

Design and Technology Curriculum Map Overview

Please note further information can be found in the Design Technology and Engineering curriculum sequencing document



Key Stage 3 (Years 7, 8 & 9)

Students will study each unit of work for approximately 14 lessons each. Please note that students may study the following units of work in a different order.

Year 7	Unit 1	Unit 2	Unit 3	Unit 4
Design and Technology	Students study a unit of work focusing on: Introduction to DT Skills	Students study a unit of work focusing on: Sunglasses Project	Students study a unit of work focusing on: Phone Case Project	Students study a unit of work focusing on: Food & Nutrition (please refer to Food page of website for details)

Year 8	Unit 1	Unit 2	Unit 3	Unit 4
Design and Technology	Students study a unit of work focusing on: Wooden Letter Project	Students study a unit of work focusing on: Sweet Dispenser Project	Students study a unit of work focusing on: Charity Money Box Project	Students study a unit of work focusing on: Food & Nutrition (please refer to Food page of website for details)

Year 9	Unit 1	Unit 2	Unit 3	Unit 4
Design and Technology	Students study a unit of work focusing on: Night Light Project	Students study a unit of work focusing on: Storage Box Project	Students study a unit of work focusing on: 3D Printing Project	Students study a unit of work focusing on: Food & Nutrition (please refer to Food page of website for details)

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Key Stage 4 (Years 10 & 11)

KS4 Year 10	Half term 1 Autumn 1	Half term 2 Autumn 2	Half term 3 Spring 1	Half term 4 Spring 2	Half term 5 Summer 1	Half term 6 Summer 2
Design and Technology	- New & Emerging Technologies - Energy Generation & Storage - Developments in New Materials	- Systems Approach to Designing - Mechanical Devices	- Materials and their Properties - Forces & Stresses - Ecological & Social Footprint	- Sources & Origins of Materials - Using & Working with Materials - Stock forms, types & sizes	- Scales of Production - Specialist techniques and processes - Surface treatments and finishes.	NEA Release (1 st June)

KS4 Year 10	Half term 1 Autumn 1	Half term 2 Autumn 2	Half term 3 Spring 1	Half term 4 Spring 2	Half term 5 Summer 1	Half term 6 Summer 2
<i>Students study a sequence of lessons developing essential knowledge of:</i>						
Construction	- Construction Sectors - Practical Construction skills - Joinery	- Construction Life Cycle - Practical Construction skills - Joinery	- Types of Structure - Practical Construction skills - Joinery	- Technologies & Materials - Practical Construction skills - Painting & Decorating	- Building Structures - Practical construction skills - Painting & Decorating	- Sustainable Construction - Practical Construction skills - Tiling

KS4 Year 11	Half term 1 Autumn 1	Half term 2 Autumn 2	Half term 3 Spring 1	Half term 4 Spring 2	Half term 5 Summer 1	Half term 6 Summer 2
	<i>Students study a sequence of lessons developing essential knowledge of:</i>					
Design and Technology (GCSE – AQA)	- Identify, investigate and outline design possibilities - Identifying & investigating design possibilities - Producing a design brief & Specification	- Generating design ideas - Develop & refine design ideas - Modelling	- Prototype Production - Prototype refinement - Final artifact production	- Final artifact production - Review against specification - Analysis & evaluation	Revision	Revision

KS4 Year 11	Half term 1 Autumn 1	Half term 2 Autumn 2	Half term 3 Spring 1	Half term 4 Spring 2	Half term 5 Summer 1	Half term 6 Summer 2
	<i>Students study a sequence of lessons developing essential knowledge of:</i>					
Construction (Vocational – EDUQAS)	- Trades in Construction - Planning Construction projects - Undertaking practical Construction skills (Joinery)	- Health and Safety - Planning Construction projects - Undertaking practical Construction skills (Joinery)	- Planning Construction projects - Undertaking practical Construction skills (Painting & Decorating)	- Planning Construction projects - Undertaking practical Construction skills (Tiling)	Revision	Revision

