Response to the Department for Education's consultation on post-16 Level 3 and below pathways: EngineeringUK's submission, drawing on the National Engineering Policy Centre's (NEPC's) draft response

January 2026

1. In taking this approach (V Levels at 360 GLH with larger subjects delivered through T Levels), are there any risks or issues DfE need to be aware of?

EngineeringUK, in a similar vein to the National Engineering Policy Centre (NEPC), welcomes the proposal to streamline post-16 pathways. However, significant risks arise from positioning V Levels at 360 GLH and relying on T Levels to deliver larger technical subjects.

Risk to progression into engineering and STEM

EngineeringUK asks DfE to consider carefully how 360-GLH V Levels can be designed to constitute a truly vocational pathway for engineering career destinations.

With regard to progression into apprenticeships or other employment-based training: EngineeringUK questions whether a small 360-hour qualification may well not prepare young people adequately for apprenticeships. Employers have already expressed concerns about T Level students lacking the practical skills and general work readiness for level 3 apprenticeships, with particular concerns about T Level students being inadequately prepared for degree apprenticeships. V Level students, having undertaken a smaller qualification without an integrated work placement, are likely to face greater barriers.

Linked to this, ensuring that there are clear onward progression pathways from V Levels may require DfE and Skills England to look at broader pathways. For example, a representative from one large employer told EngineeringUK that T Levels' link to occupational standards can be problematic for employers recruiting apprentices. A young person with a T Level may not be eligible for a fully funded level 3 apprenticeship, due to recognition of prior learning meaning that funding is reduced when the learner has already covered similar content. We heard this lack of funding for the full apprenticeship could affect employers' ability to take on an apprentice. We ask DfE to look at whether this could affect qualifications taken after V Levels too.

EngineeringUK has heard that there are insufficient standards, in the engineering and technology sectors, at levels 4 and 5. A small Level 3 qualification is less likely to lead to progression if apprenticeship standards do not exist at these higher levels, which could bridge the gap between Level 3 and a full degree apprenticeship.

We also ask DfE to consider carefully how the content of a 360-GLH engineering V Level can prepare young people for technical careers.

Engineering employers value numeracy in their engineering employees. Many engineering degree programmes specify A level Mathematics as an essential entry requirement, and some also require Physics. While a small vocational qualification, to be taken alongside these A levels, may suit learners well-suited to these academic subjects, the combination of A and V Levels may work less well for young people who currently take large qualifications with integrated mathematical content. There is a risk that an education system that favours the A and V Levels combination, and that does not replace the integrated mathematical study currently available through medium-sized qualifications, reduces options for young people who might otherwise transition into these fields. (As also discussed in our response to question 2 of this consultation.) This may ultimately weaken the engineering talent pipeline.

DfE should also consider apprenticeship entry requirements when designing the content and format of V Levels. Several engineering apprenticeship standards demand substantial technical and mathematical preparation that may not be achievable within the constraints of a 360-GLH V Level. Without alignment to these requirements, learners may face reduced access to both higher education and high-quality technical apprenticeships, compared with the current offer.

Lack of clear differentiation between V Levels and T Levels

Both V Levels and T Levels qualifications are described as grounded in occupational standards. Without clear differentiation in their intended purpose, level of depth and assessment expectations, providers, employers, and students may struggle to understand the distinction between the two qualifications. This lack of clarity introduces both reputational and operational risk across the education and skills system.

There is a risk that V Levels may be, or be seen as, a less comprehensive version of T Levels – lacking work experience (apart from the broad requirements of the 16-19 study programme) and a true vocational connection. To minimise this risk, DfE must look carefully at the potential strengths of the learners who are most likely to participate in V Levels – drawing on how existing respected qualifications are designed to play to these learners' strengths – and consider how these can be developed in a way that supports onward pathways including to Higher Technical Qualifications.

Potential loss of recognised engineering qualifications

In a similar vein to the NEPC, we would point out that engineering and construction sectors rely on long-established Level 3 qualifications widely recognised by employers and professional engineering institutions (PEIs) and by the Engineering Council for EngTech registration. A funding model restricted to A, T, and V Levels risks removing accessible entry points into technician pathways if suitable replacements are not mapped and retained. Currently more than 40 qualifications are recognised for EngTech registration; most of these qualifications may disappear without replacement if only A, T, and V Levels are funded.

Delivery and sustainability challenges for providers

If V Levels cannot be co-taught with elements of T Levels or apprenticeships, smaller providers may find specialist provision unsustainable. Engineering subjects require specialist equipment, workshop time, and trained teaching staff, resources are already in short supply. Skills England Further Education (FE) workforce statistics show that teaching headcount fell from 81,900 to 80,500 in 2023-24,[1] while earlier AoC research identified approximately 6,000 vacancies across colleges with persistent shortages in construction and engineering.[2] If this trend continues without concerted effort to address teacher shortages, it will impact on delivery capacity.

Adult learner exclusion

If V Levels are funded solely as 16–19 study programmes, adult learners could lose important progression routes to technician level qualifications. The government has highlighted the need for reskilling (for example in the Clean Energy Jobs Plan) and has acknowledged the growing number of young people, up to the age of 24, who are NEET. Despite this, the White Paper's Lifelong Learning Entitlement is geared to higher level learning and may not meet demand among adults seeking a focused technical level 3 qualification. This is particularly important for those out of the workforce, including NEET young people outside the age range for 16-19 funding, who cannot access occupational pathways like apprenticeships. We ask DfE to use ILR data to consider adult learners' participation in qualifications which are in line for defunding, and which will not be replaced like-for-like by V Levels. We also ask DfE to consider

[1] DfE, *Further Education Workforce Statistics* (May 2025) https://explore-education-statistics.service.gov.uk/find-statistics/further-education-workforce/2023-24.
[2] Association of Colleges, *College Staffing Challenges* (February 2022) https://www.aoc.co.uk/news-campaigns-parliament/aoc-newsroom/worst-staffing-crisis-in-two-decades-in-englands-colleges.

carefully how it will ensure parity of access for adult learners, including funding arrangements which support adults to achieve level 3 vocational qualifications.

Regional and systemic risks

Engineering FE provision is uneven across England. As Local Skills Improvement Plans (LSIPs) and skills devolution continue to expand, regional clusters (e.g., advanced manufacturing in the Midlands, clean energy in the North-East) require tailored delivery models. A rigid national model which prevented local providers from adapting to local conditions would risk misalignment with local labour market needs and the Government's wider industrial strategy. Ensuring that LSIPs and Skills England data tools underpin implementation will be essential to maintaining regional relevance and supporting sector-specific growth.

Summary

Without careful design and transition planning, we are concerned, in a similar vein to the NEPC, that the proposed introduction of V Levels, and the defunding of alternatives, risks reducing rather than expanding the supply of people with the right skills, in the right place, at the right time. Transition planning should include detailed sector-based consultation with employers, awarding organisations and post-16 providers- including providers of higher education- to ensure that progression pathways are strengthened and not damaged, and to minimise the risk of unintended consequences from this significant change.

