

BTEC Engineering (Level 2)

Career Pathways	<p>The UK is regarded as a world leader in engineering, which covers a wide range of exciting and rapidly developing areas such as renewable energy, space, low carbon, aerospace, automotive, agri-food and bioscience. People with engineering skills are always in demand.</p> <p>Between 2010 and 2020, engineering companies are projected to have 2.74 million job openings. This makes Engineers some of the most highly sought after professionals in the world today.</p> <p>The BTEC Level 2 in Engineering gives students the possibility to progress either onto a Level 3 Engineering Course (A-Level Equivalent) or directly into an apprenticeship in industry</p>
Examination Board	Edexcel (First Award)
Is this the right subject for me?	<p>Are you interested in how machines and electronics work? Do you ever want to take things apart to see what's inside?</p> <p>Engineering is the study of how things are made, from the initial design to a final product. It requires a technical and logical mind, as well as the ability to analyse and problem solve.</p>
What do I need to know, or be able to do, before taking this course?	<p>This course is suitable for pupils who enjoyed making things in their design and technology lessons in years 7, 8 and 9. It is also very suitable for pupils who actively engage in making things at home or have some experience working with either machines (Examples include cars, motorbikes and farm vehicles) or Electronics. Although it is useful for pupils to have a back experience in making things or working with machines/electronics it is not essential, as all teaching starts from the basics.</p>
What will I learn?	<p>In this course students will study options that include:</p> <p><i>Component 1: Exploring Engineering Sectors and Design Applications</i>– In this component, you will develop knowledge and understanding of the engineering industry, the interconnections within engineering sectors, and how these are integrated to enable organisations to find solutions to real life problems. You will explore the role that design applications play in the production of engineered products. Through practical exercises, you will produce solutions to problems using different combinations of design and modelling engineering skills.</p> <p><i>Component 2: Investigating an Engineering Project</i> – This component will give you an understanding of the types and properties of metallic and polymeric materials, and proprietary components commonly used in engineered products. You will acquire an understanding of the selection of materials, proprietary components, making processes and disassembly of a given engineered product. You will then plan, reproduce, inspect and test a single component.</p> <p><i>Component 3: Responding to an Engineering Brief</i> – This component builds on the knowledge and skills you have learned in Components 1 and 2 and is synoptic. You will be given engineering briefs with problems you need to respond to. Your response will include possible solutions that you will test against the brief. You will be given the opportunity to carry out tests, collect and analyse data, reflect on your findings, consider any issues, and suggest solutions</p>
How the course will be assessed?	<p>Component 3 – Examination 40%</p> <p>Component 1 & 2 – Controlled assessment based 60%</p> <p>(This course is the equivalent to 1 GCSE)</p>