



D&T - 7 Year Curriculum Plan



DMA = Design and Make Assignment - **FPT** = Focused Practical Task

Notes:

KS3 Product Design / Food - classes rotate at February Half-Term

KS3 Textiles / [Art & Design](#) - classes rotate at February Half-Term - see the [Art & Design Curriculum Plan](#)

KS3 Product Design & KS4 3D Design - actual sequence of delivery will vary due to resourcing and or timetabling. For example while some Y8 classes are working with Robotics, others will be working with Electronics, while one Y10 class are working with metals another will be working with card.

KS3		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	Product Design Food	Product Design DMA: Tealight Holder	Product Design DMA: Tealight Holder	Product Design FPT: LEGO Mechanisms FPT: LED Torch FPT: Structures including Bridges	Food <u>Theory</u> Health and safety Healthy eating and nutrition <u>Practical</u> Fruit preparation and cooking. Cooking pasta Using the oven.	Food <u>Theory,</u> Food safety and hygiene <u>Practical</u> Safe preparation and cooking of meat. Making a sauce.	Food <u>Theory</u> Health and safety Adapting dishes <u>Practical</u> Vegetable preparation and cooking Cereal bar
7	Textiles	Textiles FPT: Weaving	Textiles FPT: Stitching Techniques	Textiles DMA: Creative Creature	<i>Art & Design</i> <i>See Art & Design Curriculum Plan</i>	<i>Art & Design</i> <i>See Art & Design Curriculum Plan</i>	<i>Art & Design</i> <i>See Art & Design Curriculum Plan</i>

8	Product Design Food	Product Design DMA: Pewter Casting CAD/CAM	Product Design FPT: LEGO Robotics FPT: Night Light Electronics	Product Design FPT: Thermoplastics and Plastics Forming	Food <u>Theory</u> Food issues <u>Practical</u> Safe preparation and cooking of vegetables and rice. Adapting recipes, using the oven.	Food <u>Theory</u> Healthy eating and nutrition. <u>Practical</u> Bread dough forming and shaping. Making pasta.	Food <u>Theory</u> Food safety (Meat) <u>Practical</u> Cooking safely with meat. Alternative proteins.
8	Textiles	Textiles DMA: Bag	Textiles DMA: Bag	Textiles DMA: Bag	Art & Design <i>See Art & Design Curriculum Plan</i>	Art & Design <i>See Art & Design Curriculum Plan</i>	Art & Design <i>See Art & Design Curriculum Plan</i>
9	Product Design Food	Product Design DMA: Fold Lamp	Product Design DMA: Fold Lamp	Product Design FPT: Trebuchet Linkages/Levers Build/Test/Analyse	Food Meatballs and sauce. Timeplanning and nutrition. Sweet and sour. Sauces and gelatinisation. Lasagne.	Food Mini pies & Pastry, Function of ingredients. Cheesecake. Modifying recipes, gelation, high risk food, presentation. Focaccia bread. Yeast investigation.	Food Enchiladas. Food hygiene and safety. Planning and making own Multicultural savoury main course dish. Evaluation of dish. Potato Investigation
9	Textiles	Textiles FPT: Samples - Printing, Dyeing, Batik, Slashing	Textiles FPT: Samples Continued - Printing, Dyeing, Batik, Slashing	Textiles DMA: 3D Construction	Art & Design <i>See Art & Design Curriculum Plan</i>	Art & Design <i>See Art & Design Curriculum Plan</i>	Art & Design <i>See Art & Design Curriculum Plan</i>

KS4		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
10	GCSE 3D Design	<p>GCSE 3D Design</p> <p>Mini DMA : Designer Research Skills, Creativity with Wood - Sample 3D Structures</p> <p><u>Continues Throughout</u></p> <ul style="list-style-type: none"> • Design Past & Present • Design in History/Culture • 3D Drawing Exercises • CAD Skills • Visual Elements e.g. Colour, Line, Scale 	<p>GCSE 3D Design</p> <p>DMA: Hanger Project (or other TBC) - Research, Analysis</p> <p>FPT: Metal Samples</p>	<p>GCSE 3D Design</p> <p>DMA: Hanger Project (or other TBC) - Modelling, Sketching, Visual Investigation, Design Development</p>	<p>GCSE 3D Design</p> <p>DMA: Hanger Project (or other TBC) - Final Designs and Metalworking Realization</p> <p>FPT: Modelling skills in Corrugated Card</p>	<p>GCSE 3D Design</p> <p>FPT: Timber Joints and Applied Finishes</p> <p>FPT: Machinery Exercises - e.g. Milling Machine, Lathe</p> <p>FPT: Polymers - Lamination, Forming, Moulding</p>	<p>GCSE 3D Design</p> <p>DMA: Automata or other TBC</p> <p>FPT: Mechanisms</p>
10	GCSE Textiles	<p><u>GCSE Textiles</u></p> <p><u>Teacher Led</u></p> <ul style="list-style-type: none"> - Take own images - Observational Drawings using a range of media - Printing Methods including: PolyPlate Printing, Mono Printing, Gelli Plate Printing and Stencilling and CAD Stenciling. - Artist Research Sewing Machine Introduction 	<p><u>Under the Sea</u></p> <ul style="list-style-type: none"> - Combining techniques learnt together to create a mini outcome. - Use the influence of Artist Research and analysis to inspire work and create a response to the artist. 	<p><u>Under the Sea</u></p> <p>To continue to develop research skills and techniques more independently to create a final response either a shirt or a corset that combines all techniques learnt.</p>	<p>Begin a sustained personal project topic to be decided by the teacher.</p>	<p><u>GCSE Textiles</u></p> <p>Student led project to contribute to Component 1</p>	