2. Are there any particular issues for subjects or students that DfE need to be aware of as a result of not having medium-sized V Levels?

In a similar vein to the NEPC, EngineeringUK supports a simpler, and higher quality qualifications landscape. However, the absence of medium sized V Levels (between small qualifications like proposed V Levels with 360 GLH and large, single qualification T Levels) creates specific risks for engineering and allied technical subjects in England. These fields often require a balance of applied learning and technical depth that may not be achievable within the current size options, potentially limiting learner progression and provider flexibility.

Qualifications smaller than 360 GLH are also currently available and we ask DfE to use the ILR to consider what impact this will have on young people specifically, by route.

Curriculum fit and depth

The absence of medium-sized V Levels creates a significant gap in the breadth and flexibility of technical education pathways. Many technical disciplines, particularly in engineering, manufacturing, construction and digital, require provisions that offer more than an

introductory course but do not extend to full occupational competence. With V Levels set at 360 GLH and T Levels occupying the large, single qualification space, there is a missing mid-tier that previously helped learners build depth progressively (e.g., AGQs/BTECs/Cambridge Technicals).

The consultation indicates that V Levels are intended to be single, sector-linked 360 GLH qualifications, while T Levels will continue to function as large, occupationally specific programmes. Removing medium sized options risks creating a gap in provisions limiting providers' ability to offer incremental, scaffolded learning pathways across technical routes.

EngineeringUK has heard from Pearson that, in the engineering sector, potentially defunded qualifications currently account for a large number of students – with thousands taking medium or large engineering qualifications which would be defunded. This represents a large group who have not been diverted onto T Levels, which remain relatively small and have faced greater than expected capacity constraints (for example due to constraints on industry placements – constraints which could affect some regions more than others). However, we understand that publicly available data does not allow us to precisely quantify how many young people would be impacted by defunding, for engineering and technology routes, at ages 16-18 or 16-19 specifically. We ask DfE to consider whether it can use unpublished data from the ILR to establish how many young people would be affected by the change to V Levels – ideally looking by route.

Progression and mathematical confidence

In a similar vein to the NEPC, EngineeringUK would point out that for engineering in particular, mid-sized qualifications have played an essential role in building mathematical confidence and enabling students with a varied prior attainment to progress at an appropriate pace. Evidence from this consultation and other associated reviews highlights that prior attainment in GCSE maths and English is a key barrier to progress to Level 3. A mid-sized technical step can provide the applied learning and time needed to consolidate maths alongside technical content, particularly for learners from schools with limited specialist STEM teaching capacity.

Many students enter FE with highly diverse mathematical backgrounds, a challenge that is especially pronounced among disadvantaged learners and those from schools without strong STEM provision. Medium-sized qualifications allow these students to gradually develop technical understanding through applied learning, building the confidence that supports later success in more demanding engineering content. Without these stepping-stone

qualifications, students may experience a cliff edge between introductory study and full occupational specialisation. This risks disproportionately discouraging or filtering out students who have the potential to succeed with the right preparation and could ultimately narrow the engineering talent pipeline.

Pathways into higher education

For students aiming to study an engineering degree, mid-sized technical qualifications have historically supported a flexible or mixed curriculum (e.g., technical qualification and A Level Maths / Physics). This blended model has been invaluable for these students as it allows them to combine technical grounding with rigorous mathematics / physics provision. Narrowing the mid-tier could reduce viable combinations and constrain routes into higher education for learners reluctant to commit to a single, highly specialised T Level at 16.

Provider sustainability and regional equity

In a similar vein to the NEPC, EngineeringUK asks DfE to carefully consider potential impacts on the sustainability of engineering provision if mid-sized qualifications disappear. Many FE colleges rely on a suite of qualifications that can be combined to justify investment in specialist facilities. If the qualification landscape narrows too sharply, it is worth considering very carefully whether engineering departments will be able to attract sufficient student numbers to remain viable.

DfE must also be mindful of potential unintended consequences for the teaching workforce. Engineering provision depends on specialist teaching staff. FE workforce statistics already show a decline in teaching headcount and material vacancy rates. As the AoC report highlights, there are persistent shortages in engineering and construction posts. It is possible that a change in courses offered, or changes in which providers offer courses, could impact the teaching workforce further.

Course viability and any workforce shortages could lead to course closures in regions where alternative provision is not available, potentially deepening regional disparities in engineering opportunity.

Lower prior attainment and SEND learners

The lack of mid-sized qualifications may disproportionately disadvantage students with lower prior attainment or SEND students, who often rely on incremental progression and targeted support. Moving from a 240–360 GLH qualification to a full occupationally specialist programme may be too steep, increasing the risk of potential dropouts, reduced confidence

or self-selection out of technical pathways. This consultation's analysis recognises that an additional year at Level 2 can help close maths and English gaps and address wider barriers. Removing mid-tier Level 3 options is at odds with this rationale, increasing the risk of a cliff edge between foundation learning and full occupational specialisation, with knock-on effects for retention and confidence.

Summary

To avoid losing crucial mid-tier technical progression routes into apprenticeships, work or further study, EngineeringUK supports the NEPC's recommendations that Government should:

- Introduce a medium sized V Level option (480-540 GLH) in selected technical routes, or allow stackable, credit-bearing V Level modules that can accumulate to a medium size, so learners can build depth without committing to a single large qualification. We support DfE's proposal that content be aligned to Skills England's occupational standards and sector cores to maintain quality and coherence with other pathways including apprenticeships. However, we ask that DfE ensures that this alignment does not damage young people's ability to take up fully funded apprenticeships at level 3.
- Protect mixed programme flexibility by explicitly enabling combinations of V Levels with A Level Maths / Physics and level 2 Maths/English where needed, with clear HE admissions guidance to prevent uncertainty.
- Build Maths bridging units and applied numeracy within technical curricula, to strengthen confidence and progression.
- Support provider capacity (workshops, equipment, teacher recruitment/CPD) and embed regional planning via LSIPs and Technical Excellence Colleges, so colleges can sustain viable cohorts across sizes and routes in local sector clusters.

3. Which subject areas do you think are most appropriate for delivery through V Levels?

If V Levels are to be introduced, EngineeringUK supports the NEPC's recommendation that they support areas that require foundational technical knowledge and applied learning, but where the full occupational competence covered by T Levels is not appropriate or necessary, especially at age 16. A V Level should operate as a sector-based, applied programme that builds breadth, underpins progression to HTQs, an apprenticeship, or higher education and complements, rather than duplicates, a T Level.

Criteria for what subject area should be delivered through a V Level may include:

- Employer need for broad sector literacy before specialisation;
- Clear progression pathways to a level 4 or 5 qualification;
- A need to combine technical study with English, maths, or science without the commitment to a single large qualification.

These criteria align with the consultation's stated intent for a sector linked 360 GLH qualification and the wider Post-16 White Paper vision for coherent pathways into priority sectors.

