



The curriculum for this stage of students' education has been designed to be inclusive for all and build on the knowledge gained in KS3 where students should have produced creative work becoming increasingly proficient in designing, manufacturing using simple workshop tools and evaluating their own work. The aim is to increase their proficiency in the handling of different materials and their confidence to develop their own ideas and style; to extend their range of subject specific vocabulary and enable them to competently analyse and evaluate their own work, and that of others. Students will also acquire skills that can be applied to cross-curricular topics, allowing them to reflect on and explore topics in greater depth. This should foster a love of the D&T and its application across the whole curriculum.

HALF TERM 1: Styrofoam contemporary furniture R &D

Students will research contemporary ideas and use this as a base to design a piece of furniture in a contemporary style. Student will also be learning about the advancement of different materials and their properties.

STUDENTS MUST KNOW:

- The key concepts of contemporary design and how it differs from modern and traditional design.
- Scaling and the importance of making a model or prototype and the difference between the two.
- The key characteristics and working properties of materials and their main uses in society.
- The selection of materials and the key points to consider.

HOW THIS WILL BE ASSESSED:

Formal assessment based on research and design of their furniture.
Self and peer assessment opportunities and informal verbal feedback.
Formal assessment via an in-class test on analysis and ACCEESS FMM.

HALF TERM 2: EPS furniture manufacture

Students will model their furniture ideas out of EPS using mainly craft and hand tools. They will apply a suitable finish to make the model look realistic. They will spend time experimenting before finalising their design and then manufacture - following the iterative design process.

STUDENTS MUST KNOW:

- How to work with EPS, how it behaves and the safety implications and limitations of foam.
- How to finish Styrofoam and make a realistic model.
- To select suitable tools and machines for the materials and design they have created.

HOW THIS WILL BE ASSESSED:

Formal assessment based on the final furniture model.
Self and peer assessment opportunities and informal verbal feedback.

HALF TERM 3: Fragrance packaging, card-based project.

Students will design and manufacture packaging for a fragrance bottle. Students choice their TA and link their designs to fit their TA. They will also start to learn about branding marketing and designing for a TA, alongside manufacturing.

STUDENTS MUST KNOW:

Understand the main characteristics of paper and board.
Darw a net accurately in 2D, developing skills from yr. 7.
Understand how to develop a brand and link to a client's needs.

HOW THIS WILL BE ASSESSED:

Formal assessment based on the design and final execution of their fragrance box. Accuracy, fitness for purpose and the client needs/branding will be a focus for assessment.
Self and peer assessment opportunities and informal verbal feedback.

Embedding this knowledge can be supported at home by encouraging them to be more interested in the world around them. By watching programs like Click on BBC 1 – all about emerging and future technology. Other programs that support technology are, inside the factory and How it's made. These along with websites such as GCSEpod, GCSE bitesize and Technologystudent.com will help students link what they cover in lessons to the world around them.

As students rotate D&T Multi-Materials with D&T Food they will spend half of the year in food and half of the year in the multi-materials areas, so therefore the order of the skills may change depending on which area of the subject the student starts in.