

	Term 1	Term 2	Term 3
<b>DT YEAR 7</b>	<p><b>Design Technology Engineering Drawing</b></p> <ul style="list-style-type: none"> <li>• Perspective Drawing and Design Skills</li> <li>• One and two point perspective.</li> <li>• Produce accurate drawings.</li> <li>• Sketching and annotation techniques</li> <li>• Use subject specific vocabulary</li> <li>• Use a design brief successfully.</li> <li>• Primary research</li> <li>• Properties of paper and card</li> <li>• Mechanisms</li> </ul> <p><b>Business marketing and promotion</b></p>	<p><b>Design Technology Product Design Wooden car/boat</b></p> <ul style="list-style-type: none"> <li>• subject specific vocabulary</li> <li>• Write a specification</li> <li>• An understanding of the properties of different types of natural and man-made wood.</li> <li>• Cut and mark out effectively</li> </ul> <p><b>Use machinery and equipment safely</b></p>	<p><b>Design Technology Textiles Tote Bag</b></p> <ul style="list-style-type: none"> <li>• Understanding of sustainability</li> <li>• Joining and combining techniques using the sewing machine to create straight seams.</li> <li>• printing techniques</li> </ul> <p><b>To use CAD CAM to create a stencil</b></p>
<b>DT YEAR 8</b>	<p><b>Design Technology Engineering Drawing</b> Recapping engineering drawing covered in year 7</p> <ul style="list-style-type: none"> <li>• Understand dimension</li> <li>• Recognise nets of 2D shapes</li> <li>• Net design</li> <li>• Secondary Research: Inspirational designers.</li> <li>• Women in engineering</li> <li>• Sketching techniques and annotation</li> <li>• Analysis of products</li> <li>• Prototypes and models</li> <li>• Iterative design</li> </ul>	<p><b>Design Technology: Product Design</b></p> <ul style="list-style-type: none"> <li>• Use subject specific knowledge successfully when analysing work</li> <li>• Properties of different plastics</li> <li>• Electronic components and circuits</li> </ul>	<p><b>Product Design Textiles.</b></p> <ul style="list-style-type: none"> <li>• E textiles</li> <li>• Join curves successfully.</li> <li>• Working circuit with conductive threads.</li> <li>• Applique techniques</li> <li>• Secure embellishments using hand stitch techniques</li> </ul>
<b>DT YEAR 9</b>	<p><b>Design Technology Engineering Drawing:</b></p> <ul style="list-style-type: none"> <li>• Orthographic projection</li> <li>• Effective use of drawing boards</li> </ul>	<p><b>Design Technology Product Design:</b></p> <ul style="list-style-type: none"> <li>• Primary and secondary research</li> <li>• Analysis skills</li> <li>• Sketching techniques.</li> </ul>	<p><b>Product Design Textiles:</b></p> <ul style="list-style-type: none"> <li>• Tie Dye</li> <li>• Printing</li> <li>• Batik</li> </ul>

## Design and Technology Curriculum



	<ul style="list-style-type: none"> <li>• Mechanisms</li> <li>• English Lakes</li> </ul>	<ul style="list-style-type: none"> <li>• Vacuum forming</li> <li>• Range of joints.</li> <li>• Jewellery design</li> </ul>	<ul style="list-style-type: none"> <li>• Heat transfer</li> <li>• Repeat pattern</li> <li>• Interiors</li> <li>• Fabric manipulation</li> <li>• Applique and reverse applique</li> <li>• Prototypes/modelling</li> <li>• quilting</li> </ul>
<b>DT</b> <b>YEAR 10</b>	<p><b>New and Emerging Technology</b>            Design practice 1:            Alessi inspired CAD CAM Key Fob</p> <p><b>Core Knowledge and understanding</b>            D&amp;T and our world            CAD CAM            Emerging technology            Electronics            Materials / Polymers            3D printing PLA</p> <p><b>Core Designing &amp; Making Principles</b>            D&amp;T Practice            User needs            Brief / Specification            Iterative design development            Work of others            Prototyping            Decision making</p> <p><b>Work of others Presentation</b>            Research, Product Analysis Evaluation            Study on designers            Professionals            Their style            Products/USP            Their impact</p> <p><b>Core Designing &amp; Making Principles</b>            Users            Sketching</p>	<p><b>Energy – Eco design</b>            Design Practice 2: Solar powered novelty</p> <p><b>Core Knowledge and understanding</b>            Sustainability            Energy – solar – wind            Greener design            Ecological footprint            Generating clean energy            Life cycle analysis            Cradle to cradle</p> <p><b>Core Designing &amp; Making Principles</b>            Material areas may vary            Group activities            Different mechanical systems / outputs            Iterative designing            Modern and SMART Materials Product Study            Focused study            Thermos            Photos            SMA and nitinol            Polymorph            QTC pills            Fibres</p> <p><b>Focused study</b></p>	<p><b>In-depth Knowledge and understanding</b>  <b>Fashion &amp; Textiles Product Design</b>  <b>In depth Knowledge and understanding</b>            Further study specialist area            Narrower/deeper coverage            Focussed tasks • Disassembly/evaluation            Pushing iteration forwards</p> <p><b>In depth Designing &amp; Making</b>            Mini tasks Specialist processes Specific practical skills            Examination practice Challenge / advanced content Preparation for NEA in Yr11            NEA – 3 Contexts Released by WJEC            Context analysis – multiple starting points            NEA tasks begins – 35 hours Sketchbook analysis Formal Portfolio</p>

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	Ideas/concepts Prototypes Evaluation User trials		
<b>DT YEAR 11</b>	<b>Contextual challenge investigation</b> Preliminary ideas Evaluation and design movement research Primary research Existing product analysis Specification Design development Modelling Cad Development Final design and orthographic projection	<b>Contextual challenge investigation</b> Cutting list Manufacturing specification Manufacturing evidence Final product Does the product meet the Specification? Testing Evaluation Exam Revision	<b>Exam Revision</b>