Subject areas possibly suitable to V Levels

EngineeringUK supports the NEPC's perspectives, which we echo here. The NEPC argues that the most appropriate areas include engineering and manufacturing, digital and computing, construction and the built environment, transport, logistics and infrastructure, and the energy and utilities sectors. These fields align closely with national Industrial Strategy priorities and areas of economic need as indicated by Skills England's analysis of occupations in demand, and they require technical grounding that could be effectively delivered through a V Level structure.

Engineering and manufacturing:

Engineering and manufacturing occupations require learners to develop problem-solving skills, technical understanding, applied mathematics knowledge, and familiarity with engineering processes and systems thinking. A V Level could provide knowledge of these sectors' core attributes either before entry to employment or before specialisation via T Levels, apprenticeships, or engineering degrees. A V Level in engineering and manufacturing could also align with Skills England's assessment of occupations in demand.

Digital and computing:

Our digital society and economy require cross-cutting foundations (in areas such as programming, data analysis, networks and systems, user-design, cybersecurity and AI) that can articulate into a wide range of roles and further study. V Levels could give an applied and multi-role entry point for learners not yet ready to opt into a single T Level specialisation, or bridge into an apprenticeship at level 4 or 5.

Construction and the built environment:

A sector-wide V Level in this, which encompasses the technical routes for construction and the built environment, could develop skills in construction principles and building technologies, or surveying that would equip student learners with a broad-based knowledge and open multiple onward pathways (such as T Levels in specific trades or qualifications in building services or civil engineering). This route would support national priorities in housebuilding and infrastructure delivery.

Energy, utilities, and net-zero technologies:

The transition to clean energy and retrofit of the existing electrical grid, requires broad technical awareness in electrical systems, electrical fundamentals, safety, and environmental management prior to role specific competence. A V Level could provide a student learner with foundations in net-zero and sustainability principles across power, hydrogen, storage, heat pumps, and grid modernisation, again with clearly mapped pathways onto further qualifications.

Transport, logistics and infrastructure:

The growth in rail infrastructure, energy infrastructure, and the need to rebuild our ageing infrastructure in water and wastewater systems, flood defences, and road transport,[3] offer a variety of sectors in which a V Level could offer a student an initial educational exposure. Whilst improving transport is not a focus area of the industrial strategy, it will be essential to improving economic growth and is an area with an ageing workforce in danger of shortages. Nearly half of the transport and logistics workforce is aged over 45, with a particularly severe imbalance in rail engineering, for example, for which almost half of the workforce is within 10 years of retirement[4].

Local Skills Improvement Plans and national occupational standards could be sources of information to identify subject areas which will be employer relevant, economically productive and offering clear pathways into further educational or employment opportunities.

[3] NEPC, *Reviving our ageing infrastructure* (December 2025), https://nepc.raeng.org.uk/policy-work/ageing-infrastructures/reviving-ageing-infrastructure-report/.
[4] Road Haulage Association (2025), RHA-Intergenerational-Workforce-White-Paper2025.pdf

Provider capacity

We support the NEPC's observation that suitability is not determined by subject matter alone. It also depends on provider capacity. Delivering high-quality technical programmes requires expert teachers, industry-standard equipment, and strong employer partnerships. Yet across the FE sector there is clear evidence of systemic staffing shortages[5]. In the 2023/24 academic year, the vacancy rate across all teaching posts in FE colleges stood at 3.9 per 100 positions. In priority technical subject areas the situation is often worse: recent reporting indicates that many FE colleges experience persistent vacancies, with the average college previously reporting around 30 unfilled posts.[6]

Additionally, with only around 80,500 teaching staff in FE as of 2023/24, down slightly from 81,900 the year before, the total headcount of educators is shrinking even as demand for technical provision remains high. This shrinking workforce means fewer teachers are available to deliver resource-intensive STEM, engineering, digital, construction and built-environment programmes, which in turn undermines quality and consistency.

Overlap with T Levels must also be considered carefully. Insufficient alignment risks fragmenting the system, while excessive duplication may reduce sustainability. Some degree of co-teaching could reduce cost but must be pedagogically coherent.

Summary

EngineeringUK supports the NEPC's broad position that V Levels should reflect UK economic and Industrial Strategy priorities supported by clear evidence of need provided by Skills England. Each subject area identified above lends itself to broad applied learning with multiple progression routes.

Implementation of V levels must include publication of subject-by-subject progression maps and teaching that explicitly avoids duplication with T Levels while making progression pathways clear to learners, educators and employers. The qualification must allow for mixed programmes and provide qualification admissible for further study.

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[5] Gov.uk, *Further education workforce*, (29 May 2025) https://explore-education-statistics.service.gov.uk/find-statistics/further-education-workforce/2023-24

[6] AOC, *Worst staffing crisis in two decades in England's colleges*, (March 2022) https://www.aoc.co.uk/news-campaigns-parliament/aoc-newsroom/worst-staffing-crisis-in-two-decades-in-englands-colleges

4. How could current information, advice and guidance be improved or what new guidelines or measures should be developed to ensure that students are informed about V Level subject selection and combinations?

In line with the NEPC, EngineeringUK agrees that excellent and impartial information, advice, and guidance must be treated as a core entitlement, not an optional extra. Choices at Level 2 and 3 can shape access to engineering and other technical careers.

Delivery and impartiality

Current information, advice, and guidance arrangements vary significantly across England, and many students do not receive impartial, comprehensive support when making Level 2 and Level 3 subject choices. Ofsted's evidence review found good practice in many providers, but also variability in cases where guidance was not balanced between academic and technical options.[7] Recent EngineeringUK research has found that only 4% of teachers responding to our survey would recommend a technical or vocational pathway into engineering (outside the degree or apprenticeship routes) – such as a BTEC or T Level[8]. Nearly half of teacher respondents indicated they were not confident in their ability to advise young people about these routes[9]. To improve the take-up and quality of technical pathways, it is essential to treat high-quality information advice and guidance as a core entitlement rather than an optional enhancement. Face-to-face guidance delivered by qualified careers professionals is critical, as online, or self-directed approaches cannot fully capture the individual motivations, uncertainties, and barriers that learners experience.

Variable Gatsby Benchmark implementation

Implementation of the Gatsby Benchmarks is variable across schools and colleges, despite signs of improvement. The Benchmarks are well-established and internationally respected, but just less than half of schools and colleges achieve either 7 or 8 of the 8 benchmarks.[10]

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[7] Ofsted, *Independent review of careers guidance in schools and further education and skills providers* (September 2023) https://www.gov.uk/government/publications/independent-review-of-careers-guidance-in-schools-and-further-education-and-skills-providers/independent-review-of-careers-guidance-in-schools-and-further-education-and-skills-providers.

[8] EngineeringUK (2025), School report: What teachers know and think about routes into engineering and technology

[9] EngineeringUK (2025), School report: What teachers know and think about routes into engineering and technology

[10] The Careers & Enterprise Company, *Insight Briefing – Gatsby Benchmark results for 2024/25*, https://www.careersandenterprise.co.uk/evidence-and-reports/insight-briefing-gatsby-benchmark-results-for-202425/.

