

Curriculum Overview: *Technology*

Key Stage 3 (Years 7, 8 and 9)

Year 7 – Students will rotate every 7-8 weeks to study the following:

In the first week all students will undertake a 'Baseline Assessment' to get a better understanding of their experiences of Design & Technology.

Engineering: Mobile phone holder project and workshop safety

Food Preparation & Nutrition x 2 rotations: Health and Safety, Diet and Nutrition

Graphic Products: Dino's Diner menu project: Mechanisms, movement and linkages

Resistant Materials: Box project and workshop safety

Year 8 – Students will rotate every 7-8 weeks to study the following:

Students develop the basic skills learnt in Year 7, the expectation is for greater independence and a higher level of iterative design thinking.

Food Preparation & Nutrition x 2 rotations: The Eatwell Guide and Food Provenance.

Graphic Products: Festivals and Corporate Identity project.

Resistant Materials: Tea-light project – cast concrete.

Systems & Control: Electronics project – Flashing LED System.

Year 9 – Students will rotate every 8 weeks to study the following:

Students will study all Design & Technology subjects and there will be core elements of the GCSE curriculum included in each project. This will allow students to understand the demands and rigour of each subject, before making their Pathways choices.

Food Preparation & Nutrition x 2 rotations: Food Choice, Healthy Eating and food science.

Graphics: 'Movie Marketing' project and a 'Theatrical Set Design' project, related to their GCSE English set text of *Macbeth*.

Product Design: Mild Steel bottle opener project with dip-coating.

Computer Aided Design (CAD): In depth course in the use of CAD, using Solid Works.

Key Stage 4 (Years 10 and 11)

Year 10 Food Preparation & Nutrition		
Term (1)	Term (2)	Term (3)
Macro and Micronutrients, nutritional needs Food Science	Food safety Food choice	Food Provenance Mock NEA (Non-Exam Assessment) Year 10 exam preparation.

Year 11 Food Preparation & Nutrition		
Term (1)	Term (2)	Term (3)
Food Choice Food Provenance Mock NEA (Non-Exam Assessment) NEA (Non Exam Assessment) 1 Mock exam preparation and revision.	NEA (Non-Exam Assessment) 2. Exam preparation and revision.	Exam preparation and revision.

Year 10 GCSE Design & Technology – All subjects follow the ‘core curriculum’ plus additional Maths and Literacy.		
Term (1)	Term (2)	Term (3)
Core components: New and Emerging Technologies; Energy Storage and Generation; Development of New Materials; Systems Approach to Designing; Mechanical Devices. Students will also undertake focussed practical tasks and graphical exercises.	<i>Core components: Materials and their Working Properties, Forces and Stresses, Ecological and Social Footprint, Scales of Production. Students will also undertake focussed practical tasks and graphical exercises.</i>	Core components: Specialist materials area – Selection, Sources and Origins, Use and working with materials, Stock forms, Specialist Techniques, Surface Treatments and Finishes. Students will begin their NEA (Non Exam Assessment), once issued by the exam board. Year 10 exam preparation.

Year 11 Design and Technology		
Term (1)	Term (2)	Term (3)
Students will continue to work on their NEA (Non Exam Assessment), once issued by the exam board. Core Components: <i>Investigation, the Environment, The work of Other Designers, Communicating Design Ideas, Prototype Development.</i> Mock exam preparation and revision.	Students will continue to work on their NEA (Non Exam Assessment), once issued by the exam board. Core Components: <i>Selection of Materials and Components, Tolerances, Materials Management, Specialist Tools and Equipment, Techniques and Processes.</i>	Exam preparation and revision.

