

## Key Stage Four Curriculum – Carre’s Grammar School

Subject						
	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
Year 10	<b>Box design and manufacture</b> <ul style="list-style-type: none"> <li>➤ Designing using a range of design strategies.</li> <li>➤ Use workshop practices to realise designs/developments</li> </ul>	<b>Trophy design and manufacture</b> <ul style="list-style-type: none"> <li>➤ Develop knowledge of designers</li> <li>➤ Use of lay plan and assembly drawings in manufacture</li> <li>➤ Use workshop practices to realise designs/developments</li> </ul>	<b>Trophy design and manufacture</b> <ul style="list-style-type: none"> <li>➤ Develop knowledge of designers</li> <li>➤ Use of lay plan and assembly drawings in manufacture</li> <li>➤ Use workshop practices to realise designs/developments</li> </ul>	<b>Core</b> <ul style="list-style-type: none"> <li>➤ Develop a wide understanding of Design and Technology</li> </ul>	<b>Casting Mould Project</b> <ul style="list-style-type: none"> <li>➤ Develop knowledge of material properties</li> <li>➤ Use of casting process in the realisation of a design</li> </ul>	<b>NEA – Responding to Live Assessment</b> released by the exam board 1 <sup>st</sup> June.
	<b>Core</b> <ul style="list-style-type: none"> <li>➤ Develop a wide understanding of Design and Technology</li> </ul>	<b>Design and Realisation Module</b> <ul style="list-style-type: none"> <li>➤ Designing using a range of design strategies.</li> <li>➤ Use workshop practices to realise a design/development</li> </ul>	<b>Design and Realisation Module</b> <ul style="list-style-type: none"> <li>➤ Designing using a range of design strategies.</li> <li>➤ Use workshop practices to realise a design/development</li> </ul>	<b>Investigating Contexts and Responding to Briefs</b> <ul style="list-style-type: none"> <li>➤ Respond to a variety of contexts, by generating a range of design briefs.</li> <li>➤ Develop research methods to inform future designing</li> </ul>	<b>Investigating Contexts and Responding to Briefs</b> <ul style="list-style-type: none"> <li>➤ Respond to a variety of contexts, by generating a range of design briefs.</li> <li>➤ Develop research methods to inform future designing</li> </ul>	<b>NEA – Responding to Live Assessment</b> released by the exam board 1 <sup>st</sup> June.
	<b>Systems Introduction</b> <ul style="list-style-type: none"> <li>➤ Component Research, Circuit Design,</li> <li>➤ PCB Development</li> <li>➤ PCB Optimisation</li> </ul>	<b>Realisation Module</b> <ul style="list-style-type: none"> <li>➤ Manufacturing of an advanced PCB using workshop practices.</li> </ul>	<b>Core</b> <ul style="list-style-type: none"> <li>➤ Develop a wide understanding of Design and Technology</li> </ul>	<b>Designing with Systems</b> <ul style="list-style-type: none"> <li>➤ Develop a broad understanding of systems</li> <li>➤ Apply knowledge of systems to create a hydraulic and geared system outcome</li> </ul>	<b>Designing with Systems</b> <ul style="list-style-type: none"> <li>➤ Develop a broad understanding of systems</li> <li>➤ Apply knowledge of systems to create a hydraulic and geared system outcome</li> </ul>	<b>NEA – Responding to Live Assessment</b> released by the exam board 1 <sup>st</sup> June.