KS4 Year 11	Half term 1 Autumn 1	Half term 2 Autumn 2	Half term 3 Spring 1	Half term 4 Spring 2	Half term 5 Summer 1	Half term 6 Summer 2
	<i>Students study a sequence of lessons developing essential knowledge of:</i>					
Engineering (Vocational – EDUQAS)	- Explore Engineering through interpreting Engineering Drawings - Responding to an Engineering Brief • Materials • Processes • Tolerance	- Explore Engineering through interpreting Engineering Drawings - Responding to an Engineering Brief • Functionality • Interpreting Engineering drawings	- Explore Engineering through interpreting Engineering Drawings - Responding to an Engineering Brief • Manufacturing processes and interpretation of data.	- Explore Engineering through the design process • Materials • Processes • Sketching • Aesthetics • Modelling	- Explore Engineering through interpreting Engineering Drawings - Responding to an Engineering Brief • Producing Ideas & justifying decisions • Producing Engineering Drawings	Revision

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Key Stage 5 (Years 12 & 13)

KS5 Year 12	Half term 1 Autumn 1	Half term 2 Autumn 2	Half term 3 Spring 1	Half term 4 Spring 2	Half term 5 Summer 1	Half term 6 Summer 2
<i>Students study a sequence of lessons developing essential knowledge of:</i>						
Design and Technology (A-Level – AQA)	- Materials and their Application - Performance Characteristics of Materials	- Performance Characteristics of Materials - Forming, Redistribution & Addition Processes	- Forming, Redistribution & Addition Processes - The Use of Finishes - Modern & Industrial Scales of Practice	- Digital Design & Manufacture - The Requirements for Product Design & Developments - Health & Safety	- Protecting Designs & Intellectual Property - Design Considerations - Feasibility Studies	- NEA Section A

OR

KS5 Year 12	Half term 1 Autumn 1	Half term 2 Autumn 2	Half term 3 Spring 1	Half term 4 Spring 2	Half term 5 Summer 1	Half term 6 Summer 2
<i>Students study a sequence of lessons developing essential knowledge of:</i>						
Engineering (BTEC Level 3 – Pearson)	- Engineering Principles (Unit 1) - Delivery of Engineering Processes Safely as a Team (Unit 2)	- Engineering Principles (Unit 1) - Delivery of Engineering Processes Safely as a Team (Unit 2)	- Engineering Principles (Unit 1) - Delivery of Engineering Processes Safely as a Team (Unit 2)	- Engineering Principles (Unit 1) - Delivery of Engineering Processes Safely as a Team (Unit 2)	- Engineering Principles (Unit 1) - Delivery of Engineering Processes Safely as a Team (Unit 2)	- Engineering Product Design and Manufacture (Unit 3)

KS5 Year 13	Half term 1 Autumn 1	Half term 2 Autumn 2	Half term 3 Spring 1	Half term 4 Spring 2	Half term 5 Summer 1	Half term 6 Summer 2
<i>Students study a sequence of lessons developing essential knowledge of:</i>						
Engineering (BTEC Level 3 – Pearson)	- Engineering Principles (Unit 1) - Delivery of Engineering Processes Safely as a Team (Unit 2) - Engineering Product Design and Manufacture (Unit 3) - Computer Aided Design in Engineering (Unit 4)	- Engineering Principles (Unit 1) - Delivery of Engineering Processes Safely as a Team (Unit 2) - Engineering Product Design and Manufacture (Unit 3) - Computer Aided Design in Engineering (Unit 4)	- Delivery of Engineering Processes Safely as a Team (Unit 2) - Engineering Product Design and Manufacture (Unit 3) - Computer Aided Design in Engineering (Unit 4)	- Delivery of Engineering Processes Safely as a Team (Unit 2) - Engineering Product Design and Manufacture (Unit 3) - Computer Aided Design in Engineering (Unit 4)	- Revision for Engineering Principles (Unit 1) Resit	