



Topic	Learning Objectives	Key Vocabulary	Learning Sequence	Linked Learning	Home Learning
<p>Non-Exam Assessment (NEA) worth 50% of final GCSE grade:</p> <p>Research</p> <p>Design brief and specification</p>	<p>To investigate the chosen context and justify findings and their importance in the project.</p> <p>To write a detailed design brief and fully justified specification.</p>	<p>Design brief</p> <p>Design specification</p> <p>Market research</p> <p>ACCESS FM</p>	<p>Students will identify, investigate and outline design possibilities to address the needs and wants of their target user and the requirements of their chosen context.</p> <p>Students will develop detailed questionnaires, analyse the results in detail, speak to companies, investigate existing products and evaluate each step of their research process.</p> <p>Students will write their own detailed brief and specification.</p>	<p>English - comprehension of research, editing important information, analysing facts, drawing own conclusions, extended writing.</p> <p>Maths - measurements and sizing, anthropometrics</p> <p>Science - materials properties and material capabilities research</p>	<p>Exam questions</p> <p>Intervention/revision session attendance.</p>
<p>NEA:</p> <p>Initial designs</p> <p>Testing and feedback</p>	<p>To develop a wide range of unique, innovative and fit for purpose designs that fulfil target user's needs and wants.</p> <p>To utilise extensive testing results and feedback to develop a better product.</p>	<p>Innovation</p> <p>Creativity</p> <p>Visualising</p>	<p>Students will design a wide range of initial products that are fit for purpose and fulfil their brief and specification.</p> <p>Students will frequently speak with their target users to gain feedback and continually develop their ideas using a solid iterative approach.</p>	<p>Art - creativity, style, form</p> <p>History - past design eras and their context in history</p>	<p>Exam questions</p> <p>Intervention/revision session attendance.</p>
<p>NEA:</p> <p>Iterations</p> <p>Functional prototyping</p>	<p>To uphold a fully iterative approach to designing and prototyping.</p> <p>To use a variety of prototyping methods, mechanisms, materials and technical knowledge to make a fully functional first draft of your finished product.</p>	<p>Iterative</p> <p>Development</p> <p>Function</p> <p>Aesthetics</p> <p>Testing</p>	<p>Students will build precise and functional prototypes of their most successful design to fulfil a need or gap in the real-world market.</p> <p>Students will test their prototype in use and will develop and evolve.</p> <p>Evaluation and analysis of their own work must be continuous.</p>	<p>Maths - translating 2D sketches to 3D proportional prototypes.</p> <p>Art - understanding form and style</p>	<p>Exam questions</p> <p>Intervention/revision session attendance.</p>



Topic	Learning Objectives	Key Vocabulary	Learning Sequence	Linked Learning	Home Learning
<p>Non-Exam Assessment (NEA) worth 50% of final GCSE grade:</p> <p>Prototype building</p>	<p>To use a variety of prototyping methods, mechanisms, materials and technical knowledge to make a fully functional first draft of your finished product.</p> <p>To understand the importance of modelling for designers and manufacturers.</p>	<p>Iterative Development Draft Prototype</p>	<p>Students will continue to build precise and functional prototypes of their most successful design to fulfil a need or gap in the real-world market.</p> <p>Students will test their prototype in use and will develop and evolve.</p> <p>Evaluation and analysis of their own work must be continuous.</p>	<p>Maths - translating 2D sketches to 3D proportional prototypes. Analysing data.</p> <p>Art - understanding form and style</p>	<p>Exam questions</p> <p>Intervention/revision session attendance.</p>
<p>NEA:</p> <p>Testing in use</p>	<p>To develop accurate tests to perform on 3D model to see if it is fit for purpose.</p> <p>To record results of testing and feedback from third parties.</p> <p>To evaluate findings of testing and propose needed developments to initial idea.</p>	<p>Testing Analysis Feedback Develop Iterative Justified</p>	<p>Students will test their modelled prototype with third parties and obtain feedback to improve their products.</p> <p>Students will evaluate their findings and create a step-by-step brocess of improvement and quality control.</p>	<p>English - Developing surveys and questionnaires.</p> <p>Maths - Analysing data.</p> <p>Art - understanding form and style. Looking at existing artists and designers.</p>	<p>Exam questions</p> <p>Intervention/revision session attendance.</p>
<p>NEA:</p> <p>Developing ideas</p>	<p>To action findings from testing and apply to the working model.</p> <p>To repeat the testing stages, using an iterative approach, to ensure the end prototype is the most effective solution possible.</p>	<p>Development Iteration Target user needs Specification Criteria</p>	<p>Students will continually test, evaluate and assess their prototype at each stage of development.</p> <p>This is an on-going, iterative cycle of design, test, adapt, repeat.</p> <p>Students will repeat this developmental and evaluative process until a final prototype is established.</p>	<p>Maths - translating 2D sketches to 3D proportional prototypes. Analysing data.</p> <p>Art - understanding form and style.</p>	<p>Exam questions</p> <p>Intervention/revision session attendance.</p>