Engineering Level 3 BTEC Diploma

Overview

Engineering has many wide ranging careers within it that are almost too numerous to describe.

- Engineering, Product Design and Manufacture
- Applied Commercial Engineering
- Specialist Engineering project
- Delivery of Engineering processes safely
- Engineering principles

Course overview

For example: your objective is to prove you can have a strong understanding of the basics and apply this to make complex things.

- Shapes using CAD (inventor)
- Use a range of materials and their properties (metals, composites etc)
- Design and make products with high precision using machinery like CNC lathes, CNC laser cutters and CNC millers.
- Identify a range of processes and be able to explain their advantages and disadvantages. (For example: a robot welding machine vs welding by hand.)
- Basic maths of area and geometry

Assessment method

Examinations: 50%
Coursework: 50% (25% written/25% practical)

The value of Engineering

Engineering is hard to describe. It's a secretive world where problem solvers try to find ways of gaining a technical advantage in something using practical maths, and practical science, and then selling the service or product to customers.

However: Before you do this you will need to know the rules of the game. In this course you learn the fundamental rules of **applied** Maths, Physics, Technology and Electronics.

Exam board

Pearson BTEC Approved Centre

For more information contact

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Futures

Once you have mastered the basics of engineering by completing this course, you can go on to specialise in the almost infinite field of engineering either through university or Apprenticeship.

For example:

- Mechanical.
- Chemical.
- Electrical.
- CAD, CAM, CNC.
- Aeronautical.
- Nuclear.
- Renewables.
- Vehicle (boats,cars,bikes).
- Buildings.
- Design and build robotics.