# Design & Technology

#### Course Title:

# GCSE Design and Technology AQA

### Brief description of course

Pupils will get to an understanding of the skills required to undertake the design process by exploring the work of others, creating and developing design solutions, manufacturing in a range of materials and evaluating against product success criteria. Pupils will undertake a variety of design and making tasks alongside studying the subject content which looks at topics such as sustainability, material properties and processing, design history and quality control.

Pupils may opt to take the subject with either a focus on **Product Design (Options block A)** or **Graphics (Options block B)**, only <u>one</u> of these areas can be taken within the pupil's final selection of subjects. The course theory content and end of year 11 examination, which counts for 50% of the course grade, is split into three sections: All students will study sections 1 and 3, the core technical principles and designing & making principles; section 2 focuses on specialist technical principles which is timbers for product design pupils and paper & board for graphics pupils.

The exam structure has a short multiple choice and short answer section on core technical principles, longer written answer questions - which include the use of diagrams on materials and processes (based on a specialist technical principle area), and longer written answers to designing and making principles which include some elements of maths and science understanding.

The Non-Exam Assessment (NEA) also has a value of 50% and comprises of an A3 portfolio which documents the pupil's progress through a design and make project based on an exam board supplied context. Contexts are released in June of year 10 when work on the NEA will begin, with an expected completion time of February half term of year 11. It will be expected to be approximately 20 pages of A3, product models and final outcome.

#### Year 10 & Year 11

This course is suitable for pupils who have an avid interest in design and problem solving through creating; who wish to develop their skills in design technology to the next level. Pupils will cover the majority of the course content within year 10 through a variety of project based tasks aimed at developing their understanding of how different properties of materials and components are used in commercial products, how properties influence use and affect performance and how products are produced in different volumes.

Pupils will develop skills within visual communication using paper and pencil, CAD and physical modelling, following the iterative design process. Within the workshop and studio pupils will use a range of tools, equipment and processes, including CAM to shape, fabricate, construct and assemble high quality prototypes.

## Progression

The course can lead on to taking AS/A2 level in design technology.

Routes into: industrial design, interior design, graphic design, automotive design, engineering, architecture, textile design, fashion design and product design.