



GCSE Design & Technology

– 2hr or 3hr Option

Wales High School - Year 9 Subject Options

Subject Content - What will you be doing?

GCSE Design and Technology gives you the opportunity to work within a range of design subject areas such as Product Design, Graphic Design, Electronics and Textiles in one qualification. You will be developing your creativity and problem solving skills.

Your qualification consists of:

- **2 hour exam** - Designing and making (50%), core (20%) and specialist principals (30%) which makes up 50% of the overall qualification.
- **Coursework** - during 30 hours of guided controlled assessment you will complete a design and manufacture assignment; which makes up 50% of the overall qualification.

Designing and making principles

Design and Technology activities take place within a wide range of contexts, this course will give you the skills to be able to carry out practical tasks and understand where they can be applied in industry. Problem solving and development through prototypes is a big part of understanding and the application of this aspect of the course. You will need to gain and apply knowledge and understanding of designing and making principles. This will be done through the following areas:

- Research and investigation
- Environmental, social and economic challenge
- Looking at what is already available to buy and design influences
- Designing and developing ideas through sketching
- Modelling using a range of materials inc. foam and smart materials
- Learning how to use workshop tools and equipment

Core technical principles

To be able to make design decisions you will learn through seeing a variety of technical principals in context. You will look at:

- New and emerging technologies
- Energy storage and generation
- Modern and smart materials
- Materials and their working properties

Specialist technical principles

In addition to the core technical principles, there are a range of specialist principals you will learn about and need to understand. This will help you when selecting materials to design with, their properties and impact on the environment.

There will be much classroom led theory based lessons to give you a full understanding of the course. But where possible the content will be taught with application working in a range of materials including; polymers, metals, wood, electronics and textiles.

Key Points about the Subject

This academic GCSE in Design & Technology encompasses problem solving within the broad and developing design, technology and engineering world; working in the subject's range of disciplines.

This GCSE will fulfil entry requirements for academic and vocational study post-16 linking to any design and STEM related careers.

Who can I speak to for more information?

Mrs D Swain - Head of Design & Technology ds@waleshigh.com

Mrs Tidswell- Teacher of Design & Technology