expertise, including the new Technical Centres of Excellence and other similar facilities in ITPs and Universities, SSPs will aggregate employer demand and secure joint funding to keep pace with technology cycles. The Centres of Excellence (TECs and similar) provide leading-edge capability and advanced/higher level vocational training that employers require to anticipate and realise the opportunities associated with emerging technologies, digitalisation, and sustainability. Innovative delivery models will be important to ensure that these centres are accessible to employers and residents across the North East geographic region.

Strategy	Changes needed	Action required	Expected Outcome and impact	Measure
Regional Governance	Strengthen regional co-ordination, unlock cross-sector opportunities, and enhance employer access and engagement.	Establish a Strategic Oversight Board (SOB) to oversee the delivery of the NELSIP and agree with the North East MSA the Chair and board members.	Strategic Oversight Board (SOB) established with key stakeholder representation and Terms of Reference (ToR) agreed. Strong, coordinated governance of NELSIP delivery will maximise synergies across the plan by bringing together employer-led insight and strategic planning to align regional funding, enable co-designed operational mechanisms, and maintain a clear focus on SME participation in vocational training and social inclusion.	Participants agreed and meetings schedules, with conflict of interest and ToR's agreed.
		Monitor NELSIP 26/29 deployment plan and report progress to Skills England		NELSIP Quarterly updates.
		Establish KPIs for SME participation in vocational training in the region and embed regular reviews on progress.		Actions undertaken to improve SME participation in training.
		Establish a consistent set of success measures for social inclusion in education, training and employment.		Social inclusion success measures deployed.
		Establish and monitor delivery of appropriate Level 1 and 2 Maths & English attainment targets - recognising value of functional equivalent qualifications.		Level 1 and Level 2 Maths & English attainment.
Sector Skills Partnership (SSP)	A more coherent employer engagement system is needed across NELSIP sectors, with clearer routes into skills provision, sector-tailored models, and better communication and access.	Establish SSPs to support NELSIP delivery for each one of the 8 sectors and promote cross-sector collaboration. The sector ERB will act as secretariat, alongside a lead college, lead university, and key stakeholders.	An employer-led, sector-based skills system with SSPs aligned to NELSIP delivery and operating to agreed ToR - delivering a co-ordinated, simplified and responsive skills ecosystem with strong industry–provider collaboration, clear roles and accountability. This streamlined governance reduces duplication and aligns provision to current and future employer demand, whilst ensuring targeted interventions, effective access to funding, and rapid response to sector needs, including minimising workforce disruption and supporting displaced workers into priority sectors.	Participants agreed and meetings schedules, with conflict of interest and ToR's agreed.
		Each SSP will adopt terms of reference and SHINE.		ToR adopted.
		Each SSP will sign up to SHINE		SHINE in place.
		The SSP is to agree, own and deliver sector specific priorities that feed into the overarching NELSIP - reporting outputs and outcomes to the SOB.		Sector deployment plan agreed, with a reporting mechanism to the Strategic Oversight Board in place.
		SSPs will provide continuous assessment of employer needs and identify and report gaps.		
		Design and delivery of new strategic, sector-focused interventions aligned to emerging skills needs.		
		Identify best practice that can be shared across other SSPs		
		SSP to support workforce planning and training demand, working with the sector ERB.		Support skills planning and visibility of the skills and priority occupations - job plan.
		SSPs to assess the scale of impact and timing of AI-related workforce disruption in their sector and identify the policy, reskilling and redeployment responses.		
Provider Collaboration	Build on NELSIF from 2023/2026 model for each sector to remove duplication and direct competition across providers for scarce specialist/technical skills required by employers.	Establish a lead college for each NELSIP sector to facilitate collaboration across FE training providers to satisfy employer demand, to share best practice, and to work with SSPs to establish new delivery models and maximise economies of scale.	A co-ordinated regional approach to specialist provision that improves viability, visibility and employer access, particularly to advanced technologies. Clear roles, responsibilities, investment priorities and areas of expertise are agreed, with shared resources maximising scarce capability and sustaining specialist, low-volume programmes. This collaborative ecosystem broadens participation in training, including SMEs, while ensuring provision is	Lead provider networks established and formally aligned to SSPs.
		Establish a lead university for each NELSIP sector to facilitate collaboration across the HE institutions to satisfy employer demand, to share best practice, to work with SSPs to establish new delivery models and maximise economies of scale.		
		Lead college and lead university for each sector to drive collaboration and strengthen clearer and more coherent progression pathways.		

