

<b>Key Stage 5 (12)</b>	
<b>Course title: Design and Technology (product design)</b>	
<b>Exam board: Pearson Edexcel</b>	
<b>Specification code: 9DT0</b>	
<b>Autumn 1 (September – October) to Autumn 2 (October – December)</b>	During the first term key subject content is delivered to the students, using a project-based approach and formal theory lessons to learn about materials including timbers, metals, plastics, smart and composite materials. These projects also deliver key content associated with performance characteristics of materials and manufacturing processes and techniques.
<b>Spring 1 (January – February) to Spring 2 (February – March)</b>	<p>During their second term, students split their studies into continued theory while starting work on their non-examined assessment (NEA).</p> <p>Theory topics covered this term include historical design movements and key designers, how to produce pictorial and working drawings and further materials including textiles, paper and boards. The students will also have an opportunity to develop CAD and CAM skills initially learned at key stage 4.</p> <p>Students will also begin work on their NEA (this is the term used for coursework, coursework represents 50% of their overall grade). The NEA is a substantial design and make project taking approximately a year to complete. Students will investigate a variety of different situations where design will be used to solve problems and meet user needs. After deciding on a particular problem to solve students will start to gather and analyse research to help them design.</p>
<b>Summer 1 (April – June) to Summer 2 (June – July)</b>	<p>During the third term, theory topics covered include safe working practices, where students can identify potential hazards and implement risk assessments. Designing for the maintenance and the cleaner environment</p> <p>Students will also progress through their NEA. They will complete the investigation stages conducting further research to help write a design brief and specification for the prototype they will design and make. The students will regularly consult with a client to help make design decisions.</p>