

## SIR GRAHAM BALFOUR SCHOOL

CURRICULUM OVERVIEW – KEY STAGE 4 DESIGN TECHNOLOGY



<u>1</u>	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	<ul> <li>Mini Design project: Mechanical models</li> <li>Core technical Principles:         <ul> <li>Mechanical devices</li> <li>Revision and practise of graphical drawing</li> </ul> </li> <li>Designing and Making principles</li> <li>Anthropometrics and ergonomic design considerations</li> <li>Marking out tools and processes</li> <li>Material management</li> </ul>	<ul> <li>Mini Design Project:</li> <li>Foot stool - Changeable</li> <li>Timber based material specialism</li> <li>Sources origins and properties of timber</li> <li>Working with timber-based materials</li> <li>Manufacturing processes</li> <li>Treatments and finishes</li> </ul>	<ul> <li>Core technical principles</li> <li>Group design project</li> <li>The wider social and environmental impact of products</li> <li>Renewable and non-renewable energy generation</li> <li>PPE's revision and exam techniques.</li> </ul>	Core technical principles Sustainability in design People culture and society Production techniques	<ul> <li>Designing and making principles</li> <li>Design strategies</li> <li>Tolerances and allowances</li> <li>Material management cont'd</li> <li>Other non- specialist material commercial Processes</li> <li>Other materials surface treatments and finishes</li> <li>Lamp Project</li> </ul>	<ul> <li>PPE's revision and exam techniques.</li> <li>Core Knowledge:</li> <li>Systems approach to designing</li> <li>Students will begin their Non-Exam Assessment project</li> </ul>
Year 11	<ul> <li>Completion of non-exam assessment:</li> <li>Identifying and investigating design possibilities</li> <li>Brief and specification</li> <li>Generating design ideas</li> <li>Development of design ideas</li> <li>Creating a manufacturing specification</li> </ul>	Completion of non-exam assessment: PPE preparation Analysing and evaluating Realising design ideas	<ul> <li>Completion of non- exam assessment:</li> <li>Realising Design ideas (making major product)</li> <li>Problem solving</li> <li>Evaluation of practical work and Modifying designs</li> </ul>	<ul> <li>Pre public exam preparation:</li> <li>Follow up gaps in knowledge from PPE.</li> <li>Final Summer exam revision</li> </ul>	Consolidation of learning and focus on revision	

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✓ Learning, working, and succeeding together