		Measure impact of provider collaboration through the "Assessing Levels of Local Skills Collaboration" matrix developed under the NELSIP 2023-2026 to ensure move towards the codetermination model.	responsive to short and medium term employer skills needs.	Partnership agreement established and supported by in-region HE & FE providers.
		Establish a region-wide network of sector focused “Centres of Excellence” that support innovation and drive adoption of advanced technologies by expanding accessible, high-level training provision, aligning funding to demand, and delivering measurable gains in workforce capability and productivity.		
Funding	SSPs to drive a cohesive approach to maximise funding and delivery of employer-informed skills programmes, utilising the strengths of each organisation.	Establish sector-level plans to identify priority investment needs and optimise available public funding in support of key sector skills priorities.	A coordinated funding approach through SSPs creates a cohesive skills ecosystem, aligning and streamlining sector skills funding with NELSIP priorities. This ensures funding applications represent effective and efficient use of resources, maximises the complementary strengths of delivery partners, and optimises overall allocation and utilisation to support agreed sector outcomes.	Cumulative funding secured and their relative outcome (achieved vs. target).
		Through SSPs, coordinate and pursue funding opportunities that respond to NELSIP priorities and emerging sector skills requirements, including cross-sector opportunities where appropriate.		
		Coordinate bid applications, the mobilisation, allocation and delivery of new funding opportunities that will support NELSIP delivery and any emerging sector skills requirements, maximising cross-sector opportunities in delivery and funding where possible.		

2. Enhance employability and productivity through embedded digital and AI capability

The rapid development of digital technologies presents transformational impact and opportunities across all the key NELSIP sectors and have workforce implications at all levels across those sectors. It therefore stands out as a key NELSIP priority. The current workforce will need to be equipped with relevant digital skills, which continue to be developed over time as technology changes. The future workforce and those presently not included, will need to be provided with transferable digital skills which enable them to access employment. This will require applied digital skills to be embedded throughout education and training, and agile training delivery which can adapt as technology changes, be flexibly deployed, and scalable. AI presents disruptive risk, as well as opportunity, and a more detailed assessment of risk across the key sectors will be important. Regional skills planning must also satisfy employers’ needs to advanced digital skills and support the shift from basic generative AI fluency to autonomous architectures capable of reasoning, planning, and executing complex, multi-step business workflows. This transition creates a demand across sectors of Swiss Army Technologist, who merges advanced technical skills and business experience with advanced digital skills required in the specific sector, and secure AI-enabled deployment.

Strategy	Changes needed	Action required	Expected Outcome and impact	Measure
Essential digital and AI skills	Build digital inclusivity.	Support the development of a North East MSA digital inclusion action plan that aligns to broader UK Government Digital Inclusion Action Plan Policy Paper. This includes the activities below:	A regional digital inclusion action plan to build inclusivity and reduce barriers to employment for each of the NELSIP sectors. Close the digital divide by ensuring universal access, skills and confidence to use digital technology, delivered through locally tailored, community-based solutions.	NE digital inclusion action plan with established roles for each of the NELSIP sectors.
		Skills: Build essential digital skills for work and life by providing training and support.		
		Data and device access - ensure people have devices and connectivity.		
		Accessible digital services - inclusive and easy access to public services.		
		Local support - build confidence and trust by providing community-based help.		
	Ensure basic digital and AI skills reflect the latest technologies	Review and update basic digital and AI skills in all levels of 16+ education provision. Linked to the Government's national AI pledge (£187m).	A responsive, industry-aligned digital and AI training offer that keeps pace with technological change, reduces skills decay, strengthens business resilience, improves employability, and maximises inclusive reach and funding impact.	FE Colleges provider assessment as part of the annual accountability process. For HE institutions confirmation through Access and Participation Plan. No. traineeships into jobs, graduate outcome and employability data.
		Design and deploy sector-focused basic digital upskilling and reskilling programmes and utilise funding streams such as ASF and Skills Bootcamps.		
		Ensure modular delivery is available, moving from static curriculum updates to agile, bite-sized updates in keeping with the fast pace of technological change.		

