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MARPLE SIXTH FORM COLLEGE

Level 3 AAQ National Extended Certificate in Engineering

Location	Marple College
Course Type	College 16-18
Department	A Levels
Start Date	Monday 1st September 2025
Course Code	MFQ-ML3S-1103

Course Overview

The Pearson Level 3 Alternative Academic Qualification BTEC National in Engineering (Extended Certificate) is an Alternative Academic Qualification (AAQ) designed for post-16 students with an interest in the Engineering sector and aiming to progress to higher education as a route to graduate level employment. Equivalent to one A Level in size, it is suitable for students looking to develop their applied knowledge and skills in Engineering as part of a study programme alongside A Levels.

Course Requirements

Standard A Level entry requirements: 5 x GCSE grade 5's or above (must include Maths and English Language).
55 in Combined Science or 5 in Physics

What You Will Learn

Students will develop the following knowledge and skills:
- Knowledge of units of measure, understanding of engineering data and information, application of mechanical, electronic and electrical engineering mathematical procedures in engineering contexts
- Knowledge of the engineering industry including its functional areas, emerging technologies and understanding materials and their use in the sector
- Engineering design skills including design development and technical communication skills, interpreting technical specifications and responding to briefs
- Knowledge and application of Engineering project management processes and techniques
- Transferable skills such as creativity and innovation, problem solving, personal responsibility in managing own learning and communication skills

The ability to apply mathematical and scientific principles to solve engineering problems and demonstrate critical thinking and technical communication skills in engineering contexts are key attributes needed for higher education in STEM. The experiential approach to learning, and the knowledge and skills gained will give students a solid foundation for progression and demonstrate their aptitude for STEM and meeting the demands of a range of engineering degrees

Assessment

There are two examined units and two internally assessed units
Unit 1: Engineering Principles - an external examination
Unit 2: Engineering Applications - an external examination
Unit 3: Engineering Design - an internally assessed unit
Unit 4: Engineering Project - an internally assessed unit

Progression

The Pearson Level 3 BTEC National in Engineering is designed for post-16 students with an interest in the Engineering sector and aiming to progress to higher education as a route to graduate level employment.

Examples of combinations within a study programme to access specific degree programmes include:
- Mathematics and Physics: progression to degrees in Engineering
- Chemistry and Mathematics: progression to degrees in Environmental Engineering or Chemical Engineering

This qualification can lead to progression to the following degrees:
- Mechanical Engineering BEng
- Civil Engineering BEng
- General Engineering BEng
- Electronic and Electrical Engineering BEng

Students may also progress to HNC or Foundation Degrees in Engineering.

Students develop the transferable and higher order skills which are valued by higher education providers and employers. The qualification can be taken as part of a diverse programme, leaving progression options fully open.

Students should always check the entry requirements for degree programmes with specific higher education providers.

Career Options

This qualification can lead to progression to the following degrees:
- Engineering
- Surveying

Mandatory Units

Engineering Principles: Engineering data and applying mathematical procedures in mechanical and electrical contexts

Engineering Applications: Advances in modern technology and how they are reshaping the engineering sector's function; materials and processes to devise sustainable solutions to engineering problems

Engineering Design: Three-dimensional (3D) models and two-dimensional (2D) detailed drawings using a computer-aided design (CAD) system

Engineering Project: Project management processes in Engineering products from concept to solution

Contact Details

For further information please contact T: 0161 886 7070 or E: info@trafford.ac.uk

Disclaimer

Although every care has been taken to ensure that the information contained within this document is accurate, there may be changes to this programme and provision. We will endeavour to keep prospective and current students updated where appropriate and when the information becomes available.