

<b>Key Stage 5 (13)</b>	
<b>Course title: Design and Technology (product design)</b>	
<b>Exam board: Edexcel</b>	
<b>Specification code: 9DT0</b>	
<b>Autumn 1 (September – October) to Autumn 2 (October – December)</b>	<p>During this first term theory topics covered include features of manufacturing industries, current legislation (consumer law as well as health and safety regulations).</p> <p>As the NEA progresses students start to generate design ideas that meet their clients' needs and the specifications that they have written. The students will regularly review their work and consult with the client to make changes and improvements to their ideas. A chosen idea is identified using a process of evaluation and review. The chosen idea is then developed into a final product that will be manufactured in the school workshop. During the development stages the students are encouraged to have an iterative and practical approach to improving their design. This will include regular research into possible processes and testing different components of the intended prototype.</p>
<b>Spring 1 (January – February) to Spring 2 (February – March)</b>	<p>During this second term theory topics covered include features of a professional manufacturing environment.</p> <p>The remaining time is used to prepare students for the exam, including time spent focusing on the higher tariff questions.</p> <p>For the NEA element the students conclude the development of their design and reflect on the changes they have made by producing a variety of different final drawings of their product. Drawing styles will include isometric, orthographic and exploded assembly drawings. The drawing will be used alongside a set of clear instructions of how to make the product in the workshop. The final design work is then put into action and the students use the school workshop to manufacture the prototype they have designed.</p>
<b>Summer 1 (April – June) to Summer 2 (June – July)</b>	<p><b>Exam prep</b></p> <p>The final stages of the NEA include final review, rigorous testing and evaluation of the completed prototype. The students will also conduct a life cycle analysis of the product to evaluate its impact on the environment. A sample of the cohort's work will be selected to be sent to the exam boards moderator.</p>