Applied digital skills	Hybrid digital and engineering roles to improve productivity.	Support cross-sector business needs for hybrid digital and engineering skills across sectors. Expand the annual attainment in HTQs and Apprenticeship (L3+) in AI/Digital framework , including Level 4 AI and Automation Practitioner apprenticeship and AI Leader modular apprenticeship units.	Accelerated digital adoption across businesses, narrowing the implementation gap and improving competitiveness.	No. of businesses participating in digital training.
	Swiss Army – technical injection	**Advanced Manufacturing:** Hybrid mechatronics technicians capable of operating and maintaining Industry 4.0 – improve business productivity and efficiency.	Design clear progression pathways, increase the high-tech regional talent pool and retain technical skills in the region to support employer needs.	No. of starts enrolments and completions in provision aligned to specific sector skills requirements. % of learners progressing into higher-level training or relevant employment.
		Offshore Wind and Renewable Energy: High-Voltage (HV) engineering with digital controls and GWO safety training, focusing on SCADA and digital grid monitoring. Training for remote monitoring and digital maintenance increases utilisation and improves productivity.		
		Life sciences, pharmaceutical and process industries: Hybrid technicians capable of operating and maintaining Pharma 4.0 to improve business productivity and efficiency**.** Specific modules for digital twin bioprocessing and biologics, distinct from traditional chemical processing.		
		Creative Industry and Content: Develop integrated **CreaTech** skills pathways that combine creative and digital training across FE, HE and employer-led provision, aligned to emerging technologies and industry demand. 360-Degree Digital Creatives - Combined technical proficiencies in real-time camera/lighting layouts, rigging, sound, VFX, and post-production editing		
		Construction: Digital Site Operations, use of real-time data for operational insights providing fast decision-making and improving management, including Building Information Modelling (BIM), digital job ticketing, and handheld devices.		
		Adult Social Care: Digital Care & Telehealth **-** Upskill the workforce for paperless systems and remote monitoring to improve productivity.		
		Defence, Security and Space: Secure Systems & Secure by Design: Integrate security clearance readiness and AI agents to stress-test systems against adversarial attacks.		
	Modular Apprenticeship Units	Ensure modular delivery is available, moving from static curriculum updates to agile, bite-sized updates in keeping with the fast pace of technological change. For each of the NELSIP sectors, prioritise sector skills needs and plan the curriculum update/design to meet the demand.	A responsive, industry-aligned digital and AI training offer that keeps pace with technological change and maximises inclusive reach and funding impact.	FE Colleges provider assessment as part of the annual accountability annual process. For HE institutions confirmation through Access and Participation Plan.
Cyber Security	Businesses are required to be more cyber resilient due to the uptake of digital and AI technology.	Extend basic cyber security training to those who are digitally enabled, covering data privacy, safe operation and support for digital inclusion.	Improve business resilience and reduce cyber-attack exposure	No. of attainment in basic cyber security training.
		Train operational cyber security specialists to support stress tests (simulating multiple cyber-attack channels to evaluate organisational resilience and recovery capabilities) and incident response.		No. of attainment in cyber security training.
		Train advanced cyber security specialists, shifting from reactive to preventative models to enforce cyber security scans and proactive remediations linked to the UK Cyber Security Council framework.		No. of attainment in advanced cyber security specialists.
Talent	Improve the region's ability to build and sustain a strong tech	Support national and regional tech talent initiatives - including TechYouth (school-age tech skills and careers awareness), TechGrad (student scholarships and pathways into tech careers), TechLocal (regional employer and talent	Build and sustain the tech talent pipeline, support work-readiness and connect learners with regional employer opportunities.	No. of learners participating in regional initiatives mentioned (like TechYouth, TechGrad,

