



SUBJECT & QUALIFICATION: GCSE Design and Technology

Why is the study of Product Design DT Important?

Design and Technological activities provide students with a unique learning experience that cannot be replicated through other educational methods. Here are some key aspects of learning that Product Design pupils can gain:

Creativity and Innovation: DT activities encourage students to think creatively and come up with innovative solutions to real-world problems.

Through hands-on projects, they learn to generate and develop ideas, explore different design possibilities, and think outside the box.

Problem-Solving Skills: DT pupils learn how to identify and analyse problems, break them down into manageable components, and devise effective solutions.

This process involves critical thinking, logical reasoning, and evaluating different options to find the most suitable outcome.

Practical Application of Knowledge: DT activities enable students to apply theoretical knowledge from various subjects, such as mathematics, science, and engineering, to practical scenarios. This integration helps them understand the relevance and real-world applications of the concepts they learn in other disciplines.

Collaboration and Communication: DT projects often involve teamwork, allowing students to develop effective communication and collaboration skills. They learn how to work in groups, share ideas, delegate tasks, and resolve conflicts.

Overall, DT activities provide a holistic learning experience that combines practical skills, critical thinking, creativity, and problem-solving. The hands-on nature of these activities allows students to develop unique perspectives, gain valuable insights, and acquire skills that cannot be fully grasped through theoretical instruction alone.

What skills will the study of Design and Technology teach you?

You will gain important interpersonal skills necessary for future professional environments.

Hands-On Skills Development: DT activities offer hands-on experiences where students can develop practical skills, such as using tools, working with materials, prototyping, and construction techniques.

These skills include craftsmanship, precision, attention to detail, and the ability to transform ideas into tangible products.

Teamwork allows development of effective communication and collaboration skills.

We often find that students build strong interpersonal skills such as independence, resilience, teamwork, communication, aspiration and problem solving.



OPEN ELEMENT SUBJECT OVERVIEW

What will you know and understand from your study of Design and Technology?

- Product Design has something for all Students, encouraging them to aim high, understand the iterative process, making mistakes is part of the journey, allowing students to reflect and understand the problem, consider solutions and and apply alternative ideas.
- Our curriculum is regularly reviewed and developed to ensure that we are delivering the highest quality of information which is current and up to date.

How can you deepen your understanding of Design and Technology?

- Coursework book
- Enrichment sessions
- Independent study
- Completing all work in lessons
- Regular revision schedule
- Good attendance

How are you assessed in Design and Technology?

- Component 1 - Exam based on Core & Specialist Knowledge (50%)
- Component 2 - Portfolio Design & Make (50%)

Key Assessment Objectives

The key learning objectives for Design and Technology are:

LO1 or AO1: Identify, investigate and outline design possibilities to address needs and wants

LO2 or AO2: Design and make prototypes that are fit for purpose

LO3 or AO3: Analyse and evaluate:

- Design decision and outcomes including for prototypes made by themselves and others
- Wider issues in design and technology



OPEN ELEMENT SUBJECT OVERVIEW

LO4 or AO4: Demonstrate and apply knowledge and understanding of:

- Technical principles
- Designing and making principles

Coursework requirements

- Research
- Analysis
- Design
- Making
- Evaluation
- Theoretical knowledge

How can Design & Technology support your future?

By studying design and technology, you will be able to build up your creativity, problem solving, planning, and evaluation skills. Since many projects are done via group work, you will also gain communication and teamwork skills. Not to mention a great work out of your personal creativity!

Study of Design and Technology can lead to a wide range of careers:

If you decide to study Design and Technology there are a wide range of careers available such as: Graphic Designer, Product Designer, Carpenter, Joiner, Electrical/Mechanical Engineering, Architect, Fashion Designer, Manufacturing Engineer.

INSERT SUBJECT NAME Course Overview

Term	Year 1	Year 2
Autumn 1	Theory - Core knowledge - Unit 1 Online portfolio Practical	Theory - Specialist knowledge Online portfolio
Autumn 2	Theory - Core knowledge - Unit 2 Online portfolio Practical	Theory - Specialist knowledge Online portfolio Practical
Spring 1	Theory - Core knowledge - Unit 3 Online portfolio Practical	Theory - Specialist knowledge Online portfolio Practical



OPEN ELEMENT SUBJECT OVERVIEW

Spring 2	Theory - Core knowledge - Unit 4 Online portfolio Practical	Theory - Specialist knowledge Online portfolio Practical
Summer 1	Theory - Core knowledge - Unit 5 Online portfolio Practical	Theory - Specialist knowledge Online portfolio Practical
Summer 2	Theory - Core knowledge - Unit 6 & 7 Online portfolio Practical	Revision Exam