
Course highlights:

Design and technology offers students the opportunity to identify and solve real problems by designing and making products or systems. Through studying GCSE Design and Technology, students will be prepared to participate confidently and successfully in an increasingly technological world; and be aware of, and learn from, wider influences on design and technology, including historical, social/cultural, environmental and economic factors.

Learning styles used:

Students require core knowledge and understanding in technical principles which are studied across five topic areas:

- design and technology and our world
- smart materials
- electronic systems and programmable components
- mechanical components and devices
- materials

Students are also required to show in-depth knowledge and understanding of at least one specific material area to support their design and make activities.

How is it assessed?**Component 1: Design and Technology in the 21st Century: Written examination: 2 hours : 50% of qualification**

A mix of short answer, structured and extended writing questions assessing candidates' knowledge and understanding of:

- technical principles
- designing and making principles

along with their ability to

- analyse and evaluate design decisions and wider issues in design and technology.

Component 2: Design and make task: Non-exam assessment: approximately 35 hours: 50% of qualification

A sustained design and make task, based on a contextual challenge set by the exam board, assessing candidates' ability to:

- identify, investigate and outline design possibilities
- design and make prototypes
- analyse and evaluate design decisions and wider issues in design and technology.

Other Information:

This Design and Technology GCSE offers learners the opportunity to work with a wide range of materials and to produce high quality items with commercial potential. The learners will be focusing on examples of good design to help inspire them and develop innovative ideas of their own.

Careers available from this course:

Careers aspirations from this course can develop into careers such as Industrial Design, Graphic Design, Architecture, Fashion Design, Game Design, Interior Design, Engineering, Teaching and many more.

Employability skills

Independent enquiry is used to identify suitable research to carry out.

Creative thinking is essential when generating new and interesting ideas.

Reflective thinking is applied when evaluating design ideas at every stage of the design process

Teamwork is practised through the design and manufacture of items to be batch produced within a group.

Self-management is needed when modifying ideas in the light of on-going analysis and evaluation.

Effective participation is practised through understanding the impact and responsibility that designers have.

Course combinations:

This course complements other Creativity and Design subjects, such as GCSE Art & Design.

Please see **Mrs England (D3)** to discuss this course.