NFEC Forum Spring 2018
Pearson update

Pearson

Level 2:

BTEC Firsts
BTEC Level 2 Technicals

Which BTECs can you teach, and when?

	Level 2 qualifications you can teach now	New Level 2 qualifications you can teach from September 2017
	BTEC Firsts (*14–19*) **Extended until 31st December 2019**	**BTEC Level 2 Technicals** *(Post-16)*
Engineering	**BTEC Level 1/Level 2 Firsts in Engineering** • Award in Engineering Design and Product Investigation • Award in Engineering Electronics and Computer Control Technologies • Award in Engineering Materials and Manufacturing • Extended Certificate & Diploma in Blacksmithing & Metalwork • Award, Certificate, Extended Certificate & Diploma in Engineering **BTEC Level 2 Firsts in Vehicle Technology (QCF)** • Extended Certificate • Diploma	**BTEC Level 2 Technicals for Engineering** • Diploma in Engineering

Pearson BTEC Level 2 Technical Diploma in Engineering				
Unit number	**Unit title**	**GLH**	**Type**	**How assessed**
1	Engineering Principles	**45**	Mandatory	External
2	Processes and Materials	**45**	Mandatory	External
3	Business Improvement Techniques	**30**	Mandatory	Internal
4	Workshop Skills	**60**	Mandatory	Internal
5	Machining Techniques	**60**	Optional	Internal
6	PCB Components and Soldering	**60**	Optional	Internal
7	Computer Numerical Control	**60**	Optional	Internal
8	Electrical Components and Wiring	**60**	Optional	Internal
9	Delivering Engineering Solutions	**60**	Mandatory	Internal Synoptic

This qualification has 66% mandatory content and 25% external assessment.

More information here, including SAMs, teaching & learning support and Specification

Level 3:

BTEC Nationals

BTEC Nationals Extensions

DfE 2020 Performance Tables:

We submitted the following qualification to the DfE on the 16th February 2018 for inclusion in the 2020 Performance Tables as an Applied General qualification:

- Pearson BTEC Level 3 Certificate in Engineering

This qualification has been amended and will now consist of Unit 2 and Unit 3 from the BTEC Nationals suite. **Both units are mandatory**.

Current 'QCF' suite – new registrations:

Current 'QCF' suite of BTEC Nationals is set to close to new registrations in August 2019 but we are considering further short extensions where appropriate.

*__Note__ that further clarification has recently been issued on BTEC National set task for unit 6 'Microcontroller Systems for Engineers' for latest updates on all engineering qualifications see: https://qualifications.pearson.com/en/subjects/engineering.html

BTEC News (1sts & Nationals)

Introducing the 'Near Pass' grade

Pearson is introducing the N grade or 'Near Pass' for most* BTEC Nationals (RQF, teaching from 2016).

This means that learners can pass the qualification without passing the external assessment as long as they achieve the N grade and meet all other eligibility requirements, which remain unchanged. Learners will be able to do this if they narrowly miss the Pass grade, and if they still achieve enough points throughout the qualification.

These changes come into effect immediately, and retrospectively for all learners who were registered on the new BTEC Nationals (RQF) in 2016 or 2017. We will be contacting centres with learners (whose qualification had been previously 'claimed') that are now eligible for a qualification who weren't previously.

More information can be found at: Must pass rule for BTEC-Nationals

Apprenticeships

Apprenticeship Standards – in development

The following standards are currently in development and we are hopeful that these will be approved for delivery before September 2018.

- Level 2 Lean Manufacturing Operative (to replace the PMO pathway on the Level 2 Improving Operational Performance SASE Framework).
- Level 2 Engineering Operative (to replace the PEO pathway on the Level 2 Improving Operational Performance SASE Framework).
- Level 3 Fabricator (to replace the Fabrication and Welding pathway on the Level 3 Engineering Manufacturing SASE Framework).
- Level 3 Improvement Technician (to replace the BIT pathway on the Level 2 Improving Operational Performance SASE Framework).
- Level 4 Improvement Practitioner (to replace the Level 3 Operations and Quality Improvement SASE Framework).

Apprenticeship Standards – in development continued

We are currently scoping development for around a dozen standards this year in Engineering. This includes both on-programme, EPA or both, and we will prioritise this work shortly, as standards get signed off and the Register opens.

For more information on any of these standards please look at the new IfA website where the apprenticeship standard and assessment plans will be hosted once approved.

https://www.instituteforapprenticeships.org/

Apprenticeship Qualification Amendments

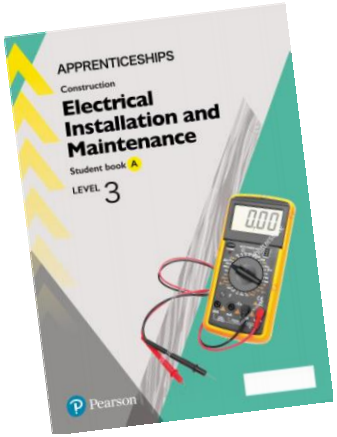
The following qualifications are being amended that meet the on programme requirements of the new Apprenticeship standards in Engineering:

