



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7	<b>Engineering Project</b> Pupils have to work collaboratively to build a structure that is capable of carrying a load for a set amount of time. Pupils will have a particular focus on health and safety as this is their introduction to the workshop.		<b>Snack Bar Project</b> Pupils learn a range of different Graphics skills and use this to design and prototype the packaging for a Snack Bar.	<b>Mechanisms Project</b> Pupils look at a range of different mechanisms to understand the different types of movement and how these can be transferred. They then complete a practical design and make task using this knowledge.		<b>Working with Plastic</b> Pupils learn about different types of plastic and then complete a practical design and make task to make a keyring.
Year 8	<b>Working with Wood</b> In this project pupils study wood as a material to increase their technical knowledge and gain an understanding of a range of joining and finishing methods. They undertake a practical task to make a wooden box with an emphasis on quality.		<b>Working with Wood 2</b> Pupils further develop their wood working skills and design and make a plaque of an animal.	<b>CAD/CAM Project</b> (Computer Aided Design and Manufacture) In this project pupils are required to design a new character for a Monster Inc. film and use CAD/CAM to create a range of movie merchandising.		
Year 9	<b>Design Eras Project</b> As part of this project pupils have to develop their knowledge of different design movements and use this knowledge to design and make a clock in a suitable style.		<b>Working with Metal</b> As part of this project pupils have to develop a knowledge of common metals and design and make a trophy whilst learning the practical skills to cut, shape, join and finish metal.		<b>Product Design Project</b> As part of this project pupils have to design and make a prototype for an Extreme Sports watch for a given target audience.	
Year 10 Graphics	<b>Graphic Skills</b> Pupils learn Layout skills, Design and development skills, Product Analysis skills, 1 point perspective, 2 point perspective, Isometric, Orthographic Projection, Dimensioning to BS, Rendering, Computer Aided Design skills In so doing Pupils produce a portfolio of work.	<b>Industrial Printing Processes</b> Pupils learn about 5 main commercial printing processes and finishing techniques used in the print industry In so doing pupil produce a sketchbook of information.		<b>The 6 R's of Recycling</b> Pupils learn about recycling and sustainability. In so doing they have to design and make prototypes for a recycling company that upcycles and resells t-shirts. In so doing Pupils produce a portfolio of work.		<b>Controlled Assessment Task</b> This task accounts for 60% of the pupils GCSE. Pupils have to Research design and make and evaluate their outcome for the packaging and promotional material for a product to promote a major sporting event.



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<b>Year 10</b> Resistant Materials	<p><b>Hardwood box</b> Pupils learn Layout skills, 2 point perspective, Rendering, Solidworks skills, evaluations. In so doing Pupils produce a portfolio of work and a hardwood box.</p>	<p><b>Aero-Ply Speaker</b> Pupils learn Layout skills, develop 2 point perspective, orthographic, design skills, develop Solidworks skills, material knowledge, product specifications, electronics knowledge, spray painting, use of templates. In so doing Pupils produce a portfolio of work and a working speaker.</p>		<p><b>Brass and copper tea-light</b> Pupils learn Layout skills, orthographic drawing on CAD, development skills, advanced metal work, design eras In so doing Pupils produce a portfolio of work and a tea light holder.</p>		<p><b>Controlled Assessment Task</b> This task accounts for 60% of the pupils GCSE. Pupils have to Research design and make and evaluate their outcome for their storage unit.</p>
<b>Year 11</b> Graphics	<p><b>Controlled Assessment Task</b> This task accounts for 60% of the pupils GCSE. Pupils have to Research design and make and evaluate their outcome for the packaging and promotional material for a product to promote a major sporting event.</p>			<p><b>Controlled Assessment Task</b> Pupils complete the evaluation of their Controlled Assessment Task, before completing a final piece of theory on Plastics. Lesson time is then devoted to exam preparation.</p>	<p><b>Exam Preparation</b> Lesson time is devoted to revision and exam preparation. Pupils will be given the design theme that part of their exam is based upon.</p>	<p><b>Final exam</b> Accounts for final 40% of GCSE grade.</p>
<b>Year 11</b> Resistant Materials	<p><b>Controlled Assessment Task</b> This task accounts for 60% of the pupils GCSE. Pupils have to Research design and make and evaluate their outcome for their storage unit.</p>			<p><b>Controlled Assessment Task</b> Pupils complete the evaluation of their Controlled Assessment Task. Lesson time is then devoted to exam preparation.</p>	<p><b>Exam Preparation</b> Lesson time is devoted to revision and exam preparation. Pupils will be given the design theme that part of their exam is based upon.</p>	<p><b>Final exam</b> Accounts for final 40% of GCSE grade.</p>



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Year 12	<p><b>Product Analysis</b> After a brief introduction to the course, pupils undertake a product analysis for a chosen product to analyse its' performance criteria, materials and components, manufacturing methods and how quality has been achieved in the product.</p>	<p><b>Product Design</b> Pupils have to respond creatively to a given design brief and design and develop a product through to a final design. In so doing they develop a range of different graphic and communication skills to convey their ideas.</p>	<p><b>Product Manufacture</b> Pupils have to plan for manufacture and produce a high quality prototype of a product. When this is complete, they undertake testing to check the performance of the product.</p>		<p><b>Exam Theory: D&amp;T in Practice</b> At this point in the course we focus on the theory element of the course. A lot of this will have already been covered through practical activity or as part of the design process. However this gives us the opportunity to revisit and add to this knowledge in preparation for the exam.</p>	<p><b>AS Exam: D&amp;T in Practice</b> 90 Mins</p> <p><b>A2 Coursework</b> On completion of the AS exam, pupils then have to decide upon their own project brief in consultation with a client. Pupils then undertake research and analysis relevant to their project.</p>
Year 13	<p><b>A2 Coursework</b> Pupils complete Product Specifications for both their 2D and 3D outcomes. This then informs a range of design ideas that they need to generate</p>	<p><b>A2 Coursework</b> Pupils review their design ideas against their specification in consultation with their client. They then develop their ideas into a final workable design for both the 2D and 3D outcome. They then need to plan for manufacture of both elements</p>	<p><b>A2 Coursework</b> Pupils have to manufacture a prototype for both their 2D and 3D outcome</p>	<p><b>A2 Coursework</b> Pupils continue to manufacture a prototype for both their 2D and 3D outcome. On completion they have to test and evaluate their final outcomes in consultation with their client</p>	<p><b>Exam Theory</b> Design for the Future At this point in the course we focus on the theory element. Some of this will have already been covered through the extended coursework task. However this gives us the opportunity to revisit and add to this knowledge in preparation for the exam</p>	<p><b>Final A2 exam: Design for the Future</b> 120 mins</p>