	talent pipeline by engaging and supporting recognised regional and national initiatives.	connections), and TechExpert (advanced research talent development) - to strengthen the digital talent pipeline and connect learners to regional employment opportunities.		TechLocal and TechExpert – Tech up, SHAREiNG, etc…). Increase the % of students progressing into digital study, training or employment.
		Expand awareness of and participation in a range of regional initiatives. This includes TechUP, which supports learners from underserved communities; programmes in Maths and Computer Science, including the MSc in Scientific Computing and Data Analysis; and AI training through SHAREing, including Research Software Engineers; the Centre for Algorithmic Life, work exploring the relationship between human life and AI/machine learning, and AI in Schools and Education via the Centre for CPD and Outreach. NICD (National Innovation Centre for Data) Traineeships Pilot Programme (funded by DSIT), Development of comprehensive digital and AI offer,AI Academy for digital transformation of Newcastle City Council staff (phase 1 is Social Care team)		
		Promote initiatives and partnerships that expand access to the work experience needed to enter technical and digital roles, including employer-led models such as Tech Talent Pro.		No. of technical and digital work experience placements completed, and % participants progressing into technical/digital roles, apprenticeships or further training.

3. Increase the supply of Level 3 – Level 8 technical skills to meet current and future requirements across all NELSIP sectors.

Emerging technologies, digitalisation, sustainability and ongoing competitiveness is emphasising the importance of higher-level technical skills in each key sector, and the need to increase the supply of these skills, which support high-value economic growth and provide pathways into good jobs and careers. Supplying these skills will require forward-looking collaboration between employers, ERBs, and across education and training providers. Collaboration will enable focussed investment in delivery capability that can be leveraged across the region. Sector-specific plans will be developed, and opportunities to develop common technical skills transferable across sectors will be identified. The activities are targeting the drop-off in progression and initiative to bridge Further and Higher Education pathways and increase the future talent pipeline. It leverages the Lifelong Learning Entitlement (LLE) and the Growth and Skills Levy to align graduate pipelines with regional innovation clusters.

Strategy	Changes needed	Action required	Expected Outcome and impact	Measure
Level 3	Boost apprenticeship demand through employer engagement and create alternative models to mitigate the reduction of apprenticeship opportunities.	Review NELSIP 2023/26 best practice and delivery models such as AMRC, training for growth, accelerated apprenticeships and Plan Bee for each of the NELSIP sectors, with the scope to deploy new models to enhance participation.	Barriers to employer engagement in apprenticeships are reduced, enabling increased participation and a stronger alignment between apprenticeship delivery, employment opportunities and evolving market demand.	No. of L3 apprenticeships YoY.
		Promote T-level as entry and access to careers in the sector.		No. of T-level learners for each of the 8 priority sectors.
		Support delivery of Modular Apprenticeship Units to enrich national standard and meet employers' L3 technical need (i.e. Electric vehicle (EV) charging point installation and maintenance — Solar PV installation and maintenance and future releases).		No. of L3 attainments.
Level 4/5	Improve the lower-than-average level of L4+ attainment in the North East.	Use the Lifelong Learning Entitlement (LLE) tuition fee loan system for modular upskilling. Development of CPD programmes and apprenticeship units (where approved).	Increase progression to L4+, closing the gap between the North East and the rest of the UK. Remove systemic barriers to higher-level skills, allowing Level 2 and 3 vocational learners to progress flexibly into Higher Technical Qualifications (HTQs) and degrees.	No. of L4+ attainments.
		Evaluate a flexible delivery model to support employers' requirements and widen the volume of L4/L5 opportunities.		
		Increase and expand the availability and offer of HTQs (Higher Technical Qualifications) and degree apprenticeships.		

