

ENGINEERING

Qualification: Level 1/2 Award in Engineering Design
Available to: All students
Awarding Body: OCR



OVERVIEW

SKILLS REQUIRED

We ask that you have a strong interest in Engineering and are keen to produce high quality work to given specifications. Problem solving, planning and teamwork are all essential skills to any engineer and this course is no different. The ability to interpret information from sources such as technical drawings, CAD models and planning charts are also important. You will be expected to work independently to produce assignment work to given deadlines and to follow professional Health & Safety regulations and training provided at all times. Students must have a willingness to study and improve their engineering theory knowledge, not just their practical skills, as this is essential to gaining a Level 2 qualification.

POST 16 OPPORTUNITIES

A Level 2 qualification in Engineering is a brilliant stepping stone onto other courses such as Level 3 or A-Level Engineering or Product Design. Successful completion of the engineering course would provide you with the skills and core knowledge required for any further engineering study such as apprenticeships within automotive, fabrication, electrical and manufacturing industries.



DETAILS

COURSE OVERVIEW

Intended as an introduction to Engineering, this qualification allows students to develop skills and understanding which will be of use generally and as part of a progressive career path leading to further technical or academic engineering qualifications. Students will be taught a wide range of drawing skills by hand and using computer aided design and 3D modelling. They will learn how to render and annotate these images to communicate their designs to clients. Students will also be taught about a variety of different engineering materials and manufacturing processes giving them the knowledge to disassemble an existing product and analyse it effectively. They will be required to work with a range of engineering tools, machinery, equipment and materials to design, plan and complete a range of engineering projects, submitted as a portfolio of work. They will develop an understanding of the role and responsibilities and engineers, as well as the possible engineering career paths available to them.

ASSESSMENT

The course comprises of 2 controlled assessment units (Unit 1 & 2) and an externally assessed exam (Unit 3).

- * For Unit 1 students are given a project brief and must research, analyse, design and develop an engineered solution, communicating their ideas clearly and evaluating them against a specification.
- * Unit 2 involves the manufacture of an engineered product from a series of given drawings and plans, presented as a report where they must plan and record their work, including photographs of the practical work they undertake.
- * Unit 3 is a 1 Hour 30 minute exam covering engineered skills and theory, including tools, materials, processes and technical drawing.