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	<p>R106 – Introduction / Preparation</p> <ul style="list-style-type: none"> <li>➤ Scales of Production</li> <li>➤ Processes</li> <li>➤ Research Techniques</li> <li>➤ Materials and Components</li> </ul>	<p>R106 - Preparation</p> <p>R106 – Live Assessment Material</p> <p>Preparatory project</p>	<p>R107 Preparation</p> <ul style="list-style-type: none"> <li>➤ 2D and 3D Sketching</li> <li>➤ Rendering and presentation techniques</li> </ul> <p>R107 Live Assessment</p> <p>Preparatory project</p>	<p>R107 Preparation</p> <ul style="list-style-type: none"> <li>➤ CAD Techniques</li> <li>➤ Annotation Techniques</li> </ul> <p>R107 Live Assessment</p> <p>Preparatory project</p>	<p>R108 Preparation</p> <ul style="list-style-type: none"> <li>➤ Interpreting Specifications</li> <li>➤ Planning and management techniques</li> <li>➤ Processes and Materials</li> </ul> <p>R108 Live Assessment</p> <p>Preparatory project</p>	<p>R108 Live Assessment</p> <p>Preparatory project</p>
	<p><b>Assessment</b></p> <p><u>Design and Technology</u>                  2 x Timbers Socrative Tests                  2 x Papers and Boards Socrative Tests                  2 x Systems Socrative Tests</p>		<p><b>Assessment</b></p> <p>Spring 4 - Core Socrative Assessment for all strands of Design and Technology : Timbers, Papers and Boards, Systems                  Year 10 Mock Examination</p>		<p><b>Assessment</b></p> <p>AFL                  Practical Outcomes</p>	
Year 11	<p>NEA</p> <p>NEA</p> <p>NEA</p> <p>R108 Live Assessment                  R105 Preparation                  Preparatory Project</p>	<p>NEA</p> <p>NEA</p> <p>NEA</p> <p>R105 Preparation</p>	<p>NEA</p> <p>NEA</p> <p>NEA</p> <p>Final Completion of internally assessed units</p>	<p>NEA</p> <p>NEA</p> <p>NEA</p> <p>R105 Retake Revision                  Independent Projects</p>	<p>NEA administration                  Revision – 1DT0/1F</p> <p>NEA administration –                  Revision - 1DT0/1B</p> <p>NEA administration –                  Revision - 1DT0/1D</p> <p>R105 Retake Revision                  Independent Projects</p>	
	<p><b>Assessment</b></p> <p><u>Design and Technology</u>                  2 x Core Socrative Tests                  2 x Timbers Socrative Tests                  2 x Papers and Boards Socrative Tests                  2 x Systems Socrative Tests</p>		<p><b>Assessment</b></p> <p><u>Design and Technology</u>                  2 x Core Socrative Tests                  2 x Timbers Socrative Tests                  2 x Papers and Boards Socrative Tests                  2 x Systems Socrative Tests</p>		<p><b>Assessment</b></p> <p><u>Design and Technology</u>                  2 x Core Socrative Tests                  2 x Timbers Socrative Tests                  2 x Papers and Boards Socrative Tests                  2 x Systems Socrative Tests</p>	

## Key Stage Four Curriculum – Carre’s Grammar School

		AFL – Self Assessment of Cambridge National in Level 2 Engineering  Summative Assessment of Cambridge National in Level 2 Engineering Controlled Assessment	Summative Assessment of GCSE Design and Technology Non-Examined Assessment
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Additional explanation if required.

[Design and Technology - Timbers](#)

[Design and Technology - Papers and Boards](#)

[Design and Technology - Systems](#)

[Cambridge National in Engineering Level 2](#)

➤ Indicative Design and Technology NEA Coverage

Year 10 Summer 6 –	<p><b>1.1 Investigation of needs and research</b></p> <p><b>1.2 Product specification</b></p> <p><b>2.1 Design ideas</b></p>
Year 11 Autumn 1 –	<p><b>2.1 Design ideas</b></p> <p><b>2.2 Review of initial ideas</b></p> <p><b>2.3 Development of design ideas into a chosen design</b></p> <p><b>2.4 Communication of design ideas</b></p>
Year 11 Autumn 2 –	<p><b>2.3 Development of design ideas into a chosen design</b></p> <p><b>2.4 Communication of design ideas</b></p>
Year 11 Spring 3 –	<p><b>2.5 Review of chosen design</b></p>

## Key Stage Four Curriculum – Carre's Grammar School

**3.1 Manufacture**

**3.2 Quality and accuracy**

Year 11 Spring 4 –

**2.5 Review of chosen design**

**3.1 Manufacture**

**3.2 Quality and accuracy**

**4.1 Testing and evaluation**

- Sequence of Engineering dependent on rooming and may change.