

# Design and Technology

## Introduction

Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise. Our students will study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. Science and Maths skills will be taught alongside the courses to apply during the design and make process.

## Curriculum Information: Key Stage 3

The units of study for Key Stage 3 are outlined below:

Year 7	Year 8	Year 9
<b>Mini Projects</b>  Students will cover 3 projects based on difference specialisms including Graphics, Textiles and resistant materials.	<b>Speaker Project</b>  All students complete a project with a wide ranges of materials and processes. The project will involve, fabrics, timbers, electronics and graphic communication with a focus on CAD/CAM.	<b>Dragons Den</b>  All students will take part in a live project which involves designing and making a new product to sell. There is a huge focus on team work where students have to manage their own design process, budget, and manufacturing to sell at a final event. The profit made is theirs to keep. All aspects of the design industry are taught during this project building on their knowledge from the last two years.

## Curriculum Information: Key Stage 4

The units/areas of study for Key Stage 4 are outlined below:

Unit 1 - Exam 50% of GCSE
What's assessed <ul style="list-style-type: none"><li>• Core technical principles</li><li>• Specialist technical principles</li><li>• Designing and making principles</li></ul>
Unit 2 - Non Examined Assessment (NEA) 50% of GCSE
What's assessed  Practical application of: <ul style="list-style-type: none"><li>• Core technical principles</li><li>• Specialist technical principles</li><li>• Designing and making principles</li></ul>

## Curriculum Information:

### Key Stage 5 Product Design



Unit 1	
What's assessed: Technical principles	How it's assessed: <ul style="list-style-type: none"><li>• Written exam: 2.5 hours</li><li>• 120 marks</li><li>• 30% of A-level</li></ul>
Unit 2	
What's assessed: Designing and making principles	How it's assessed: <ul style="list-style-type: none"><li>• Written exam: 1.5 hours</li><li>• 80 marks</li><li>• 20% of A-level</li></ul>
Unit 3	
What's assessed: Practical application of technical principles, designing and making principles.	How it's assessed: <ul style="list-style-type: none"><li>• Substantial design and make project</li><li>• 100 marks</li><li>• 50% of A-level</li></ul>