Benchmark 7, encounters with FE and HE, has seen some improvement, but is identified by the Careers and Enterprise Company as one of the hardest Benchmarks for schools to achieve, with 60% of schools achieving the Benchmark.[11]

Parent and guardian influence

Parental engagement must also be strengthened. Research consistently shows that parents and carers are the single most influential group in young people's career choices.[12] One UK study found that most students consider parents to have the greatest impact on their important education and career decisions, with parents rated above teachers, friends, or media.[13] Yet parents often have limited understanding of modern engineering roles or the structure of technical education. EngineeringUK's survey of parents in July 2025 showed that parents had relatively low awareness of vocational pathways overall, with least awareness of the recently introduced (and still relatively low-uptake) T Levels pathway. Only 5% of surveyed parents said they knew a lot about T Levels as an educational route, compared to 42% for university degrees, 20% for apprenticeships, 15% for other vocational qualifications, and 12% for BTECs[14]. Schools and FE colleges should involve parents proactively through targeted engagement events, accessible information sessions, and clear communication of the benefits and progression routes associated with technical qualifications.

Higher education recognition

Transparency is particularly important in relation to higher education. Many universities continue to require A level Mathematics and Physics for engineering degrees, and some remain unfamiliar with T Levels or equivalent technical qualifications. Students must therefore be given up-to-date guidance about which subject combinations keep routes open. There is a real risk that some schools, particularly those under performance pressure, can direct young people toward 'safe' academic routes into higher education rather than technical ones or apprenticeships, even when the latter may be better suited to their future career aspirations. Better oversight, consistent implementation of statutory guidance and clear accountability mechanisms are essential to preventing this.

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[11] The Careers and Enterprise Company, *Insight Briefing: Gatsby Benchmark results for 2024/25*, https://www.careersandenterprise.co.uk/evidence-and-reports/insight-briefing-gatsby-benchmark-results-for-202425, page 5

[12] Gatsby, *Talking Futures*, (February 2023) https://www.gatsby.org.uk/education/activity/talking-futures/.

[13] Gti Media, *Parental influence: the key role played by parents in their children's decisions about routes and pathways post-18*, (July 2015), https://www.accesshe.ac.uk/yYdIx0u7/Parental-Influence-Report-2015-FINAL-1-JULY-00000003.pdf.

[14] EngineeringUK (2025), What parents know about engineering and technology

Technical provider access

The recently reformed Provider Access Legislation now requires six meaningful encounters with technical or apprenticeship providers across the Years 8 – 13. We look forward to seeing evidence that schools and colleges are uniformly providing this.

Summary

High-quality independent careers advice and guidance is essential to improving take-up of technical pathways. EngineeringUK backs the thrust of the NEPC's recommendations on this:

- Making face-to-face careers advice an entitlement, not an aspiration, with careers advisers who get the continuous professional development required to stay up-to-date with modern engineering and technology careers[15].
- Ensuring that the Gatsby Benchmarks remain central and are consistently implemented.
- Involving parents and carers more proactively, given their strong influence on young people's decisions. This could include parent toolkits that explain the various qualification pathways with specific information on local industry opportunities. Schools and colleges could also be encouraged to run parent briefings on technical routes and local opportunities.
- Ensuring transparency around university entrance requirements, which continue to favour A levels for certain STEM routes.
- Government could encourage information, advice, and guidance programmes to reference Local Skills Improvement Plans so that advisors, teachers, and parents can see the local economic opportunities landscape and target employers for meaningful employment encounters that address stereotypes and broaden participation in engineering.

5. What factors should we consider when creating T Levels where there are currently no Level 3 occupational standards? Please explain your answer.

In a similar vein to the NEPC, EngineeringUK supports employer aligned technical education, but creating T Levels without an existing Level 3 occupational standard demands rigorous safeguards to protect quality, industry relevance, and progression. The absence of an occupational standard raises several challenges discussed below.

[15] EngineeringUK (2024), Advancing STEM careers provision in England

Identify industry demand

A new T Level should only be developed where data analysis identifies a clear sustained industry demand for the qualification in a recognisable occupation and aligns to Skills England's occupational maps. In line with our understanding of Skills England's plans – these maps should be used to confirm the occupational scope and level of each qualification and to demonstrate clear progression routes into apprenticeships, further study, or employment. In engineering-related fields, alignment with professional frameworks such as the Engineering Council's standards is essential for ensuring technical credibility and safeguarding progression pathways. New occupational standards must not be developed in isolation from industry, professional bodies, or education experts.

Build or revise occupational standard first

There is also a risk that creating T Levels without established standards may result in qualifications that appear to be employer-led but fail to reflect actual industry needs. Occupational standards were originally designed for apprenticeships, not full-time 16–19 education. We welcome Skills England's work with route panels to identify potential occupational standards, and ask that the Trailblazer Group has expertise not only in apprenticeships but also in 16-19 classroom delivery.

Use professional engineering frameworks

Where engineering occupations are involved, reference should be made to the professional standards such as the Engineering Council's *Approval and Accreditation of Qualifications and Apprenticeships* (AAQA). If so, the programme could support technician formation and recognise progression to further qualifications.

Differentiate T Levels from V Levels

The Government must avoid creating qualifications that duplicate T Levels and lack employer credibility. There must also be a clear rationale for using occupational standards: if both T Levels and V Levels draw from the same standards, meaningful differentiation is essential. T Levels deliver a large, occupation specific qualification that includes industry experience through placements. V Levels however may be sector-based, broader in scope and A Level sized. New T Levels must have explicit progression profiles to relevant apprenticeships or other qualifications. The Government should provide careers advisers and universities with clear statements of accepted subject combinations to avoid incorrect advice being given to students on potential pathways.

Capacity and placements

The recent NAO report on T Levels demonstrates that the cost of delivery is higher than other qualifications because of the additional teaching hours and placements.[16] Any new T Level should include provider readiness in staffing, facilities, and equipment along with necessary funding for delivery. Likewise, the issue of inadequate availability of industry placements has been an ongoing issue for current T Levels. Any new qualification must first ensure that there are adequate available placement opportunities for students in their community or region.

6. How can the two pathways, and the two qualifications, be designed to make transitions as easy as possible for students who change their minds or move between pathways?

EngineeringUK backs the NEPC's suggestion that transitions and moves between pathways should be supported and students should be able to preserve credit for prior attainment or study if they transition to a different qualification or pathway. England's post-16 system can achieve this by combining modular study design, clear progression maps and strong information, advice, and guidance.

Modular, stackable units with credit

To support smooth transitions between pathways, the system should adopt modular and stackable design principles that allow learners to carry forward successfully completed components rather than repeat learning. Shared technical core content across related pathways would provide a consistent foundation and make it easier for learners to adjust their plans as they mature. Recognition of prior learning must be embedded to facilitate mid-course transitions into apprenticeships, V Levels, or other Level 3 programmes. This approach is found within the recommendations of Engineers 2030[17], which calls for training and skills acquisition to be 'recast into flexible and responsive modules, fundable through the Growth and Skills Levy, which can be stacked into a qualification or skills passport.'

