

GCSE DESIGN AND TECHNOLOGY

Why choose WJEC GCSE Design and Technology?

Through studying GCSE Design and Technology, you 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.

The course will offer you the opportunity to solve real problems by designing and making products or systems.

What will I study?

You will study the following 2 areas:

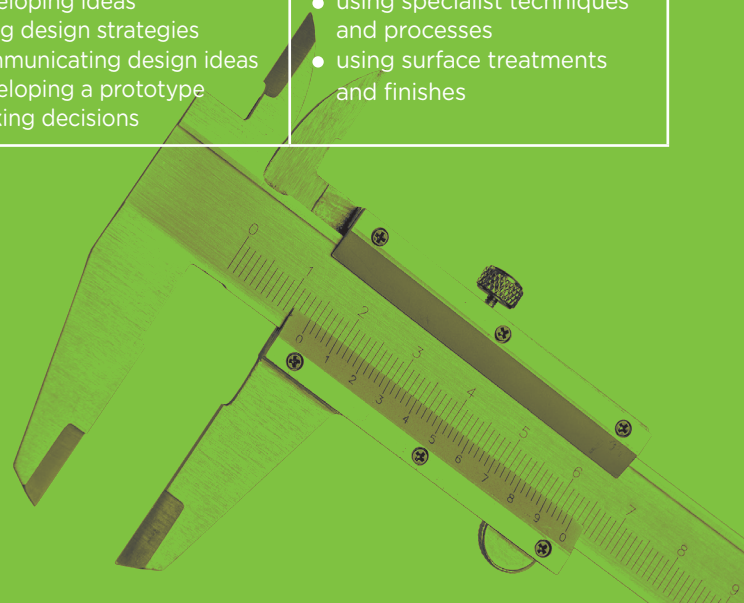
- Knowledge and Understanding
- Skills

This will allow you to develop knowledge and understanding of design and technology, its impact on daily life, and develop a broad understanding of materials, systems and processes.

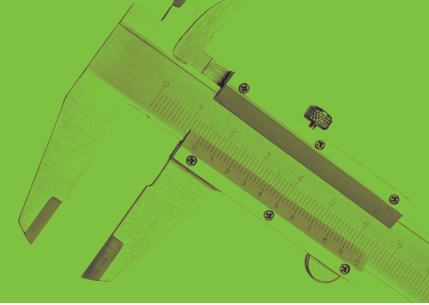
Each of the above areas is further divided into

- Core Content
- In-Depth Content

| Knowledge and Understanding | |
|--|--|
| Core Content | In-Depth Content |
| <p>(you will study all the content in these 6 areas)</p> <ul style="list-style-type: none"> • impact of new and emerging technologies • evaluation of new and emerging technologies • energy • modern and smart materials • ecological and social footprint • investigating and analysing the work of others | <p>(you will study one of these endorsed areas)</p> <ul style="list-style-type: none"> • engineering design • fashion and textiles • product design |
| Skills | |
| Core Content | In-Depth Content |
| <p>(You will study all the content in these 9 areas)</p> <ul style="list-style-type: none"> • understanding design and technology practice takes place within contexts • identifying and understanding user needs • writing a design brief and specifications • investigating challenges • developing ideas • using design strategies • communicating design ideas • developing a prototype • making decisions | <p>(You will cover all of the content in these 4 areas, in relation to one of the three endorsed areas identified in the in-depth content section of Knowledge and understanding).</p> <ul style="list-style-type: none"> • selecting and working with materials and components • marking out • using specialist techniques and processes • using surface treatments and finishes |



GCSE DESIGN AND TECHNOLOGY



What skills will I develop?

Studying Design and Technology will enable you to develop a wide range of transferable skills for further education, work and life:

- Creative and innovative thinking
- Use of imagination and experimentation
- Ability to critique and refine your own ideas
- Knowledge and Understanding of all design and technological activity and influences
- Decision making skills
- Develop high quality, imaginative and functional prototypes
- Communication skills

How will I be assessed?

There is one 2 hour written examination (Unit 1) at GCSE worth 50% of the qualification; the remaining 50% will be a Design and Make task (NEA) (Unit 2)

Unit 1: Design and Technology in the 21st Century

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

- engineering design
- fashion and textiles
- product design.

Unit 2: Design and Make Task

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

- identify, investigate, analyse and outline design possibilities
- design and make prototypes and evaluate their fitness for purpose.

Careers with Design and Technology

There are many career paths that Design and Technology could take you down; from Carpenter to Architect all the way to Aerospace engineer.

Here are just some of the industries and jobs that are facilitated by a qualification in Design and Technology:

- **ART AND DESIGN** - Graphic Designer, Sculptor, Gallery Curator
- **IT AND THE INTERNET** - Games Developer, Software Programmer, Network Engineer, Web Designer
- **FAST CONSUMER GOODS** - Mechanical Engineer, Product Designer, Market Researcher

- **FASHION AND BEAUTY** - Fashion Designer, Dressmaker, Hairdresser
- **CONSTRUCTION** - Tradesperson, Architect, Construction Manager
- **MANUFACTURING** - Food Technologist, Manufacturing Engineer, Manufacturing Manager

You could of course carry on studying on Design and Technology at an advanced level, which would allow you the opportunity to study a range of courses at university..