

Technical Engineering Pathway

L3 BTEC National Diploma Engineering Equivalent in size to 2 A Levels

**10 Units completed over 2 years.
2 externally assessed units, 5 mandatory units**

Unit 1 Engineering Principles (external)

Assessment will focus on learners' ability to solve problems that require individual and combined application of mathematical techniques, and electrical, electronic and mechanical principles to solve engineering problems.

Unit 2 Delivery of Engineering Processes Safely as a Team (internal)

Learners explore how processes are undertaken by teams to create engineered products or to deliver engineering services safely

Unit 3 Engineering Product Design and Manufacture (external)

Learners will explore engineering product design and manufacturing processes and will complete activities that consider function, sustainability, materials, form and other factors.

Unit 4 Applied Commercial and Quality Principles in Engineering (internal)

Learners explore commercial engineering, for example key business activities, cost control, quality systems and value management, which is used by engineering organisations to create value.

Unit 5 A Specialist Engineering Project (internal)

Learners apply project-management principles to undertake a 30-hur individual project and will produce a product, system or process relevant to their specialist area of study.

Plus an additional 5 internally assessed units from across business disciplines, to be confirmed at the beginning of the programme but likely to include CAD Engineering, Work Experience, Welding, Additive Manufacturing Processes, Manufacturing Computer Numerical Control Machining Processes.

What could this qualification lead to?

The Pearson BTEC Level 3 National Diploma in Engineering is for learners who want to pursue a career in engineering, and who want to be able to collaborate across and apply knowledge, skills and understanding in other branches of engineering.

Students who hold this qualification can either progress directly to a degree apprenticeship, an advanced apprenticeship, employment or a Level 4, 5 or 6 qualification at College or University.

The L3 National Diploma is widely recognised and welcomed by Employers, Colleges and Universities.

Exam board Specification

<https://eal.org.uk/get-eal-qualified/29-core-content/531-engineering-technologies-vrqs>