10	Engineering	Cambridge National Engineering	Cambridge National Engineering	Cambridge National Engineering	Cambridge National Engineering	Cambridge National Engineering	Cambridge National Engineering
		<p>Engineering principles RO14</p> <p>Reading engineering drawings</p> <p>Production Planning</p> <p>Quality Control</p> <p>One-Off Manufacture RO15</p> <p>Practical</p> <p>Bottle opener keyring</p> <p>One-off manufacture production - hand tools</p>	<p>Engineering principles RO14</p> <p>Materials and properties</p> <p>Health & Safety</p> <p>One-Off Manufacture RO15</p> <p>Practical</p> <p>Sliding bevel</p> <p>Clamp</p> <p>One-off manufacture production - machines</p>	<p>Engineering principles RO14</p> <p>Manufacturing Processes</p> <p>One-Off Manufacture RO15</p> <p>Practical</p> <p>Sliding bevel</p> <p>Clamp</p> <p>One-off manufacture production - machines</p>	<p>Engineering principles RO14</p> <p>Manufacturing Processes</p> <p>One-Off Manufacture RO15</p> <p>NEA (working on)</p>	<p>Engineering principles RO14</p> <p>Manufacturing Processes</p> <p>One-Off Manufacture RO15</p> <p>NEA (cont)</p>	<p>Engineering principles RO14</p> <p>Manufacturing Processes</p> <p>Mock exam</p> <p>One-Off Manufacture RO15</p> <p>NEA (assessment)</p>
10	GCSE Food	<p>GCSE Food</p> <p>Introduction to Year 10.</p> <p>Commodity - Fruit and Vegetables.</p>	<p>GCSE Food</p> <p>Commodity - Milk, cheese and yoghurt.</p>	<p>GCSE Food</p> <p>Commodity - Cereals, flour, bread and pasta.</p>	<p>GCSE Food</p> <p>Commodity - Meat, fish, poultry, eggs.</p>	<p>GCSE Food</p> <p>Commodity - Butter, oils, margarine, sugar syrup.</p>	<p>GCSE Food</p> <p>Commodity - Soya, tofu, beans, nuts, seeds.</p>
11	GCSE 3D Design	<p>GCSE 3D Design</p> <p>Significant Project (Automata or other TBC) as part of Component 1 - The Portfolio</p>		<p>GCSE 3D Design</p> <p>Component 2 NEA: Externally Set Assignment</p>			
11	GCSE Textiles	<p>GCSE Textiles</p> <p>Student led project to contribute to Component 1</p>		<p>GCSE Textiles</p> <p>Component 2 NEA: Externally Set Assignment</p>			
11	Engineering	Cambridge National Engineering	Cambridge National Engineering	Cambridge National Engineering	Cambridge National Engineering	Cambridge National Engineering Engineering principles RO14 Revision	

		<p>Engineering principles RO14 Manufacturing processes (Revision) Scale and manufacture</p> <p>Manufacture in Quantity RO16 Scales of manufacture Productions aids (jigs) Sequencing, SoP's Operating parameters CAD/CAM</p> <p>Practical Mobile phone holder (laser)</p>	<p>Engineering principles RO14 Influence of scale on manufacture Quality systems</p> <p>Manufacture in Quantity RO16 Practical Pen holder (3D Print)</p>	<p>Engineering principles RO14 Inventory management/Lean Manufacturing</p> <p>Manufacture in Quantity RO16 NEA (working on)</p>	<p>Engineering principles RO14 Globalisation</p> <p>Manufacture in Quantity RO16 NEA (cont)</p>	<p>Final Exam Manufacture in Quantity RO16 NEA (assessment)</p>	
11	11 GCSE Food	<p>GCSE Food</p> <ul style="list-style-type: none"> • Introduction to year 11 • NEA 1 investigation project. • Range of practicals time permitting to extend year 10 practical skills. 	<p>GCSE Food</p> <ul style="list-style-type: none"> • NEA 2 research and planning of practical exam dishes. <p>Begin practical trials for exam.</p>	<p>GCSE Food</p> <ul style="list-style-type: none"> • Practical trials of planned dishes for the practical exam. • Evaluating dishes. • Sensory testing. • Revise theory topics. 	<p>GCSE Food Practical Assessments and Evaluation Exam revision</p>	<p>GCSE Food Exam revision</p>	<p>GCSE Food Exam revision</p>

KS5		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
12	A'Level 3D Design	A'Level 3D Design <ul style="list-style-type: none"> • Skills Workshops - Resistant Materials & Processes • Drawing and Modelling Skills - Design Development • CAD/CAM - Proficiency in 2D and 3D CAD Software • Design History/Context 			A'Level 3D Design Component 1 - Personal Investigation		
12	A'Level Textiles	<u>A'Level Textiles</u> Teacher Led <ul style="list-style-type: none"> - Take own images - Observational Drawings using a range of media - Printing Methods including: PolyPlate Printing, Mono Printing, Gelli Plate Printing and Stencilling and CAD Stenciling. - Artist Research Sewing Machine Introduction	<u>Under the Sea</u> <ul style="list-style-type: none"> - Combining techniques learnt together to create a mini outcome. - Use the influence of Artist Research and analysis to inspire work and create a response to the artist. 	<u>Under the Sea</u> To continue to develop research skills and techniques more independently to create a final response either a shirt or a corset that combines all techniques learnt.	Begin a sustained personal project topic to be decided by the teacher.	A'Level Textiles Component 1 Personal Investigation	
13	A'Level 3D Design	A'Level 3D Design Component 1 - Personal Investigation			A'Level 3D Design Component 2 - Externally Set Assignment		
13	A'Level Textiles	A'Level Textiles Component 1 Personal Investigation			A'Level Textiles Component 2 - Externally Set Assignment		