

KS3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	<ul style="list-style-type: none"> Introduction to 3D drawing and CAD/CAM. Introduction of isometric drawing and sketching, including Rendering Techniques. 	<ul style="list-style-type: none"> Pewter Casting. Introduction to basic hand and machine tools to create an accurate mould for Pewter casting. Focusing on the design and finishing techniques 		<ul style="list-style-type: none"> Edison Robots developing skills in scratch to be able to program the Edison Robots to follow a series of commands. 	<ul style="list-style-type: none"> Mechanisms and Pop-Up cards. Pupils will learn about a range of mechanisms and movements to help them design their own Pop-up card 	<ul style="list-style-type: none"> Introduction to 3D computer modelling on Creo leading to 3D printing of designs to help pupils build their own mini figure
Year 8	<ul style="list-style-type: none"> Edison Robots. Applying previous knowledge of scratch into practical programming of the Edison robots to complete a series of complex challenges. 		<ul style="list-style-type: none"> Desk tidy Pupils learn about natural and manufactured wood and their uses. Manufacturing the desk tidy for a series of Engineering drawings using a range of materials and techniques. 		<ul style="list-style-type: none"> Drinks Packaging. Pupils develop their knowledge, purpose, and function of packaging. Exploring these areas, reduce, reuse, and recycle when considering their packaging. Pupils will develop understanding of net development and will use this to create a unique piece of packaging 	
Year 9	<ul style="list-style-type: none"> NEA practice Ali-Mals. Putting skills into context – students design and manufacture a folded Aluminium mood light including electronics with elements that are produced using computer control, balanced with traditional workshop skills. 			<ul style="list-style-type: none"> NEA practice Cameras Product Design block modelling project. Focusing on digital cameras. Pupils will develop their own ideas, construct block models, and create a 3D computer model which could be 3D printed. 		
<p>Projects in KS3 Design and Technology may not be taught in the order shown above. But all projects will be covered each year.</p>						