

Design and Technology Curriculum Map



Design and Technology can lead to careers in carpentry, plumbing, electronics, graphic design and much, much more!

Key Stage 1&2

KS1&2 Aims Design and Technology

The national curriculum for design and technology aims to ensure that all pupils:

Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world

Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users

Critique, evaluate and test their ideas and products and the work of others

Understand and apply the principles of nutrition and learn how to cook.

Key Stage 3

KS3 Aims Design and Technology

The national curriculum for design and technology aims to ensure that all pupils:

Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world

Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users

Critique, evaluate and test their ideas and products and the work of others

Understand and apply the principles of nutrition and learn how to cook.

Key Stage 4

WJEC Entry Level

Design and Modelling: Know how to research features of a product suitable for design work. Be able to create a design brief and specification. Be able to present design ideas.

Making a product: Be able to choose suitable materials for the chosen product. Be able to manufacture their chosen design. Review their manufactured product.

Planning: Know the importance of planning the making of a product. Be able to create a plan of manufacture. Be able to review a plan of manufacture.

Health and Safety: Know about hazard or risks in the workshop environment. Be able to apply health and safety practices.

GCSE Design and Technology

GCSE Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise. Our GCSE allows students to study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth.

Example Projects

Vacuum forming chocolate moulds
Laser cutting Christmas decorations
Pop-up cards

Example Projects

Laser cutting and line bending nightlight
Wood work maze game
Making a model boat or car
USB stick housing
Making games controllers

Example Projects

Independent design and make project:
Speakers
Photo frame
Lamp
Jewelry stand/box

Extras!

We also offer extra-curricular opportunities to our outreach students and offer support in teaching practical subjects to our smaller WRAP bases.

All our projects explore what is needed to design and make a project, from market research to design and development and making processes/materials to evaluating what has been done.



Art and Design Curriculum Map



Art and Design can lead to careers in fashion, games design, illustration, photography and film arts.

Key Stage 1&2

KS1&2 Aims Design and Technology

The national curriculum for art and design aims to ensure that all pupils: Produce creative work, exploring their ideas and recording their experiences become proficient in drawing, painting, sculpture and other art, craft and design techniques

Evaluate and analyse creative works using the language of art, craft and design

Know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.

Extras!

We also offer extra-curricular opportunities to our outreach students and offer support in teaching practical subjects to our smaller WRAP bases.

Example Projects

Shape printing
Mixed media project
Illustration techniques

Key Stage 3

KS3 Aims Design and Technology

The national curriculum for art and design aims to ensure that all pupils: Produce creative work, exploring their ideas and recording their experiences become proficient in drawing, painting, sculpture and other art, craft and design techniques

Evaluate and analyse creative works using the language of art, craft and design

Know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.

Example Projects

Marbling
Collage
3D Modelling

Key Stage 4

WJEC Entry Level

Painting and Drawing: Be able to research information and ideas appropriate to painting and drawing work. Be able to develop ideas for a painting and drawing outcome using appropriate materials, techniques and processes. Be able to produce and present a painting and drawing outcome in response to a task or theme.

Printmaking: Be able to research information and ideas appropriate to printmaking. Be able to develop ideas for a printmaking outcome using appropriate materials, techniques and processes. Be able to produce and present a printmaking outcome in response to a task or theme. Textiles: Be able to research information and ideas appropriate to textile design. Be able to develop ideas for a textiles outcome using appropriate materials, techniques and processes. Be able to produce and present a textiles outcome in response to a task or theme.

Three Dimensional Studies: Be able to research information and ideas appropriate to three dimensional studies. Be able to develop ideas for a three dimensional outcome using appropriate materials, techniques and processes. Be able to produce and present a three dimensional outcome in response to a task or theme.

Example Projects

Mask making
Graffiti art
Mono printing and lino cut

GCSE Art and Design

Students are required to develop knowledge, understanding and skills relevant to their chosen title through integrated practical, critical and contextual study that encourages direct engagement with original works and practice. Students may work in any medium or combination of media. They can work entirely in digital media or entirely non-digital media, or in a mixture of both, provided the aims and assessment objectives are met. Students must learn through practical experience and demonstrate knowledge and understanding of sources that inform their creative intentions. Intentions should be realised through purposeful engagement with visual language, visual concepts, media, materials and the application of appropriate techniques and working methods. Students must develop and apply relevant subject-specific skills in order to use visual language to communicate personal ideas, meanings and responses. Students must, over time, reflect critically upon their creative journey and its effectiveness in relation to the realisation of personal intentions. The following definitions of art, craft and design highlight the distinguishing characteristics of each domain. These domains can be addressed separately or in an integrated way depending upon the intentions and purposes of work undertaken.

