

# GCSE Design Technology: Engineering

**Subject Leader:** Mr T Priest

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<b>Curriculum Intent:</b> To demonstrate their knowledge, understanding and skills through interrelated iterative processes that 'explore' needs, 'create' solutions and 'evaluate' how well the needs have been met.	
Core Knowledge	Procedural Knowledge
<b>Topics:</b> <ol style="list-style-type: none"> <li>1. Identifying requirements.</li> <li>2. Learning from existing products and practice.</li> <li>3. Implications of wider issues.</li> <li>4. Design thinking and communication.</li> <li>5. Material considerations.</li> <li>6. Technical understanding.</li> <li>7. Manufacturing processes and techniques.</li> <li>8. Viability of design solutions.</li> </ol>	<b>Students will:</b> <p>Complete an Electronic Engineering unit covering technical understanding, focussed practical tasks and a design and make project.</p> <p>Complete a Mechanical Engineering unit covering technical understanding, focussed practical tasks and a design and make project.</p> <p>Complete a NEA (coursework) project from June 1<sup>st</sup> Y10 until March Y11.</p>
<b>Homework:</b> Weekly quizzes on core content. Later on, NEA work each week. Revision. Seneca.	
<b>Assessment:</b> Verbal and informal formative feedback. Weekly quizzes on core content. Summative levels for each project. Assessed and graded exams at assessment weeks. Assessed past paper questions.	
<b>Links to Personal Development:</b> KS5 Sixth Form A Levels in Product Design or Design Engineering. Level 3 apprenticeships.	
<b>How is my knowledge developed further at Key Stage Five?</b> The skills learnt at GCSE enable students to enter the A Level course with the necessary skills to complete coursework and respond to design briefs.	