

Design & Technology

KS3 Curriculum

What does this course involve at Key Stage 3?

Design and Technology is about all that surrounds us. It is a subject which encourages you to design and make products with creativity and originality using a range of materials such as paper/card, plastics, textiles, ceramics, food, electronics, timber-based materials and ferrous and non-ferrous metals. Students will develop a variety of techniques for working with these materials. The course has a practical approach that encourages students to design and make products with creativity and originality in a variety of practical activities. The study of packaging, branding and marketing tools are included in the course as part of the process of understanding commercially viable products.

We aim in Design and Technology to develop students' independence and opportunities for learning through their engagement, thinking, reflectiveness and Interdependence.

What do you need to be successful in this course?

To be successful in this course students' will be shown how to undertake different drawing and modelling techniques to design products. Channelling and developing their own creativity and problem solving skills will result in finished pieces of practical work being completed. Student will be responsible for ensuring they follow the safety procedures correctly whilst they are in the workshops.

Year 7	Students will be completing a maze game project to introduce them into the practical element of Design and Technology and introduce the students into a variety of tools and materials that will be using throughout their time in Design and Technology. They will also have their creativity stretched and challenged in their second project where they will be given a material to create a storage project of their own making.
Year 8	Students will complete a mechanical toy project working mostly in a variety of wood to developing their practical skills from year 7. They will also explore electronics and Computer Aided Design (CAD) to develop a night light project.

Key Stage 4 Curriculum

Years 9, 10 & 11	<p>Qualification name: WJEC Level 1/2 Vocational Award in Constructing the Built Environment</p> <p>The course offers a learning experience that is focused through applied learning, i.e. acquiring and applying knowledge, skills and understanding through purposeful tasks set in sector or subject contexts that have many of the characteristics of real work.</p> <p>The applied purpose will also enable learners to learn in such a way that they develop:</p> <ul style="list-style-type: none">• skills required for independent learning and development• a range of generic and transferable skills• the ability to solve problems• the skills of project based research, development and presentation• the fundamental ability to work alongside other professionals, in a professional environment• the ability to apply learning in vocational contexts <p>Year 9 Students will be introduced to various skills giving an introduction to the different construction industries: Carpentry – looking at various wood joining methods then developing these to build window frames and a table. Painting and Decorating – Students will be developing correct painting techniques for the projects they will be building and shown how to wallpaper a section of a wall. Tiling – Students may also have to opportunity to develop tiling skills during the course of the year.</p> <p>Year 10 Students will be focusing on their controlled assessment where they will be assessed on the practical skills developed in year 9 creating a project connected to the brief set by the exam board to show the three skills they have learnt.</p>
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Year 11

Students will focus on the theoretical side of construction looking as health and safety in a construction environment and the planning process that goes into constructing a building. They will spend the year looking at case studies as a practical approach to learning the knowledge needed for working in construction.

