

Curriculum Map - Design and Technology

Our Intent is that students learn how products and systems are designed and manufactured, how to be innovative and to make creative use of a variety of resources including traditional and digital technologies, to improve the world around them by understanding the importance of sustainability. To be able to problem solve in real world situations.

	Autumn Term	Spring Term	Summer Term
Year 7	<u>Wooden collection box prototype</u> -Skills: using 3D drawing to communicate ideas, Select & use specialist tools, equipment and processes. understanding materials and	<u>3 keyring project, wood, metal and recycled plastic</u> -Skills: Develop & communicate ideas using annotated sketches, detailed plans , using CAD, Test, evaluate & refine ideas & products against a specification, Select & use specialist tools, equipment and processes.	
Year 9	<u>Architecture- Tiny house project</u> -Skills: Research & exploration, Develop & communicate ideas using oral & digital presentations and computer based tools	<u>Flat pack furniture</u> -Skills:Analyses the work of past & present professionals, Select & use CAM (Computer Aided Manufacture)	<u>Upcycle textiles project</u> -Skills: Understand impact of developments in D&T on society & environment Select & use specialist tools, equipment and processes.
Year 10	<u>New and emerging technologies</u> - Industry and Enterprise Sustainability and the Environment - People culture and Society Production Techniques and Systems - Informing design decisions	<u>Energy, materials, systems and devices</u> -Energy Generation -Energy Storage - Modern materials - Smart Materials -Mini laser cut lamp project	<u>Materials and Their Working Properties</u> -Paper and Board - Natural and manufactured timber - Metals and alloys - Polymers - Textiles
Year 11	NEA: Select and confirm the design task option to begin the coursework project, using the assessment criteria as a format for the project's progress. Design, plan and make products.		

Assessment Objectives