



## Vision

The aim of this course is prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise. Theory lessons will study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. Students will also have the opportunity to study specialist technical principles in greater depth.

	Foci	Assessment	Knowledge Organiser
Year 10	<p><b>New and emerging technologies:</b>            Industry and enterprise            Sustainability and the environment            People, culture and society            Production techniques and systems            Informing design decision</p> <p><b>Energy, Materials and devices:</b>            Fossil fuels            Renewable energy            Nuclear energy</p> <p><b>Materials and working properties:</b>            Papers and boards            Natural and manufactured timbers            Metals and alloys            Polymers</p> <p><b>CAD/CAM:</b>            Fusion 360, SketchUp, 2D design and Photoshop</p>	<p><b>Written Exam:</b> A 2 hour written examination paper tests you on your knowledge and understanding (50% of the overall grade).</p> <p><b>Section A</b> – Core technical principles - A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding.</p> <p><b>Section B</b> – Specialist technical principles - Several short answer questions and one extended response to assess a more in depth knowledge of technical principles.</p> <p><b>Section C</b> – Designing and making principles - A mixture of short answer and extended response questions including an extended mark design question.</p>	<p><b>Year 10 DT</b></p> <p><b>KO for each section/sub section</b></p>
Year 11 NEA	<p>During year 10 you will complete several mini NEA (Non Examined Assessment) design and make projects from a range of materials to prepare you for your final NEA submission. This is the internally assessed part of this qualification and will be completed during year 11. This will involve using specialist tools and equipment, which may include hand tools, machines or CAM/CNC. The prototype(s) will be constructed through a range of techniques, which may involve shaping, fabrication, construction and assembly.</p>	<p>A design and make project that is undertaken for up to a total of thirty five hours and a 20 page portfolio of evidence (50% of the overall grade).</p> <p>AQA marking grid applied to assess outcome</p>	<p><b>Year 11</b></p> <p><b>GCSE POD Sam Learning Revision guides</b></p>