Normalising flexibility

Language and framing are also critical. The pathways and qualifications should reflect a flexible, learner-centred system that accommodates exploration and supports informed

[16] National Audit Office, *Investigation into introducing T Levels* (March 2025) p8. https://www.nao.org.uk/wp-content/uploads/2025/03/investigation-into-introducing-t-levels.pdf
[17] Royal Academy of Engineering, *Engineers2030 Report* (November 2025) https://nepc.raeng.org.uk/media/mpifpogd/nepc-engineers-2030-final-report-1.pdf

decision-making. A unified credit-bearing system would create true permeability between academic, technical, and work-based routes.

Summary

EngineeringUK would refer to the NEPC's recommendations, which we support:

- Modular, stackable units to enable transfer without restarting. Use Skills England's occupational knowledge, skills, behaviours to define unit learning outcomes and assessment so that credit is portable and underpinned by employer standards rather than provider specific content.
- A shared core technical component across related routes at Levels 2 and 3. This reduces repetition and makes sideways movement feasible during study.
- Recognition of prior learning to allow transition into apprenticeships or Level 3 programmes mid-cycle. Providers could be required to map completed units to knowledge, skills, behaviours, and grant recognition automatically if a learner transfers part way through their programme.

A coherent credit-bearing system would allow smoother transitions and align more effectively with employer expectations.

7. In proposing that all Foundation Certificates are 240 guided learning hours, are there any risks or issues we need to be aware of?

EngineeringUK, in line with the NEPC notes that changing every Foundation Certificate to 240 guided learning hours introduces risks, especially for technically demanding routes in engineering, construction, and digital technologies. It also disadvantages learners who need more time to close GCSE maths or English gaps or build baseline practical skills. This consultation recognises that prior attainment barriers often necessitate an additional year of study at Level 2 and that non-qualification activity such as extended workshop practice, contextualised maths support or structured project work is integral to preparation, which may not uniformly fit into 240 guided learning hours. These activities are often crucial in building the confidence and competence of learners who have previously struggled in more traditional academic settings. Learners with SEND, adult returners and those from disadvantaged backgrounds may benefit from longer, more flexible foundation programmes.

Key risks to consider

For technically demanding disciplines such as engineering, construction and digital technologies, many learners will require substantial time to address gaps in mathematics, science, and basic practical competence before they are ready to succeed on a full occupational pathway. A fixed 240-GLH offer may not allow providers to deliver the depth of preparatory teaching required, particularly where students are entering with lower prior attainment or disrupted educational histories.

There is also a concern that a rigid GLH model could limit the ability of providers to integrate essential non-qualification activities such as extended workshop practice, contextualised maths support, or structured project work. These activities are often crucial in building the confidence and competence of learners who have previously struggled in more traditional academic settings. Learners with SEND, adult returners and those from disadvantaged backgrounds may benefit from longer, more flexible foundation programmes. A one-size-fits-all approach risks undermining the very purpose of a foundation offer, which is to provide a secure platform for progression into more demanding technical study.

8. Should any additional criteria be considered when selecting the subjects suitable to become a Foundation Certificate? If yes, what are they and why?

EngineeringUK supports the NEPC's suggestion that, if Level 2 Foundational Certificates are introduced, the government should apply evidence-based criteria to decide which subjects merit a Foundation Certificate. The qualification must bridge prerequisite gaps, be deliverable locally, and articulate clearly into further Level 3 study or employment.

Prerequisite learning gaps

In determining which subjects should be eligible for Foundation Certificates, additional criteria beyond simple demand should be considered. One key criterion is the presence of systematic gaps in prerequisite knowledge among learners entering particular pathways. Engineering is a prime example. FE providers regularly report that many entrants have insufficient mathematical fluency or scientific understanding to access Level 3 engineering content confidently. Where this pattern exists, there is a strong case for a foundation stage that focuses explicitly on bridging these gaps.

Delivery capacity and investment

A second criterion is provider and regional capacity. Foundation Certificates should be introduced only in subjects where local institutions can reasonably deliver the necessary

teaching, including access to specialist facilities and staff. As cited earlier, there are chronic shortages of appropriately qualified staff. Government must ensure that subject choices are made with robust data about facilities and staff availability. Where provision is deemed to be important, DfE must consider how capacity can be expanded, including considering funding arrangements.

Progression

Finally, there must be clearly defined progression routes. A Foundation Certificate should not be a cul-de-sac; it should articulate cleanly into V Levels, Occupational Certificates, T Levels, or apprenticeships. This clarity of purpose is essential if learners, parents, and employers are to see value in the qualification and if it is to support, rather than complicate, the overall system of technical education.

Other items to consider

- Alignment with sectors requiring strong Level 2 pipelines (e.g., engineering, construction). Use Skills England evidence on occupations in demand and Local Skills Improvement Plans to confirm that the foundational certificate responds to local sector needs.
- Regulatory or health-and-safety requirements. Where occupations are regulated, or require mandated safety training, Foundation Certificates should include these elements so that learners can progress without repeating compliance training later.
- Feasibility of delivery across post-16 providers.
- Availability of employer input and realistic progression pathways.
- Foundation Certificates must also support young people aiming to enter Level 2 occupations.

9. Are there any other potential subjects you think should be considered for Foundation Certificates? If yes, what are they and why?

EngineeringUK supports the NEPC's suggestion that Foundation Certificates could be added where a structured Level 2 year will close prerequisite gaps, widen participation and improve progression into Level 3 and employment.

Pre-engineering foundation

A pre-engineering foundation, with a strong emphasis on applied mathematics, physics, introductory workshop skills, digital skills for engineering, and problem identification and

solving, would be of significant value. Many students who could thrive in engineering are currently held back by weaknesses in these underpinning areas. Additionally, a foundation certificate which considers sustainability issues could also help attract and retain students, and show the relevance of engineering to environmental concerns. A structured foundation year could address this while also giving them a realistic insight into engineering practice and create a bridge into V or T Levels, or apprenticeships.

Digital and computing foundation

Similarly, foundational qualifications in digital and computing could help learners build core programming, logic, and problem-solving skills before progressing to more specialised routes in cyber security, software development, or data analysis. Employers report persistent digital skills shortages across various domains. The Level 2 foundation could build basic skills before specialisation in Level 3 areas like software development. Local Skills Improvement Plans frequently prioritise digital skills across sectors, making Level 2 a potential high value feeder.

Construction and built environment

Construction and the built environment is another area where a foundation phase can be important. Learners need to develop a basic understanding of construction methods, health and safety, sustainability, and digital tools such as Building Information Modelling before committing to a specific occupational route. This improves readiness for Level 3 qualifications and supports government priorities regarding housebuilding and infrastructure delivery. Many LSIPs areas identify construction skills gaps making construction qualifications a potential area to explore if they care configured to local employer needs.

Energy and net-zero technologies

We believe there is a strong case for foundation provision in emerging green and net-zero technologies, where the concepts are new, fast-evolving and often require a combination of scientific literacy and practical problem-solving that many learners have not had the opportunity to develop at school. The decarbonisation of the electrical grid demands cross-cutting technical awareness. A Level 2 foundation may prepare learners for further qualification pathways. Energy clusters, particularly North-East and Humberside, require pipelines into technician roles. Ensuring these employers are consulted on content and standards is important so that students can more easily transition to employment from training.

