L3 Extended Diploma Engineering
Equivalent in size to 3 A Levels

15 Units completed over 2 years.
3 x external assessed units, 7 x mandatory units.

Mandatory Units Completed over 2 Years

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-hour individual project and will produce a product, system or process relevant to their specialist area of study.

Unit 6 Microcontroller Systems for Engineers (external)

Learners explore how programmable devices and electronic components are developed systematically to form physical systems controlled by computer code.

Unit 7 Calculus to Solve Engineering Problems (internal)

Learners use differential (rates of change) and integral (summing) calculus to solve engineering problems and develop a mathematical model of a local and relevant system.

Plus an additional 8 internally assessed units from across business disciplines, to be confirmed at the beginning of the programme but likely to include Further Engineering Mathematics, CAD, Additive Manufacturing Processes, Static Mechanical Principles, Manufacturing Computer Numerical Control Machining Processes

What could this qualification lead to?

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

Students with this qualification can either progress directly to a degree apprenticeship, advanced apprenticeship or employment or can choose to progress to higher education to study for a degree.

The qualification is equivalent in size to three A Levels and is widely recognised by Universities and employers.

Exam board Specification

https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Engineering/2016/specification-and-sample-assessments/SPEC-BTEC-NAT-ENG-ExtDip.pdf