

# Year 10 Curriculum Overview

## Design & Technology

Term	Theory	Practical
<b>Autumn 1</b>	<b>Specialist Technical Principles</b> Forces and Stresses Carbon Footprint and Greenhouse Gases The 6 R's Scale of Production Improving Functionality	<b>Model Me</b> <b>You will research an existing product and make a model of an exact replica using a range of modelling materials</b> Research – Existing Products Product Analysis Importance of Prototyping Making Schedules Making Principles
<b>Autumn 2</b>	<b>Timbers</b> Forestry Management Conservation and Seasoning Common Faults Deforestation Manufactured Boards Making Principles with Timber Quality Control Surface Treatments and Finishes	<b>Bird BnB</b> <b>You will Design and Make a Bird Box Hotel based around a classic bird box shape which you will adapt</b> Research – Existing Products The use of AI Initial Sketches 3D Design
<b>Spring 1</b>	<b>Designing Principles</b> Types of Research Ergonomics Anthropometrics Design Brief and Specification Modelling Types of Design The Work of Others	<b>Bird BnB - Continued</b> Following a Plan Wood Joints Making Principles Evaluation
<b>Spring 2</b>	<b>Making Principles</b> Material Selection Project Management Reducing Waste Datum Points – CAM Health and Safety Risk Assessment Writing Material Application Methods	<b>Specialist Making Techniques</b> <b>You will learn a number of specialist practical skills which we may not have covered within our past projects</b> Addition Techniques Subtraction Techniques Deforming Techniques
<b>Summer 1</b>	<b>NEA – Coursework</b> <b>Students will be given a specific Context from the exam board (AQA) and will independently produce a portfolio around a product of their choice</b> Section A - Research	
<b>Summer 2</b>	<b>NEA – Coursework – Continued</b> Section A – Research – <i>Continued</i> Section B – Design Brief and Specification	