		Utilise TECs and NEIoT to standardise and simplify the regional L4/5 offer to satisfy priority occupation (SOC20) employer demand.		
		Support delivery of Modular Apprenticeship Units (Growth and Skills Levy) to enrich national standards and meet employers' technical needs (i.e. AI strategy and opportunity, AI adoption, procurement and governance, AI delivery and organisational transformation, and any future releases).		
Level 6	Improve graduate retention across the NELSIP region	Improve visibility of sector opportunities for local and non-local graduates in regional business growth clusters (CIAG).	Stronger employer-university collaboration improves graduate retention and strengthens the talent pipeline into key growth sectors.	No. of employers engaging with NELSIP Universities.
		Promote graduate work experience to facilitate connection with regional employers.		No. of graduates work placement.
Level 7	Low Level 7 skills attainment limits the region's capacity to deliver innovation, leadership, and high-value growth.	Build regional leadership capability and promote master's-level projects to support industry innovation and productivity.	Ensure that early-stage 'blue-sky' innovations are built into technical training courses long before widespread industry demand begins.	Increase Level 7 attainment.
		Strengthen leadership and management skills across the region to support innovation, productivity and economic growth.	Improved leadership and management capability across the region, leading to stronger workforce performance, higher productivity, and greater capacity for innovation and growth.	No. attainments in Leadership and Management training.
Level 8	Integrate early-stage R&D funding with technical training.	Connect the region's technical education courses directly with Research England, Higher Education Innovation Funding (HEIF), and the Knowledge Exchange Framework (KEF).	More impactful research outcomes. Improved awareness of regional business innovation priorities among PhD learners, leading to stronger employer engagement and increased research collaboration.	No. of new technical education programmes linked to live R&D, innovation or knowledge exchange activity.
	Improve the understanding within R&D institutions of employer led blue sky research.	Support and promote KTPs and align employer-led blue-sky research challenges with R&D institutions.		No. of research challenges shared with R&D institutions.
		Increase learners' awareness of local businesses and industry and strengthen their understanding of how their PhD research can contribute to local business innovation ambitions.		No. of PhD learners engaged in regional employer activity.
Technical injection current and future demand	Technical injection to meet the specific skills gaps identified in the NELSIP - SSP to support future technical injection requirements.	**Advanced Manufacturing including EV:** Technical Skills required to pivot from traditional mechanical workflows toward automation, robotics, PLC, advanced modelling (digital twins) diagnostics. and net-zero technologies. Highly technical skills in the PEMD (Power Electronics, Machines & Drives) supply chain, battery production, and energy storage systems. Advanced diagnostics for ICE/EV systems, electronic control units (ECU), CAD, and high-integrity fabrication (MIG/TIG welding).	Design clear progression pathways to reduce/close the "Level 4 gap" and increase productivity through automation and sustainable innovation. Retain technical skills in the region to support employer need and regional projects/initiatives. (Note: Electrification and Advanced Manufacturing: Progression Pathways developed as part of the Institute of Electrification and Sustainable Advanced Manufacturing and National Battery Training and Skills Academy) Number of starts, enrolment and completion rates in Level 3+ and the % of learners progressing to higher-level training across the NELSIP sectors.	No. of starts, enrolments and completions in Level 3+ provision aligned to sector specific skills requirements, and % of learners progressing into higher-level training or relevant employment.
		Offshore Wind and Renewable Energy: High-Voltage (HV) electrical engineering, subsea electrical technicians, and Global Wind Organisation (GWO) safety and compliance training. Technical skills required to support Fabrication 4.0: Transitioning manual fabricators to robotic, laser, and vacuum welding specialisms. Subsea embedded systems, maritime logistics coordination, prototype engineering, and marine analytics/consenting services.		
		Tech, Digital & AI: Orchestration, configuration, compliance, and governance of AI architectures and workflows (moving beyond basic prompt fluency). Providing "technical doers" for physical-digital infrastructure and support for the AI Growth Zone project - software and system engineering, complex data architecture for high-performance Graphics Processing Unit (GPU)		

