

Engineering

Qualification: GCSE

Equivalent to: 1 GCSE (A*-G)



The engineering course will follow the topics -

Unit 1 : Application of Engineering Technology

You will learn about the stages involved in manufacturing an engineered product and the advantages and disadvantages of using modern technology in engineering. You will investigate the use of ICT, modern and smart materials and control technology in engineering, and the impact of modern technology on the design and manufacture of a product in a particular manufacturing or engineering sector. You will also learn about how new technologies can be used to benefit the workforce, the wider community and the global environment.

Unit 2 : Engineered Products

- a) You will develop an understanding of the processes involved in producing a number of engineered products. You will create a production plan, select and use suitable tools, components and processes and apply a range of quality control techniques when making these product.
- b) You will develop a design specification and design proposal for a number engineering problems. You will learn how to draw and model the final solution.

Course Content

- Coursework Making Section (Unit 2b). This includes a number of practical projects in Yr10; Model Car & Portable Twin Speaker Amp for Mp3 player or mobile phone. In Yr11 the main practical coursework project is completed; adjustable table lamp with ultra-bright LEDs powered from a USB port.
- Coursework Design Section (Unit 2a). This includes in Yr10 a number of drawing projects using both traditional drawing methods and the use of computer aided design. In Yr11 the main coursework project is a design and model project. Both the above coursework projects are set by the examination board.
- Theory Section (Unit 1) based on all the practical work covered and a special study, again set by the examination board. The special studies for the last three years have been guitars, bikes and skateboards.