

Curriculum Summary Document

Year 10 – GCSE 3D Design

Module/Unit of Learning	Taught During	What will students learn?	How does this prepare students for success at GCSE?	Links to other Subjects
Core Drawing, Workshop Skills and Furniture Modelling	September – November	<p>Students begin Year 10 by strengthening core drawing skills, including 1-point and 2-point perspective, and by generating rapid visual ideas through sketching.</p> <p>They revisit and extend essential workshop competencies, producing small practical outcomes such as a decorative box, aluminium toy and acrylic key fob to reinforce accuracy, safe tool use and finishing techniques.</p> <p>Students are introduced to movement in design and explore model-making techniques through the creation of small furniture prototypes.</p>	<p>This module consolidates the fundamental practical and visual communication skills required for the Non-Exam Assessment (NEA).</p> <p>Accurate drawing, modelling and workshop practice underpin both design development and the production of high-quality prototypes.</p> <p>The focus on precision, safe working and iterative modelling mirrors the expectations of GCSE practical work.</p>	<p>Art – perspective drawing and design sketching</p> <p>Maths – measurement, scale and geometry</p> <p>Science – materials, forces and workshop safety principles</p>
Research, Design Development and Initial NEA Skills	November – April	<p>Students develop GCSE-level research skills through analysing natural forms and other design influences. They practise sketching from primary and secondary sources and develop a broader range of drawing techniques, including lettering and presentation skills.</p> <p>Students explore materials through experiments—card modelling, laminating and forming techniques—to understand how materials behave and how they can be shaped or constructed. They complete design sheets that follow GCSE conventions and begin to produce developed design ideas.</p>	<p>This module aligns closely with NEA expectations by strengthening research, analysis, sketching and material experimentation.</p> <p>Students practise the types of design sheets, annotation, modelling and iterative development required in the NEA, ensuring they understand how to justify ideas and make informed material or process choices.</p> <p>These skills provide a strong foundation for starting the formal NEA in Year 11.</p>	<p>Art – observational drawing and presentation techniques</p> <p>Science – material behaviour, heat processes and experimentation</p> <p>English – analytical writing and clear explanation of design decisions</p>

Curriculum Summary Document

Year 10 – GCSE 3D Design

<p>Materials Theory, Modelling Techniques and Idea Generation</p>	<p>April – July</p>	<p>Students deepen their understanding of theory content including materials, polymers, metals and papers/boards, and how these are processed and used in industry.</p> <p>They complete design-source research and apply this knowledge to refined modelling tasks, including layered 3D model reliefs and print techniques.</p> <p>Students practise sketching ideas in alternative styles using different media such as fineliners, watercolour and coloured pencils.</p> <p>They undertake individual experimentation tasks using techniques from the PPT resources, then generate a series of developed ideas based on research.</p> <p>The year finishes with rapid modelling of final ideas using card, cardboard and prototyping materials.</p>	<p>This module embeds core GCSE theory while building the modelling and idea-generation skills essential for the NEA.</p> <p>Students learn how to justify material choices, present design ideas effectively and model concepts quickly - key competencies assessed throughout the GCSE course.</p> <p>Exposure to a wide range of techniques means students enter Year 11 confident and ready to begin formal NEA development.</p>	<p>Science – materials, sustainability and processing methods</p> <p>Art – varied drawing media, alternative styles and 3D model-making</p> <p>Geography – sustainability and responsible material use</p>
---	---------------------	---	--	--