		environments, full-stack engineering, version control, and real-time 3D workflows. Advanced AI, Advanced AI with Cybersecurity; Data Science, Advanced DS with Statistics and/or specific sector needs.		
		Life sciences, pharmaceutical and process industries: specific requirements to support Pharma 4.0, sterile manufacturing and Good Manufacturing Practice (GMP) aseptic facility workflows, and digital twin bioprocessing/biologics. Bioinformatics, biotechnology, medicinal chemistry, biodesign, advanced organic chemistry depth (autonomous chemical synthesis), Laboratory Information Management Systems (LIMS), and advanced energy monitoring for data-intensive sterile processing. Mid-career upskilling for Qualified Persons (QPs) and senior Quality Assurance (QA) regulatory professionals.		
		Creative Industry and Content: Advanced training in Unreal Engine, virtual production volumes, motion graphics, and UI/UX wireframing. Digital marketing and audience insight; journalism, media and communication; music enterprise and industries management; creative writing and cultural content development; curating, museum and heritage practice; architecture and urban design. **Freelance Readiness:** Business modules covering self-employment mechanics, IR35 compliance, invoicing, and commercial workflow leadership.		
		Defence, Security and Space: Specific sector skills include physics, data analytics, and situational awareness. Secure by Design" principles integrated across software/hardware, electronics beyond silicon, and advanced electronics R&D. **Space & Orbital Analytics:** Hybrid expertise spanning orbital analysis, physics, situational awareness, satellite R&D, and space law. FPGA design, signal processing for Radar/Electronic Warfare (EW), radiation-hardened circuitry, and technical clearance path preparation.		
		Construction: PAS 2035-compliant low-carbon retrofit installation, ventilation/moisture control (damp/mould prevention), high-efficiency insulation, and low-carbon heat pump systems. Engineering programmes, covering structural, geotechnical, construction and digital engineering. Project planning, costing, scheduling, risk, foundation and structural design, surveying, BIM, spatial data and computational modelling, including finite element analysis. Level 7 study also includes offshore structures.		
		Adult Social Care: Sustained demand for Care Workers, Training frontline staff in remote monitoring ("Virtual Wards") and digital care records to improve productivity. Domiciliary expertise in advanced pressure care, sample collection, neurodiversity tracking, and complex dementia/medication management. Upskilling senior staff to confidently navigate regulatory CQC inspections and absorb 24/7 accountability frameworks. Nursing, social work, allied health and care.		

4. Increase SME Participation in technical and vocational training

SME are vital to economic success and employment in the region. Their participation in technical training and apprenticeships is low and declining, and it is important that NELSIP prioritises their increased participation. This will require innovative ways of engaging SME to be resourced, simplifying their interface with the education & training providers, and flexible and high-quality training delivery that adds value

to their business. By scaling successful new delivery model and promoting best practices across sector, the activities would like to promote SMES participations and it de-risks on-the-job coaching for small and micro-businesses.

Focus	Changes Needed	Action required	Expected Outcome and impact	Measure
Facilitate access to vocational training	Improve SME engagement and participation in the vocational skills and training offer across the NELSIP area by targeted support to overcome participation barriers, increasing demand in line with employer and sector needs.	Utilise ERB business networks to deploy evidence-led SME engagement approaches to improve employer understanding, access, and engagement with SME skills provision at all levels across the NELSIP area.	Improved awareness, understanding and simplified access to vocational skills provision enables greater SME participation across the region, supported by ERBs and streamlined provider processes. These drives increased uptake of training and apprenticeships whilst strengthening pathways into higher-level qualifications. A coordinated approach, shared delivery models, and sector-led best practice (including shared placements), enhances employer engagement, widens participation, and reinforces the business case for investment in skills, leading to sustained growth in apprenticeship demand and workforce capability aligned to NELSIP priorities.	Number of SMEs referred by ERBs.
		Resource skills & workforce planning guidance and support for SMEs.		Apprenticeships & training outcomes in SMEs.
		Aggregate demand from SMEs across ERB networks, ensure cost-effective delivery models with practical support mechanisms to remove SME barriers.		No. of SMEs enrolling apprentice for the first time.
		Leverage the Government's initiative and fully funded SME apprenticeships for under-25s.		No. of apprentices employed across SMEs in the region.
		Boost aggregate demand for Level 2 apprenticeship across SSPs		No. of Level 2 starts per year.
		Develop alternative pathways to L3 apprenticeships, informed by NELSIP 2023–26 best practice paper citing AMRC, accelerated apprenticeships, training for growth and Plan Bee models.		No. of Level 3 apprenticeship starts within SMEs.
		Promote and support initiative like Help to Grow Management Programme (Sunderland University) to SMEs in the region.		No. of SMEs supported through the Help to Growth Management Programme.
		Utilise the centres of excellence to provide additional assistance for SMEs to recruit advanced technical apprentices requiring significant off-the-job training and on-the-job supervision.		SME assistance policy implemented.
				Apprenticeships & training outcomes in SMEs.
		Promote case studies and success stories to SMEs of productivity and innovation improvements enabled by vocational training.		Apprenticeships & training starts in SMEs.

5. Prioritise social inclusion and workforce resilience through development of foundation and employability skills, and vocational pathways into entry-level roles.

