

# Design & Technology

Examination Board: AQA

Specification No: 8552

QAN Code: 603/0984/2

## Course Description

GCSE 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.

Students will study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth.

The GCSE Design and Technology specification sets out the knowledge, understanding and skills required to undertake the iterative design process of exploring, creating and evaluating. The majority of the specification will be delivered through the practical application of this knowledge and understanding.

## How will you learn?

Topics and themes have been selected and developed to best meet the needs of the learners, and to fit the requirements of the specification.

The Specification has split the subject content into three sections as follows:

- Core technical principles;
- Specialist technical principles;
- Designing and making principles;

In order to make effective design choices students will need a breadth of core technical knowledge and understanding that consists of:

- new and emerging technologies;
- energy generation and storage;
- developments in new materials;
- systems approach to designing;
- mechanical devices;
- materials and their working properties.

In addition to the core technical principles, all students should develop an in-depth knowledge and understanding of the following specialist technical principles:

- selection of materials or components;
- forces and stresses;
- ecological and social footprint;
- sources and origins;
- using and working with materials;
- stock forms, types and sizes;
- scales of production;
- specialist techniques and processes;
- surface treatments and finishes.

## Method of Assessment

This qualification is linear. Linear means that students will sit all their exams and submit all their non-exam assessment at the end of the course.

How it's assessed:

- Written exam: 2 hours – 100 marks – 50% of the overall grade
- Non-exam assessment (NEA): 30–35 hours approx. – 100 marks – 50% of the overall grade

NEA work will be monitored and formally assessed by classroom teachers. This in turn will be moderated within the school and a sample will be requested by the exam board to ensure the process has been carried out accurately and fairly.

Pathways after Year 11	
Training Pathways	Career Routes
<p>Students can progress from this qualification to a number of different academic and vocational qualifications:</p> <p><b>A Level</b> Design &amp; Technology : Design Engineering</p> <p><b>BTEC Nationals/Cambridge Technicals</b> Engineering Principles in Engineering and engineering business Systems control in engineering Engineering manufacture</p>	<p>Design &amp; Technology will inspire and equip you with the confidence to use skills that are relevant to engineering, manufacturing, and process and control sectors.</p> <p>By developing applied knowledge and practical skills, this course will help give students the opportunity to progress on to A Levels, or equivalent, an apprenticeship or university.</p> <p>You'll develop a range of skills to help you succeed not only in the workplace but in other subjects too. These skills include:</p> <ul style="list-style-type: none"><li>• creative thinking</li><li>• analytical skills</li><li>• problem solving</li><li>• research and planning</li></ul>