

KS4 Year 11: 2026-27
Overall Curriculum Intent for Design & Technology

The curriculum intent of Design & Technology is for pupils gain experience of a wide range of practical skills and processes through a multi-disciplinary approach, which develops resilience, reasoning and problem-solving skills. Creativity, imagination and technical understanding are combined to equip our pupils with essential life skills and a love of product design and manufacture. By the end of their five-year journey pupils will have a deep understanding of how a range of factors and stimuli effect how products are design, used, manufactured and disposed of. More important the short-, medium- and long-term impacts products have not just the user but the environment and world they live in. They will also develop their investigation, design, development manufacture and evaluation skills through a range of design, practical projects through the use of workshop equipment and CAD/CAM.

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge Introduced	<p>NEA - Design & Development</p> <p>Contextual design-based NEA coursework.</p> <p>To include:</p> <ul style="list-style-type: none"> - Initial idea drawing - Modelling - Virtual Prototyping - Final design idea - Client feedback. - Material testing - Production methods - Assembly and Finishes. <p>Theory Unit 3.2 Specialist Technical Principles</p>	<p>NEA - Prototyping & Final Idea</p> <p>Contextual design-based NEA coursework.</p> <p>To include:</p> <p>Early Practical work, working towards the final prototype, using the correct processes, based on learning from year 7.</p> <p>Theory Unit 3.2 Specialist Technical Principles</p>	<p>NEA - Manufacture & Evaluation</p> <p>Contextual design-based NEA coursework.</p> <p>To include:</p> <p>Completion of the final prototype, and the wide range of processes this requires. Final evaluation and product in-situ, potential methods of industrial production.</p> <p>Theory Unit 3.2 Specialist Technical Principles</p>	<p>Exam - Specialist Materials Unit</p> <p>To include:</p> <p>Priority of section A unit. Then recapping on the remaining theory topics and working through exam technique using past paper examples.</p> <p>Focuses areas taken from MOK book fortnightly lessons and home learning outcomes for whole class and pupil focused tasks/topics.</p> <p>Theory Unit 3.3 Designing and Making Principles</p>	<p>Exam – Personal Study Topics</p> <p>To include:</p> <p>RAG rated knowledge gaps of students to create bespoke exam learning plan.</p> <p>Focuses areas taken from MOK book fortnightly lessons and home learning outcomes for whole class and pupil focused tasks/topics.</p> <p>Theory Unit 3.3 Designing and Making Principles</p>	
Key vocabulary/concepts/ideas students must master	<p>Design Ideas</p> <p>Concept</p> <p>Sketching</p> <p>Isometric</p> <p>Exploded</p> <p>Design Development</p>	<p>Prototype</p> <p>3D modelling</p> <p>Virtual Prototyping</p> <p>Assembly Drawing</p> <p>Exploded Views</p> <p>Final Prototype (outcome)</p> <p>Material & processes as specific to project.</p>	<p>Manufacturing Specification</p> <p>Quality Control</p> <p>Quality Assurance</p> <p>Client Feedback</p> <p>Commercial Production</p> <p>Equipment specific to project outcome.</p>	<p>Key vocabulary including tier 2 and 3 will be consolidating from the vocabulary in all previous years.</p>	<p>Key vocabulary including tier 2 and 3 will be consolidating from the vocabulary in all previous years.</p>	
Knowledge revisited	<p>Linked to previous NEA section</p> <p>Key aspects from Y9 design challenges and T1 and t2 Y10 Projects. Supported by core skills and knowledge form KS3.</p>	<p>Linked to previous NEA section</p> <p>Key aspects from Y9 design challenges and T1 and t2 Y10 Projects. Supported by core skills and knowledge form KS3.</p>	<p>Linked to previous NEA section</p> <p>Key aspects from Y9 design challenges and T1 and t2 Y10 Projects. Supported by core skills and knowledge form KS3.</p>	<p>Linked all to section of NEA. The theory is reinforced by the CA.</p> <p>Core elements have been built from all KS3 projects.</p>	<p>Linked all to section of NEA. The theory is reinforced by the CA.</p> <p>Core elements have been built from all KS3 projects.</p>	
CEIAG Links/ Opportunities	<p>Graphic Designer</p> <p>Product Designer</p> <p>CAD Designer</p> <p>Construction & Engineering</p> <p>Gatsby BM: 2/3/4</p>	<p>Graphic Designer</p> <p>Product Designer</p> <p>CAD Designer</p> <p>Construction & Engineering</p> <p>Gatsby BM: 2/3/4</p>	<p>Graphic Designer</p> <p>Product Designer</p> <p>CAD Designer</p> <p>Construction & Engineering</p> <p>Gatsby BM: 2/3/4</p>	<p>Graphic Designer</p> <p>Product Designer</p> <p>CAD Designer</p> <p>Construction & Engineering</p> <p>Gatsby BM: 2/3/4</p>	<p>Graphic Designer</p> <p>Product Designer</p> <p>CAD Designer</p> <p>Construction & Engineering</p> <p>Gatsby BM: 2/3/4</p>	