

# Design Technology at KS4

## GCSE Design & Technology

GCSE Design and Technology will prepare you to confidently and successfully take part in an increasingly technological world. You will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors.

### Assessment

Unit 1 Core technical principles & unit 2 Specialist technical principles is assessed through a 2hr written exam 50% of GCSE

Unit 3 Designing and making principles will be a controlled assessment 30-35 hours 50% of GCSE

### What Will I gain?

You will get the opportunity to work creatively when designing and making and apply technical and practical expertise. You will study core technical and designing and making principles, including a broad range of design processes, CAD/CAM, materials techniques and equipment. you will also have the opportunity to study specialist technical principles in greater depth.



## BTEC Tech Award Design Technology

If you are on the BTEC course, you will gain knowledge and technical skills through vocational contexts by studying the knowledge, skills and processes related to investigating, exploring and creating design work. The BTEC course has an emphasis on practical work.

### Assessment

The three components focus on the assessment of knowledge, skills and practices. These are all essential to developing a basis for progression and, therefore, learners need to achieve all components to achieve the qualification.

Component number	Component title	GLH	Level	How assessed
1	Generating Ideas in Art and Design	36	1/2	Internal
2	Develop Practical Skills in Art and Design	36	1/2	Internal
3	Responding to a Client Brief	48	1/2	External Synoptic

# Design and Technology Pathways

*'Design and Technology is about making things that people want and that work well. Creating these things is hugely exciting: it is an inventive, fun activity.'* (James Dyson)

Dentistry Video Game Design



Fashion Design

Engineering

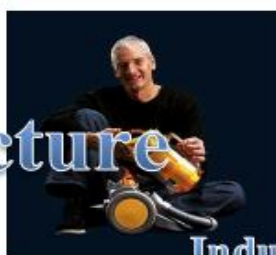
Food Technology

Skills needed for hands on jobs

Interior Design Product Design



Architecture



Industrial Design

Graphic Design



## Related to Product Design or development

- Architecture
- Construction: technical work and management
- Civil engineering
- Engineering construction
- Website design and management
- Software engineering
- Display and exhibition design
- Fashion design
- Graphic design
- Interior design
- Product design
- ~~Signmaking~~
- Textile and surface design
- Designer craftspeople
- Engineering – areas of work
- Engineering – qualifications and training
- Design engineering
- Medical engineering
- Electrical engineering
- Electronics engineering
- Naval architecture
- Automotive engineering and design
- Landscape architecture, management and science
- Packaging
- Jobs in the food and drink industries
- Jobs and careers in textiles
- Market research
- Marketing
- Food science and technology

## Careers where you make Or mend things

- Practical work
- Jobs in construction
- Bricklaying
- Carpentry and joinery
- Stonemason ICT: sales and technical support
- Modelmaking
- Craft bookbinding and conservation
- Land-based engineering
- Office equipment servicing
- Domestic appliance servicing
- Engineering maintenance
- Making and repairing clocks and watches
- Shipbuilding and boatbuilding
- Rural crafts
- Dental technology
- Conservation of works of art
- Working in the clothing industry
- Cabinetmaking, furniture-making and design

## Other Careers

- Cooking and food preparation
- Work in multimedia and interactive media
- Teaching – an introduction to the work and training
- Security systems installation and locksmithing
- Occupational therapy
- Careers in museums and art galleries
- Special effects work
- Technical writing
- Publishing
- Careers in theatre
- Trading standards and consumer protection
- Home economist/consumer scientist
- Working for the environment
- Materials science

*There are many careers related to design and technology. They are found across a wide variety of industries ranging from agriculture, engineering and construction to healthcare and the food and drink industries.*

*Such careers can be placed into two broad groups: careers involving **product design and development**, and practical careers where you **make or mend things**.*

*As well as the subject knowledge you gain, studying design and technology helps to develop skills like logical thinking, problem solving, teamworking, research, ICT and planning – which are all useful in many different career areas.*