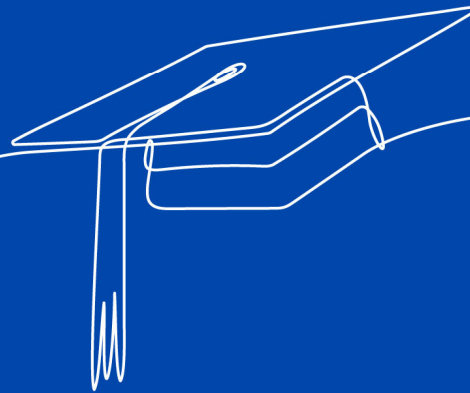




ACHIEVING MORE TOGETHER

Technology curriculum overview



Technology at Sandymoor Ormiston Academy

Key stage 3, Years 7, 8 and 9

Our KS3 Design and Technology curriculum inspires pupils to become creative, confident and innovative thinkers who can solve real-world problems through design. Through a broad curriculum encompassing Design Technology, Food Studies, Textiles and Graphics, pupils develop practical, technical and creative skills while exploring how products and ideas are designed, made and communicated.

Pupils work with a range of materials, ingredients, tools and technologies, learning to research, plan, design, make and evaluate a variety of outcomes. They explore nutrition and healthy eating, textile techniques and fashion influences, graphic communication and branding, and product design, while considering user needs, sustainability and the impact of design on society.

By studying the work of designers, artists, chefs and innovators from diverse backgrounds, pupils gain an understanding of how creativity, technology and culture shape the world around them. Our intent is for pupils to leave KS3 with the confidence, practical life skills and creative thinking needed for a healthy and sustainable future, and with the enthusiasm to pursue further study in Design Technology, Food, Textiles, Graphics and related creative industries.

Key stage 4, Years 10 and 11

Our KS4 DT curriculum is designed to prepare pupils for success in Engineering (NCFE exam board), Creative i-media (Cambridge National), Food (AQA), and Textiles (AQA).

Building on the strong foundations established at Key Stage 3, pupils will develop their knowledge, understanding and practical skills through a range of creative, technical and vocational qualifications, including NCFE Engineering, AQA GCSE Design & Technology: Textiles, AQA GCSE Food Preparation and Nutrition, and Cambridge National Creative iMedia. Pupils will apply core principles within real-world contexts, exploring how historical, social, cultural, environmental and economic factors influence the design, production and communication of products, services and digital media.

Across all specialisms, pupils will work creatively to investigate, design, make and evaluate a range of outcomes. They will develop practical skills using specialist materials, tools, equipment and software, while building creativity, problem-solving, resilience and critical thinking. Through engineering, textiles, food and digital media, pupils will gain both subject-specific knowledge and transferable skills, helping them become confident learners who can communicate ideas and respond to real-world challenges..

By the end of Key Stage 4, pupils will have achieved a recognised qualification and developed the knowledge, creativity and technical skills required for progression into further education, apprenticeships and a wide range of careers within engineering, design, food, digital media and the wider creative and technical industries. Our intent is to equip every learner with the confidence and capability to succeed in an increasingly innovative and technologically driven world.

GCSE course information

Exam board	NCFE
Course	Engineering (603/7006/3)
Specification and resources	NCFE Level 1/2 Technical Award in Engineering NCFE

Exam board	AQA
Course	Food Preparation and Nutrition (8585)
Specification and resources	GCSE Food preparation and Nutrition 8585 Specification Specification At A Glance AQA

Exam board	AQA
Course	Art and Design: Textiles (8204)
Specification and resources	GCSE Art and Design 8204 Specification AQA

Exam board	Cambridge National
Course	Creative I-media (J834)
Specification and resources	Cambridge Nationals - Creative iMedia Level 1/Level 2 - J834

Year 7

Year 7 is a skills-building year focused on introducing pupils to a wide range of processes, equipment, and materials through practical work. Pupils develop foundational knowledge of materials and processes, which is then applied and built upon throughout Key Stage 3. **Students complete four rotations across the year** to experience a range of material areas.

Design and evaluation are taught alongside practical lessons through short, focused activities. Pupils complete simple design tasks that may or may not lead directly to making, supporting continuity and progression. More advanced technical knowledge is developed in Year 8.

Textiles	Resistant Materials	Graphics	Food
Mini monsters	Mechanisms	Typography	Introduction to food

Assessments will take place at the end of each cycle.

