

Curriculum Summary - Design Technology (Year 10)

Autumn	Spring	Summer
<p>Students will experience a Practice NEA ready for starting in the Summer Term. The project will be a condensed project that focuses on the key elements of the NEA to build confidence and experience for the students. Key elements of the NEA focus will be:</p> <ul style="list-style-type: none"> • Research: Analysing a design brief, analysing the design context, formulating user needs and wants, and writing a design specification. • Design: Rendering, technical drawing, sketch modelling and material testing. • Manufacture: Material properties, manufacturing techniques and material finishes. CAD/CAM. • Evaluate: Product testing and analysis, User feedback. <p>Subject knowledge gained will support pupils in Section C; Design and Making Principles of GCSE examinations.</p>	<p>Manufacturing skills and Subject Knowledge will be the focus this term to gain experience and confidence in the manufacturing process. Pupils will manufacture a series of 'Focus Projects' on different manufacturing processes using Metals, Polymers and Timbers, manufactured by hand and CAD/CAM. All of these 'Focus Projects' will be a separate component of a larger product students will assemble at the end of this Term.</p> <p>Focus Projects:</p> <ul style="list-style-type: none"> • Wood joining: Softwoods and Hardwoods, adhesives and finishes, jigs and templates. • Living Hinge: CAD/CAM, Thermoplastics, and applied mathematics. • Line Bending: Material properties, dimensions and modelling. • Metal Lathe: Ferrous and Non-Ferrous metals, Taps and Die, fabrication. <p>Each of the 'Focus Projects' will also produce a booklet of subject knowledge to support students in revision for Section A, Core Technical Principles and Section B, Specialist Technical Principles of GCSE examinations.</p>	<p>Summer Term 1 Students will be experiencing subject knowledge in classrooms and the workshop for preparation for the Summer Mock Exam. Students will learn key elements of Sections A, B and C to prepare them for the exam. Students will learn the importance of revision and revision techniques to encourage independent learning and accountability.</p> <p>Summer Term 2 Students will start their GCSE NEA for Design and Technology. At this time, they will focus on AO1 of the GCSE NEA.</p>