COWLEY

SIXTH FORM COLLEGE

BTEC LEVEL 3 NATIONAL EXTENDED CERTIFICATE

ENGINEERING

Teaching staff

Mr Bate
Mr Jones
Mr Hesketh

Overview

In Year 12 you will study a range of practical units. You will learn about 3D design using Fusion 360, Programmable Logic Controllers, Electronic Principles and Health and Safety.

In Year 13 you will study Secondary Machining Techniques and Material Properties

You will be taught by an enthusiastic and caring team who are committed to ensuring you achieve and reach your potential. We are always developing and improving upon the work we do to keep the course fresh and exciting.

You will take part in a range of practically guided tutorial sessions to develop 3D models and test their assembly using 3D printing, use Programmable Logic Controllers to control devices such as an Engineering Conveyer belt and develop and test electronic circuits using Cathode Ray Oscilloscopes. You will use lathes to develop your machining techniques and also make and test prosthetic limbs.

What to expect during lessons

In the engineering environment, we encourage students to work systematically to develop their problem solving skills.

Lessons will be in the form of class tutorial sessions as well as focused independent study.

Equipment that you will need

Technical drawing set which includes:
60/30 degree set square, 45 degree set square, compass, ruler, drawing pencils, circle/ellipse template

“Engineering is a really interesting and hands-on subject.

The first year has involved 3D modelling and 3D printing, as well computer based drawing.”

Matthew Summerskill

Currently studying:
Subsidiary Dip. Engineering
A-Level Physics
A-Level Mathematics

Progression

Many students choose a variety of paths depending on their ambitions and aspirations.

The majority of students usually progress to careers within manufacturing, structural or mechanical engineering, automotive engineering or electrical engineering.