

Curriculum Statement of Intent for DT KS3

Purpose of Study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils 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. Pupils 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.

Core concepts and principles of progression

Through a variety of creative and practical activities, pupils are taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They work in a range of domestic and local contexts [for example, the home, health, leisure and culture], and industrial contexts [for example, engineering, manufacturing, construction, food, energy and fashion. When designing and making, pupils are taught to:

Aims/Outcomes

Through our carefully sequenced and ambitious curriculum our students will:

KS3 DT

Design

- ♣ use research and exploration, such as the study of different cultures, to identify and understand user needs
- ♣ identify and solve their own design problems and understand how to reformulate problems given to them
- ♣ develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations
- ♣ develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools

Make

- ♣ select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture
- ♣ select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties

Evaluate

- ♣ analyse the work of past and present professionals and others to develop and broaden their understanding
- ♣ investigate new and emerging technologies
- ♣ test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups
- ♣ understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists

Food Technology

Understand and apply the principles of nutrition and health

- ♣ cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet
- ♣ become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes]
- ♣ understand the source, seasonality and characteristics of a broad range of ingredients

[National Curriculum - Design and technology key stages 3 and 4 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)