



Design Technology Department
Curriculum Overview - Year 7

<u>First Rotation</u>	<u>Second Rotation</u>	<u>Third Rotation</u>
4 th Sept – 19 th Oct. 29 th Oct- 19 th Dec (14 weeks) 2 weeks: ICT skills (5 hours)	7 th Jan – 15 th Feb 25 th Feb - 5 th April (12 weeks) 2 weeks: ICT skills (5 hours)	23 rd April -24 th May 3 rd June – 23 rd July(12 weeks) 2 weeks: ICT skills (5 hours)

KS3 Assessment Objectives

AO1: Design. To research and explore to identify and understand needs. Identify and solve design problems. Develop specifications to inform the design of innovative, functional and appealing products. Use a variety of approaches to design creative ideas. Develop and communicate ideas through annotated sketches, detailed plans, 3D and Mathematical modelling and digital presentation.

AO2: Make: Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer aided manufacture. Select from and use a wide range of complex components and materials taking into account their properties.

AO3: Evaluate Analyse the work of past and present professionals to develop understanding. Investigate new and emerging technologies. Test and evaluate and refine ideas, taking into account the views of intended users. Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of design, engineering and technologies.

AO4: Technical Knowledge Understand the use properties of material and the performance of structural elements to achieve functioning solutions. Understand how more advanced mechanical systems used in their products enable changes in movements and force. Understand how more advanced electronic systems can be powered and used in their products. Apply computer and electronic intelligence that responds to inputs.

The Big Picture: Working in a variety of processes with an introduction to workshop safety.

Micro-bit guitars Microchip coding and card modelling.

Holiday Cookie Cutters: 3D printing and food technology

GREEN TASKS- Baseline assessment Term 1 only, Challenges in coding, Micro-pet finish and folder, Written evaluation /photo- Grade, Cookie cutter designs and finished outcomes

Assessment Objectives covered – AO1, AO2, AO3 ,AO4

Wooden Desk Tidy – wood work

Graphic Design - creating packaging and marketing materials

GREEN TASKS - Baseline assessment Term 1 only, Design work based on drawing assignments in isometric, Summative tests of graphics, Summative assessment of design challenges, equipment and processes, Written evaluation /photo grade

Assessment Objectives covered – AO1, AO2, AO3 ,AO4

Metal Hook – Metal work

Mild Steel Candle Holder Steel work

GREEN TASKS: Baseline assessment Term 1 only, Design work based on practical assignments of metal work, Summative tool and processes tests. Summative assessment of materials, equipment and processes Evaluation grade including photo

Assessment Objectives covered – AO1, AO2, AO3 ,AO4