The North East faces long-standing structural challenges associated with relatively high unemployment and economic inactivity and youth NEETs. Further risk of economic exclusion is presented by macro-economic uncertainty, and disruption from AI and new technologies which are automating routine tasks. A more inclusive workforce is a priority in the Local Growth Plan and the New Deal for North East Workers. It is also necessary to ensure that employers can resource entry-level roles within their organisations. Meeting the needs of employers, developing a more inclusive workforce, and resilient regional economy, all require investment in foundation and employability skills, and pathways into work for the future workforce and those that are presently not employed. This requires engagement from a broad range of stakeholders and a proactive approach that addresses multiple systemic and structural challenges, and it is important that it is reflected as a NELSIP priority.

Focus	Changes Needed	Action required	Expected Outcome and impact	Measure
Support for unemployed people	Improve access to employment and work-readiness by increasing the level of foundation and employability skills.	Funded work-readiness and employability assistance programmes supported by employers for those unemployed and economically inactive	Strengthen targeted and tailored support to improve employment outcomes for unemployed and economically inactive individuals, including those with special educational needs and disabilities (SEND), ensuring barriers to participation are addressed and opportunities for sustained employment are increased.	No. of economically inactive/unemployed accessing employment.
		Deliver tailored work-readiness and employability support programmes for under-represented groups, including people with special educational needs and disabilities.		Proportion of those with SEND accessing employment.
Support for Young	Improve the co-ordination of employer-	Continue to enable high-quality careers information, advice and guidance supported by North East Ambition and the deployment of Gatsby Frameworks.	Improved careers guidance, employer engagement and co-ordinated work	No. of young people receiving careers guidance

People Pathways into Entry-Level Roles	aligned pathways into entry-level roles. Fragmented delivery of employment support initiatives reduces effectiveness in enabling sustained re-entry into work and constrains the region's ability to meet current and future labour market demand.	Increase work experience opportunities for young people by ensuring placement brokerage is appropriately resourced and opportunities for flexible, employer-friendly placements are optimised.	experience, aligned to the DfE guarantee, will strengthen awareness, ambition and understanding of opportunities. This enables clearer, accessible pathways into entry-level roles and Level 2 apprenticeships, increases participation and progression through T Levels and other technical routes. This will provide better progression routes into employment or self-employment.	No. of young people in education securing work-experience placements.
		Promote case studies and success stories of those who have progressed through assisted pathways into entry-level roles.		Participation in assisted programmes.
		SSPs to endorse different assisted pathways into entry-level roles within the sector for different populations, including those leaving education, those who are economically inactive, and those from under-represented groups including SEND.		Time to fill entry-level roles.
		SSPs to endorse Level 2 apprenticeships for each sector and establish a framework of positive assistance to enable access for those who are economically inactive, or from under-represented groups including SEND.		No. Level 2 apprenticeships starts in key sectors.
		Promote T Level provision as an entry route and access to careers in the STEM sectors or to employment via accelerated apprenticeships.		T-level attainments.
		Promote aspirational case studies that inspire and demonstrate achievable career pathways for individuals from similar backgrounds.		Aspirational case studies promoted and engagement achieved.
	Entrepreneurship, creativity and innovation.	Widen the skills provision to support entrepreneurship, leadership, creativity and innovation.		No. of attainments in entrepreneurship, leadership, creativity and innovation provision.
Employer-led	Employers proactively adopting inclusive employment practices to attract local workforce and actively supporting development of work-readiness.	ERBs and SSPs to emphasise the benefits to employers of more inclusive employment practices in a tight employment market and promote participation in SHINE.	Employers adopting more inclusive employment practices	Employer participation in SHINE.
		Continued development of SHINE as a resource to employers	Progressive ongoing adoption of inclusive employment practices	Employment levels for under-represented groups.
		Sponsorship of tailored sector programmes to support work-readiness, such as DWP Trailblazer, Skills Bootcamps, SWAPs and recruitment fairs.	Higher levels of employer engagement in improving work-readiness tailored to sector requirements	Conversion into employment of those attending work-readiness programmes.
		Adopt a tailored approach to transitioning new employees from benefits to employment which removes financial disincentives.	Less unemployed/economically inactive residents reluctant to move into employment due to short-term risk of financial disadvantage	No. of unemployed/economically inactive accessing employment.