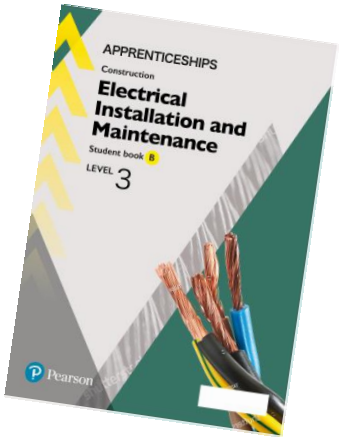
- ***Level 2 Aerospace and Aviation Engineering (Foundation Knowledge)*** – changes to the Pass/Merit/Distinction Criteria for many units and an update to Unit 10. To be completed by August 2018.
- ***Level 3 Aerospace and Aviation Engineering (Development Technical Knowledge)*** – addition of a mandatory unit (Helicopter Theory of Flight) to be taken as an either/or with the current Aircraft Flight Principles and Practice. Also adding in an additional optional unit covering helicopters. To be completed by April 2018.
- ***Level 3 Advanced Manufacturing Engineering*** – addition of optional units to the structure to cover the requirements of the Engineering Technical Support occupation within the Engineering Technician standard. Also creation of 2 specialist pathways within the structure (Mechanical and Electrical). To be completed by July 2018.
- ***Level 3 Rail Engineering Technician (Technical Knowledge)*** – further optional pathways (Telecoms, Signalling, Overhead Line and Track) are to be added to the structure. To be completed by July 2018.

Also publishing this year…

Level 3 Electrotechnical (Installation and Maintenance) Student Book A September
Level 3 Electrotechnical (Installation and Maintenance) Student Book B November

£35 for print plus access to enhanced ebook (ActiveBook) with animations
Mapped to qualifications from C&G and EAL
New editions from our successful publishing, in partnership with JTL





T Levels

T Levels

The government consultation has concluded on the future of Post 16 Vocational provision.

Feedback has been provided on the Occupational Map for Engineering. In some case we agreed with the map however we highlighted the absence of standards for example:

1.Engineering Manufacturing Fitter should be included in the Manufacturing and Process pathway (Apprenticeship Standard currently in development).
2.Fabrication and Welding occupation should be included in the Manufacturing and Process pathway (Apprenticeship Standard currently in development).
3.A Single Skilled Maintenance Technician is also not listed that should be considered under the Maintenance, Installation and Repair pathway.

T Levels

We also highlighted that *Applied General qualifications* are still very important for this sector to provide a theoretical approach to engineering to allow learners who wish to study engineering at university to learn some of the basic concepts of the sector.

T Levels are a new suite of taught qualifications across all sectors for different career pathways with specialist options available to cover each cluster of skills and knowledge.

The new qualifications for the Engineering and Manufacturing sector are due to be implemented from ***September 2021***. The full list of occupations and clusters is shown over the following slides & handout, ***only three*** are identified as '***apprenticeship only***' therefore the government expects qualifications can be developed to cover the remaining 19.

Proposed T Level Occupations and Clusters

Career Pathway	Cluster	Cluster Description
Engineering, Design, Development and Control	Design and Development Technician	Design and develop parts of product and/or process technologies.
Engineering, Design, Development and Control	Design and Development Technical Manager	Design and develop whole product and/or process technologies using a specific discipline or technology or application expertise.
Engineering, Design, Development and Control	Design and Development Engineer	Design and develop a range of products and/or process technologies using discipline and applications specific expertise.
Engineering, Design, Development and Control	Quality Improvement and Project Control Technician	Maintain and improve product and process integrity and quality, production and process efficiency, and the overall health and safety of the working environment.
Engineering, Design, Development and Control	Quality Improvement and Project Control Manager	Maintain and improve the integrity and quality of complex products and processes, improve whole production and process technologies, and the overall health and safety of the working environment.
Engineering, Design, Development and Control	Quality Improvement, Health & Safety Professional	Direct and manage overall product and process integrity and quality, and the health and safety of a whole workplace.

Proposed T Level Occupations and Clusters

Career Pathway	Cluster	Cluster Description
Engineering, Manufacturing and Process	Fabrication and Welding Operative/Technician	Make products and plant by cutting, forming, jointing and shaping of materials.
Engineering, Manufacturing and Process	Manufacturing and Process Operative/ Technician	Assemble and construct complex engineering products.
Engineering, Manufacturing and Process	Manufacturing Engineer	Introduce complex technologies into the manufacturing environment and improve manufacturing technologies.
Engineering, Manufacturing and Process	Manufacturing, Plant and Process Technologist	Develop and improve technology of the manufacturing plant and equipment for a whole

Proposed T Level Occupations and Clusters

Career Pathway	Cluster	Cluster Description
Engineering, Manufacturing and Process	Manufacturing Operative (APPRENTICESHIP ONLY)	Routine assembly of manufactured products
Engineering, Manufacturing and Process	Print and Packaging Operative/Technician (APPRENTICESHIP ONLY)	Operate complex manufacture of printed matter and packaged goods.
Engineering, Manufacturing and Process	Print and Packaging Technologist	Develop and apply new and improve existing technologies for print and packaging manufacturing.
Maintenance Installation and Repair	Service, Repair and/or Overhaul Operative/Technician	Install, maintain and service plant and equipment.
Maintenance	Installation, Service,	Install, maintain and

Proposed T Level Occupations and Clusters

Career Pathway	Cluster	Cluster Description
Maintenance Installation and Repair	Manufacturing/Process Maintenance Advanced Technician	Test and commission power generation, transmission and distribution plant to confirm the successful installation and operation of new and refurbished plant and equipment to prescribed specifications.
Maintenance Installation and Repair	Manufacturing/Process Maintenance Engineer	Improve and develop manufacturing and engineering systems.

Local contacts & support

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