10. Are there any other circumstances you believe would justify a student stepping off the Occupational pathway before completing the full 2 years?

In line with the NEPC, EngineeringUK supports an Occupational pathway that is flexible, fair and progression orientated. There are legitimate, evidence-based circumstances in which a learner should be able to leave an Occupational pathway early without penalty, provided learning to date is recognised and a clear re-entry route exists.

Employment or progression

There are several legitimate circumstances in which a learner may need or wish to step off an Occupational pathway before completing the full two years, and these should be recognised and accommodated within the system. One such circumstance is progression into employment or an apprenticeship. In engineering and related sectors, it is not uncommon for capable learners to be offered apprenticeships during their studies. This is now more feasible given reform of the apprenticeship rules from 1 August 2025 (greater flexibility on minimum duration, stronger recognition of prior learning, standard specific off the job hours), and the launch of Foundation Apprenticeships for younger learners in critical sectors.[18]

Health, caring, or personal

Other reasons include health issues, caring responsibilities, or changes in personal circumstances that make full-time study over two years untenable. Funding rules already contemplate breaks in learning and other change of circumstance provisions; these should be applied consistently to help learners pause or exit without losing credit, with a structured plan for re-entry when feasible.

Programme mismatch

Some learners will also discover, through exposure to practical and workplace experiences, that the specific occupational focus of their pathway is not right for them. In such cases, it is far better to enable an orderly transition into a more suitable programme. Whether that is a V Level, a different occupational route, or a mixed programme then to trap learners in courses, they are unlikely to complete successfully. Clear interim exit awards and recognition of prior learning can ensure that stepping off does not mean losing the value of what has already

[18] UK Government DfE, *Apprenticeships Funding Rules* (August 2025) https://assets.publishing.service.gov.uk/media/6936acd76a167b6884b7360e/Funding_Rules_2025_to_2026.pdf

been achieved. The transition should be coupled with appropriate guidance tailored to the individual's needs.

11. We are proposing that DfE sets introductory core content for Occupational Certificates which is shared across related qualifications. Do you agree with this approach? (Y/N)

Yes.

12. Please give reasons for your answer to Question 11.

EngineeringUK refers to the NEPC's responses for this question. The NEPC agrees in principle that the Department for Education should set introductory core content for Occupational Certificates, shared across related qualifications. The content should be employer aligned, age appropriate and consistent.

A common core

A common core can help to ensure that all learners, regardless of which awarding organisation or provider they study with, receive a baseline of essential knowledge and skills. Engineering-related routes could include core mathematical techniques, safety and risk awareness, foundational data/digital competence and understanding of key engineering principles mapped to occupational standards.

Enhance system coherence and portability

Having a clearly specified shared core also supports system coherence. It can make it easier for learners to move between related qualifications where necessary, and it gives employers a clearer sense of what they can expect a holder of an Occupational Certificate to know and be able to do. However, this core must be designed carefully, in close dialogue with professional bodies and sector experts, to ensure that it is intellectually robust, forward-looking, and appropriate for 16–19 learners rather than a simple transcription of apprenticeship standards.

Support progression

A common core should clearly support progression into Level 3 programmes (such as V or T Levels) and into employment, including apprenticeships. The same knowledge, skills and behaviours, would frame the step-up from introductory core and into occupational specialisms.

An introductory core content should however:

- Enable co-teaching where appropriate to support sustainability. The core should be structured into modules/units with clear learning outcomes tied to knowledge, skills, and behaviours, so providers can co-teach across related qualifications where feasible and recognise prior learning when learners switch pathways. This supports sustainability and reduces unnecessary repetition.
- It must be clearly differentiated from the occupational specialism in T Levels and from broader sector-based content in V Levels to avoid duplication and confusion.
- Ensure the core does not displace essential subject-specific content.
- Ensure that it improves, not complicates, transferability between pathways. A shared core must simplify transitions between qualifications (e.g., V Level and Occupational Certificate, T Level and Foundation Certificate) by using the same knowledge, skills, and behaviours language. It should be published with progression maps so learners can see the line of sight to apprenticeships, HTQs and employment.

13. We propose that Occupational Certificate sizes vary based on their linked occupational standards. Do you foresee any challenges with this approach? (Y/N)

Yes.

14. If yes, what are the challenges and how might they be overcome?

EngineeringUK refers to the NEPC's response to this question. The NEPC would agree that aligning the size of an Occupational Certificate to the demands of an occupational standard would be appropriate. However, several practical challenges may arise that need to be addressed to ensure coherence and progression rather than complicating the offer.

Clarity and comparability

Different sizes may create confusion among learners and employers about the relative weight and value of each qualification, particularly if GLH differences are substantial. Managing programmes of varied sizes will also add complexity to provider timetabling, staffing and resource allocation, especially in subjects that already rely heavily on specialist facilities such as engineering workshops or laboratories.

These issues could be mitigated by clear purpose statements for GLH bands, outcome descriptions that are tied to Skills England's knowledge, skills, and behaviours framework.

Progression maps that show pathways into T or V Levels and apprenticeships. Deliverability issues may be addressed through phased introduction, targeted funding for staff training and infrastructure and allow for co-teaching across qualifications to smooth timetabling and reduce duplication.

Age-appropriate occupational standards

A further challenge is that occupational standards were not originally designed as direct blueprints for full-time classroom-based learning for 16–19-year-olds. Some standards may imply an intensity or breadth of learning that is not feasible within the constraints of a study programme, or that is misaligned with the broader developmental needs of learners at this age. Without careful adaptation, there is a risk that some Occupational Certificates become overloaded, while others are too narrow. Clear national guidance, piloting and consultation with providers and professional bodies will be needed to ensure that size variation enhances, rather than undermines, the coherence of the offer.

Perceptions

While appropriate in principle, this approach risks inconsistency, reputational confusion, and students choosing routes perceived as 'easier' or 'shorter'. Clear communication, external quality assurance, and employer consultation are essential safeguards.

15. We propose that the broad introductory core content should be less than 50% of the overall GLH. Do you foresee any challenges with this approach? (Y/N)

Yes

16. If yes, what are the challenges and how might they be overcome?

EngineeringUK refers to the NEPC's response to this question. While the NEPC could support a shared, employer-aligned core Occupational Certificate content, a hard ceiling of 50% may create unintended consequences for technical routes such as engineering. These consequences may include:

- If the core is constrained below 50% in all cases, it may be too small to secure the common knowledge, skills, behaviours that enable transfer between related routes and support Recognition of Prior Learning. This could be addressed by replacing a blanket 'less than 50%' with a default range and allow a justified exception process for safety critical or mathematically intensive routes, where employers and PEIs evidence the need. High hazard sectors and workshop-based disciplines need time for health & safety, applied maths, and digital/data foundations. A tight cap could push providers to squeeze this

content, raising the risk of learners progressing without a secure baseline. The Government should publish a concise, mandated pathway for each route (e.g., safety & risk, applied numeracy for the route, digital/data basics, professional behaviours) with clear learning outcomes and assessment rules, so the core is not a 'generic studies' component.

