

KS5 YEARS 12 & 13 DESIGN AND TECHNOLOGY 2023/2024

YEAR	TERM 1 (Autumn)	TERM 2 (Spring)	TERM 3 (Summer)
YEAR 12	<p>THEORY: Topic 1: materials Topic 2: performance characteristics of materials</p> <p>PRACTICAL: <i>Workshop:</i> skills lathe, centre lathe, milling laser cutter</p>	<p>THEORY: Topic 3: processes and techniques Topic 4: digital technologies</p> <p>PRACTICAL: <i>Design and make tasks:</i> Sketching and modelling</p>	<p>THEORY: Topic 5: factors influencing the development of products Topic 6: effects of technological developments</p> <p>PRACTICAL: Identification and investigation of a design possibility</p>
YEAR 13	<p>THEORY: Topic 7: potential hazards and risk assessment Topic 8: features of manufacturing industries</p> <p>PRACTICAL:</p> <ul style="list-style-type: none"> • Investigation of client/end user needs, wants and values • Research and production of a specification • Design ideas • Development of a design idea • Final design solution • Review of development and final design • Communication of ideas 	<p>THEORY: Topic 9: designing for maintenance and the cleaner environment Topic 10: current legislation</p> <p>PRACTICAL:</p> <ul style="list-style-type: none"> • Design manufacture and realisation of a final prototype (including tools and equipment, quality and accuracy) • Testing • Evaluation 	<p>THEORY: Topic 11: information handling, modelling, forward planning Topic 12: further processes and techniques</p> <p>PRACTICAL:</p> <ul style="list-style-type: none"> • Revision