



Engineering VCERT

Level 1/2 Award in Engineering Level 1 Pass Level 2 Pass/Merit/Distinction/Distinction*

Who is this course aimed at?

Engineering is a growing industry and there is huge demand for highly skilled engineers in the UK. This course is aimed at students that are interested in pursuing jobs in a number of sectors including (but not limited to) Engineering, Product Design, Aerospace, Architecture, Construction, Automotive Design etc.

This course can be taken alongside GCSE Product Design, which makes for a fantastic combination if you are interested in these subjects as a potential career. Engineering is designed to support those looking at Engineering apprenticeship schemes as well as a transition into A Level Design & Technology subjects.

How will I be assessed?

During the initial part of year 10 you will complete a range of 'skill building' projects to further develop your skills you picked up in year 7-9. In the second half of year 10 and throughout year 11 you will be completing the assessed pieces of work. This consists of 3 units; two being coursework based (75%) and one is an external exam (25%).

Your overall grade will be a combination of the grades from the 3 assessed units. All students will be encouraged to achieve Level 2 (GCSE 4-9 equivalence). Level 2 qualifications are graded as 'Pass', 'Merit', 'Distinction' or 'Distinction*'.

The Level 1 'fall back' option ensures students leave the course with a qualification even if they haven't quite met the standard of Level 2. This is graded as 'Pass' which is equivalent to a GCSE grade 1-3.

Will I enjoy the course?

You will enjoy Engineering if you enjoy practical work and problem-solving. You will also enjoy the course if you like to be challenged! Here's what past students have said about Engineering:

"I love engineering and would recommend it to anyone with an interest in engineering or someone with a creative mind that wants to work hard."

You will develop precise techniques and how to work within a specific tolerance. This course will also offer you the opportunity to experience practical team work as well as competitive individual progress. The skills and experiences you will gain on this course will be unique and provide many opportunities for enthusiastic and eager students.

What will be expected of me?

Above all else, you will be expected to behave safely and sensibly in the workshop. This is something that is taken very seriously in this subject due to the nature of the equipment that is being used.

In terms of the practical elements of Engineering, the course is focussed on helping to develop highly accurate practical skills, particularly with metals and plastics. Students will also be expected to monitor their own progress during a project to ensure deadlines are met. You will also be expected to take pride in the work you produce and ensure you consistently work to the best of your ability.

What will I study?

<p>Mandatory Units Unit 1: Engineering Design (25% of final grade)</p>	<p>In this unit, you will learn about the design process. You will learn how to analyse a product so you can see what features make it work and how it meets certain requirements. You will learn how to take ideas from different products in order to produce a design specification for a product.</p> <p>You will also be taught technical drawing skills by hand and on computer programs such as Techsoft Design (2D Modelling) & Solidworks (3D Modelling).</p>
<p>Mandatory Units Unit 2: Producing Engineering Products (50% of final grade)</p>	<p>Through this unit you will plan and make engineered products. You will develop the skills needed to work safely with a range of engineering processes, equipment and tools including (but not limited to);</p> <p>Drilling, Turning, Shaping, Brazing, Welding, Soldering and Finishing.</p> <p>With these skills, you will learn to make a range of engineered components, ultimately resulting in your final product.</p>
<p>Mandatory Units Unit 3: Solving Engineering Problems (EXAM) (25% of final grade)</p>	<p>Problem solving is critical to working in engineering.</p> <p>In this unit you will learn about how engineers in the past have found solutions to problems and how other engineers use their ideas to solve problems today. You will learn about materials, processes and maths that engineers use and how they are used to solve problems. In solving problems, you will learn to follow a process and develop drawing skills to communicate your solutions.</p>