- Occupational standards were developed first for apprenticeships; simply 'shrinking' them into a sub 50% core risks content that is either too generic or too compressed for 16–19 fulltime delivery, reducing motivation and relevance. A consultation should be undertaken with employers, professional engineering institutions, and educators to adapt standards into 16–19 core content.
- Colleges already face teacher shortages and workshop capacity constraints. A low cap can force more dispersed, route specific delivery early on, harder to timetable and staff, instead of cotaught core blocks that make efficient use of scarce specialist staff and facilities.

17. What non-qualification activities do you think are successful in supporting vocational students to engage with course content, achieve their qualifications, and progress to their intended destination?

In a similar vein to the NEPC, EngineeringUK would consider the most effective non-qualification activities are those that make learning grounded, supported, and connected to real opportunities.

Employer engagement and work exposure

Meaningful employer engagement through site visits, industry-set projects, guest lectures, and mentoring can help students see the relevance of their studies and develop the professional behaviours expected in the workplace. In engineering, opportunities to visit factories, construction sites, laboratories, or design offices can be particularly powerful in motivating learners and contextualising abstract concepts. Given the difficulties in securing work placements for T Level students (for example, evidenced by the National Audit Office's 2025 investigation) it does not seem realistic to incorporate work placements as a requirement for V Levels or Foundation or Occupational pathways. However, we support the government's commitment to deliver two weeks of work experience for every student in Key Stages 3 and 4, and ask that programmes to support this are adequately supported and resourced. For example, we look forward to the findings from further piloting of the Careers and Enterprise Company's equalex framework and its implementation.

Work experience constraints

Work experience is essential but remains challenging to deliver at scale. Many engineering employers are unable to offer short placements at scale due to insurance constraints, health and safety requirements and the need for specialist equipment. Without flexibility in the provision of work experience as part of the broader 16-19 offer, barriers and inequities in access to work experience will persist, especially in rural areas, for students with caring responsibilities, or for those in part-time work.

Contextualised maths and English support

Integrated support in mathematics and English, tailored to the demands of the technical discipline, is also vital. Many engineering learners benefit from contextualised math teaching that directly relates to the calculations and problem-solving they meet in workshops and projects.

High quality careers guidance

Use the Gatsby benchmarks to establish a robust careers guidance framework for learners which includes one to one personal guidance, meaningful encounters with employers (Benchmark 5), workplace experiences (Benchmark 6), and encounters with FE/HE (Benchmark 7). Higher benchmark achievement is associated with better destinations and lower NEET rates, especially for disadvantaged learners.

Wellbeing and inclusion

Wellbeing support, including guidance on finance, housing and mental health, helps learners cope with the pressures they may face in and outside college. Assistive technologies, quiet study spaces, structured coaching, and reasonable adjustments codesigned with learners would expand inclusion of learners with different needs. Track participation and outcomes for SEND and other priority groups. High-quality support staff and appropriate funding are essential for equitable access.

Enrichment

Finally, involvement with professional bodies and participation in competitions or enrichment activities, such as engineering challenges, can raise aspirations, build networks, and reinforce a sense of belonging in the profession.

The government is currently working on a new enrichment framework for schools and colleges and we strongly advocate for STEM to be more visibly included in the framework. We

believe this would enable more young people to get access to STEM related enrichment activities and ensure the education system is better linked up with the government's ambitions as outlined in the Industrial Strategy and the wider skills system.

As it stands, the framework sets out five areas for enrichment, but not STEM. It says that '[w]*e will bring together support for schools and colleges to follow these benchmarks which will set out that, at a minimum, every school should deliver an enrichment offer which provides access to civic engagement; arts and culture; nature, outdoor and adventure; sport and physical activities; and developing wider life skills.'* The framework is intended and likely to drive school behaviours, particularly if Ofsted updates its inspection toolkits next year, and will take account of the new enrichment benchmarks, in a similar way to the Gatsby Benchmarks currently included in relation to careers education, as has been alluded to in the government response to the CAR.

18. We plan to roll out V Levels, Foundation Certificates and Occupational Certificates together by route. Do you think this is the best approach? Are there alternative rollout strategies or unintended consequences we should consider?

EngineeringUK refers to the NEPC's response to this question. The NEPC notes the possible coherence a simultaneous rollout strategy could bring. However, such a strategy carries material delivery risks, especially in engineering, construction, and digital, given provider capacity, staffing and placement constraints. A phased readiness-based approach is likely to be more sustainable and lower risk.

Rolling out V Levels, Foundation Certificates and Occupational Certificates together by route could, in theory, enhance coherence and make it easier for learners and employers to understand the structure of provision in a given sector. However, this approach also carries risks. Implementing several new qualifications at the same time increases the complexity and workload for providers, who will need to redesign curricula, retrain/recruit staff, invest in new resources and communicate changes to learners, parents, and industry. In engineering and other resource-intensive disciplines, this may be particularly challenging given current staffing and funding pressures.

An alternative approach might be to phase implementation, beginning with a smaller number of routes where occupational standards are already well developed and where provider capacity is relatively strong. Lessons from these early adopters could then be used to refine the model before wider rollout. It will also be important to consider transitional arrangements

for existing learners and qualifications, to avoid disruption and ensure that current routes are not prematurely destabilised before the new system is fully ready to replace them.

Further risks to manage in a simultaneous approach to roll out include:

- Provider capacity and staffing- FE workforce data show teaching headcount fell from 81,900 to 80,500 in 2023/24 and vacancies remain significant. Rolling out three new qualifications at once will stretch specialist staff, workshops, and labs, especially in engineering and construction.
- Complexity and implementation load- NAO's investigation into T Levels highlights the complexity and cost of introducing large technical programmes (content, placements, staffing). Doing three qualifications at once per route compounds risk of inconsistent quality and learner experience.
- Transition and defunding risks- Without careful planning, simultaneous change can destabilise existing provision and learners.
- Regional readiness and LSIP alignment- Capacity and sector mix are regional. Rolling out everywhere at once may misalign with local clusters and LSIP priorities; uneven readiness could widen regional disparities.

19. What steps should we take to ensure the outline content for V Levels, Foundation Certificates and Occupational Certificates is high-quality across subjects and awarding organisations?

EngineeringUK refers to the NEPC's response to this question. Ensuring that the outline content for V Levels, Foundation Certificates and Occupational Certificates is consistently high-quality will require robust governance and meaningful engagement with sector experts. EngineeringUK agrees with the NEPC's recommendations that qualification development be overseen by panels including professional engineers, employers, FE and HE educators, Professional Engineering Institutions, and assessment specialists. These panels should be tasked with ensuring that content is technically accurate, pedagogically sound and aligned with both occupational standards and longer-term progression routes.

