



BRANNEL SCHOOL

PROGRAMME OF STUDY FOR DESIGN TECHNOLOGY

Purpose of Study from the National Curriculum

Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, students design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Students learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Aims from the National Curriculum

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

- 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.

Studying Design Technology at Brannel School

Design Technology has a deep rooted history within the school. It allows the students to explore many types of materials and allows them to use various machines to develop innovative products. Design Technology is an important subject that brings Mathematics, English, Science and other curriculum areas to life, by blending these curriculums together to create a model prototype or full working product.

Design Technology has various subjects under its umbrella and the following are taught at Brannel School.

Electronics, Product Design, Resistant Materials, Catering, Food Technology and Graphics.

Curriculum Provision for Design Technology at Brannel School

Students at Brannel School study Design Technology during Key Stage 3 and 4. They receive the following number of 75 minutes sessions per fortnight during each cycle of the two week timetable.

Year	No of 75 minute lessons per fortnight
7	3
8	3
9	4
10	The above subjects are delivered as an option and have 4 lessons.
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Termly Programmes

The programmes indicate the sequence of topics which students study in Design Technology and allows parents/carers, teachers and students to understand the structure of the learning over the course of the length of study. These programmes are then planned in more detail for teachers to use as schemes of work when planning their teaching.

During Years 7 & 8 students will complete all of the modules, to allow them to gain a broad understanding of Design Technology. In Year 9 students select to follow two Art Design Technology areas. This enables them to focus on the skills required leading up to selecting their GCSE option courses.

Please note that the Autumn Term begins when the new academic year timetable starts in June.

Year 7	
Rotations	Electronics – Alarms and basic components
	Product Design – Decorative Mirror Project
	Food – Basic meal preparation and Food Safety
Year 8	
Rotations	Electronics – PIC Microcontrollers
	Product Design – Jewellery Casting and wooden presentation cases
	Food – Full savoury meal preparation
Year 9	
Rotations	Electronics – PIC Microcontrollers, develop a scaled warehouse robot
	Product Design – Jewellery Casting and wooden presentation cases
	Resistant Materials – Laminating wood
	CAD/CAM – Developing techniques in 3D design
	Food – Full savoury meal preparation
Year 10	
Option Subjects	Electronics
	Product Design
	Resistant Materials
	Catering
Year 11	
Option Subjects	Electronics
	Product Design
	Resistant Materials
	Catering