



Year 10 Syllabus in a nutshell

DESIGN & TECHNOLOGY





Year 10 Syllabus in a nutshell – Design & Technology

The GCSE Design and Technology course certainly builds on what is learnt in Y9. Those foundational skills are developed to become more advanced in order to be an efficient design creator in the subject. Students are challenged and pushed through the teaching of content to think about how design, the use of technology is making and impact more than just during its time of use. Students will look at the complete lifecycle of a product or system from cradle to grave and cradle to cradle.

Additionally, student will develop their design communication. This is very important. We are not Art, and do not expect students to be great artists. What we teach and develop is a set skill set, with clear technique that will allow a student to communicate, develop, and iterate the thought process of their design.

Core focus:

1. Design Communication
2. Material Source and Resource
3. Impact on the Environment of Material Use
4. Trends and Design History
5. Life Cycle Analysis
6. User Centered Design
7. Psychology of Design
8. Use of Modern and Smart Technology
9. Modern Manufacturing Methods
10. Modern Manufacturing Processes
11. Systems and Control.
12. Emerging Technology.

The design of the workshop is such that it suits our choice of specialised materials. As a department we have chosen timbers (including boards), and Polymers. Our reason for this is that the workshop has been developed and expanded over the years to fit these material groups. Additionally, we feel that learning about modern timber use, and the use, or misuse of polymers is interesting to cover in GCSE years. If a student has an interest in metals or textiles, we encourage them to continue with this interest and incorporate them where possible.

Specialist Material Focus (Meaning the materials below will be investigated in depth)

1. Sustainable resource
2. Hardwood
3. Softwood
4. Manufactured Board
5. Thermoplastics
6. Thermosetting Plastics
7. Elastomers

Assessment:

Exam Paper – 50%

Coursework – 50%