There should also be mechanisms to promote cross-awarding-organisation consistency in the interpretation of national outlines, particularly in core and high-stakes components. Piloting and external evaluation of new qualifications before full implementation will help identify unintended consequences and areas requiring refinement. Continuous feedback loops drawing on data about learner outcomes, employer satisfaction and progression into further

study or work will be essential if content is to remain relevant in rapidly evolving sectors. Transparency in the design and review process will support trust and engagement from the engineering community.

Quality would be strengthened by:

- Clear national core content frameworks
- Use of professional standards (e.g., Engineering Council AAQA)
- Employer advisory panels
- Stronger Ofqual oversight
- Periodic review cycles aligned with industrial change.

Coherence across awarding organisations is essential.

20. We are proposing that there is no awarding-organisation branding for V Levels, Foundation Certificates and Occupational Certificates. Do you foresee any problems with this, and how could these be mitigated?

EngineeringUK, in a similar vein to the NEPC, recognises that removing awarding-organisation branding from V Levels, Foundation Certificates and Occupational Certificates is likely to bring long-term benefits by simplifying the landscape for learners and employers. In the shorter term, it does raise some concerns. In engineering and other technical fields, certain awarding bodies have built strong reputations for rigour and relevance over many years. Their names can serve as shorthand for quality and for specific curriculum traditions that employers recognise and value. Erasing this identity risks losing a layer of information that currently helps stakeholders interpret what a qualification represents.

To mitigate these issues, it will be important to maintain clear, accessible information about who designs, assesses, and quality-assures each qualification, even if this is not expressed through prominent branding on certificates. Strong, transparent national quality assurance processes will also be essential to maintaining confidence across the system. Communication with employers and professional bodies should make explicit how the new centrally branded qualifications relate to previous provision, and where continuity in content and standards can be expected.

21. Could any of the proposals have an impact—positive or negative—on people with protected characteristics?

In a similar vein to the NEPC, EngineeringUK recognises that the proposals could have both positive and negative impacts on people with protected characteristics. On the positive side, a clearer and more coherent technical education system has the potential to improve access and progression for under-represented groups if it is designed with inclusion in mind. However, there are also significant risks.

Learners with SEND may be adversely affected if new qualifications are less flexible in structure or assessment, or if there is insufficient support to adapt teaching and resources to their needs.

In the engineering and technology sectors, structural imbalances in the workforce are stark. According to EngineeringUK[19] women currently make up only about 16.9% of the UK engineering and technology workforce, compared with roughly 56% representation in other occupations. Even after modest progress from around 10% in 2010 to 16.9% in 2024[20] there is still a very significant gender gap. And, 14% of the engineering and technology workforce are from a UK minority ethnic background, compared with 18% in other occupations[21].

Historically, mid-sized and more flexible technical qualifications have provided access to further study for some groups under-represented in the engineering workforce. For example, looking across all sectors – in 2019, the proportion of Black students entering HE with a BTEC and no A levels was nearly twice that of white students, with nearly a third of all Black students entering HE in 2019 possessing at least one BTEC.[22]

DfE must guard against risks that existing inequalities could be reinforced by changes to the system. This is particularly important given that schools and colleges serving disadvantaged communities often have weaker specialist STEM provision and fewer resources for careers guidance. Removing mid-sized or flexible pathways may therefore narrow access further.

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[19] EngineeringUk, Diversity in engineering and tech infographic dashboard (September 2025) https://www.engineeringuk.com/research-and-insights/our-research-and-evaluation-reports/diversity-infographic-dashboard/.

[20] EngineeringUk, *Trends in women in the engineering workforce dashboard (November 2025),* https://www.engineeringuk.com/media/xzjdokwk/dashboard-women-in-engineering-engineeringuk-nov-25.pdf

[21] EngineeringUK (2025), Diversity dashboard, dashboard-diversity-engineeringuk-nov-25.pdf

[22] Atherton (2021), Will abolishing BTECs mean reversing widening access to higher education? BTEC-report-FINAL.pdf

Adult learners, many of whom may have caring responsibilities or other commitments, are also at risk if provision becomes tightly focused on 16–19-year-olds and flexible or part-time routes are reduced.

Potential impacts include:

- Women and ethnic minority groups remain under-represented in engineering and may not engage with pathways perceived as narrow or inaccessible.
- The defunding of shorter programmes could reduce opportunities for adult learners and career changers, depending on implementation.

22. What action could help reduce any negative impacts identified in Question 21?

To reduce negative impacts on learners with protected characteristics, deliberate and targeted action will be required. For learners with SEND, this should include flexible programme structures, reasonable adjustments in assessment, accessible learning materials, and specialist support staff.

Qualifications should be designed from the outset with principles of universal design in mind, rather than retrofitting accessibility as an afterthought. The content of the new qualifications should be tested for appeal across demographic groups.

Monitoring data on participation, retention, and achievement by protected characteristics will be essential to identify emerging disparities early.

Encouraging greater diversity in engineering will also depend on active outreach and role modelling. Working with schools, community groups, and professional bodies to raise awareness of engineering and other technical careers among girls, ethnic minority students and those from disadvantaged areas can help counteract stereotypes and expand the pool of potential applicants.

- Engaging SEND specialists and autism advocacy groups
- Ensuring free or affordable transport for those who need it
- Embedding inclusive design principles across curricula
- Monitoring participation and outcomes disaggregated by protected characteristics

23. Are there elements of V Levels, Foundation Certificates or Occupational Certificates that are required in your view to increase accessibility or improve outcomes for learners with SEND?

EngineeringUK supports the NEPC's response to this question. The NEPC argues that modular structures that allow learning and assessment to be broken into manageable components, with opportunities to revisit and reinforce key concepts, would improve accessibility. A variety of assessment methods, including practical demonstrations, project work and oral presentations, can give learners alternative ways to show what they know and can do, reducing reliance on high stakes written examinations that may not be accessible to all.

Accessible physical and digital environments are also crucial, especially in engineering workshops, laboratories, and construction training spaces where the risk of exclusion is high if adjustments are not properly planned. Staff development in inclusive pedagogies for technical subjects should be a priority, equipping teachers to differentiate instruction effectively and to use assistive technologies where appropriate. Clear guidance on how reasonable adjustments can be made within the constraints of occupational standards will help providers support learners with SEND without compromising the integrity or safety of technical training.

24. Are there any other equality-related impacts you think we should consider?

EngineeringUK would respond in a similar vein to the NEPC. The NEPC has flagged that, beyond the specific issues already identified, there are wider equality-related impacts that should be considered. Geographic inequality is a major concern. Learners in rural, coastal, or economically disadvantaged areas may have less access to providers with the capacity to deliver a full range of technical programmes, particularly in engineering and digital sectors that require significant capital investment. If reforms lead to further concentration of specialist provision in a small number of large centres, students without the means or ability to travel may effectively be excluded from certain routes.

Transport poverty, caring responsibilities and digital exclusion, and digital poverty can all disproportionately affect learners with protected characteristics or from lower-income households. Similarly, if new qualifications assume consistent access to digital devices and connectivity, those without such access will be at a disadvantage.