Year 8

Textiles	Resistant Materials	Graphics	Food
Sensory Book	Electronics	Technical drawing	Multicultural Food

Assessments will take place at the end of each cycle.

Year 9

Textiles	Resistant Materials	Graphics	Food
Social Action	Sustainability	Computer Aided Design (CAD)	Food choices

Assessments will take place at the end of each cycle.

NCFE Engineering

Year 10

Throughout Year 10, students following the NCFE Level 1/2 Technical Award in Engineering will develop their understanding of engineering design, manufacturing processes, materials and systems. Through practical and theoretical learning, they will build skills in designing, making and evaluating engineering products while exploring how engineers solve real-world problems. Students will also consider sustainability, modern technologies and industry practices, developing the technical knowledge, creativity and problem-solving skills needed for success in the qualification and future pathways within engineering.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Understanding and selecting materials	Developments in new materials	Sustainability Design development and communication	People, culture and society The complete design cycle	Electronics Systems & control	Influential designers Non-examination assessment (NEA; coursework)

Assessments will take place in April and we will share revision information a few weeks before each assessment.

Year 11

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Non-examination assessment (NEA; coursework)	Non-examination assessment (NEA; coursework)	Non-examination assessment (NEA; coursework)	Exam preparation	<i>Exams</i>	<i>Exams</i>

Mocks will take place in November and February and we will share revision information a few weeks before each assessment.

AQA Food and Nutrition

Year 10

Throughout Year 10, students following AQA GCSE Food Preparation and Nutrition will develop their understanding of nutrition, healthy eating, food science and food sustainability. Through practical cooking activities, they will build confidence in preparing, cooking and evaluating a range of dishes while developing essential food skills. Students will also explore factors that influence food choices, cultural food traditions and the impact of food production on the environment, preparing them for both the practical and written elements of the GCSE qualification and for making informed food choices in the future.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Food nutrition and health	food provenance	Food science Cooking methods linked to nutrition	Food science Cooking methods linked to nutrition	Food choices – nutrition and provenance	Non-examination assessment (NEA; coursework) Food Investigation

Assessments will take place in April and we will share revision information a few weeks before each assessment.

Year 11

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Non-examination assessment (NEA; coursework) Food Investigation	Non-examination assessment (NEA; coursework) Food Preparation	Non-examination assessment (NEA; coursework) Food Preparation	Exam preparation	<i>Exams</i>	<i>Exams</i>

Mocks will take place in November and February and we will share revision information a few weeks before each assessment.

Cambridge National Creative i-media

Year 10

Throughout Year 10, students following Cambridge National Creative iMedia will develop their understanding of the digital media industry through a range of creative and practical projects. They will learn how to plan, design and create digital products such as graphics, websites, animations and interactive media, using industry-standard software and techniques. Students will explore how media products are developed to meet the needs of specific audiences and clients, while building skills in creativity, problem-solving and project management. Through practical assignments, they will learn to generate, develop and refine ideas, preparing them for both the coursework and examined units of the qualification, while developing valuable digital skills for further study and future careers in the creative industries.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Visual Identity and digital graphics	Visual Identity and digital graphics	Creative i-media in the media industry	Animation with Audio	Animation with Audio	Creative i-media in the media industry

Formal assessments will take place in April and we will share revision information a few weeks before each assessment.

Year 11

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Visual Identity and digital graphics	Animation with Audio	Creative i-media in the media industry	Exam preparation	<i>Exams</i>	<i>Exams</i>

AQA Art (Textiles)

Year 10

Throughout Year 10, students following AQA GCSE Art and Design (Textile Design) will explore a range of traditional and contemporary textile materials, techniques and processes, including stitching, printing, fabric manipulation and mixed-media work. They will investigate the work of historical and contemporary textile artists and designers, developing an understanding of different styles, cultural influences and creative approaches. Students will generate, refine and develop ideas through experimentation and practical making, while considering sustainability and the environmental impact of the textile industry. Through independent creative work, they will build the skills, confidence and portfolio needed to successfully complete the coursework and externally set assignment components of the GCSE qualification.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Portfolio development: Sustained project – Natural forms	Portfolio development: Sustained project – Natural forms	Response to stimuli	Response to stimuli	Portfolio Development: Corsets and Waistcoats	Portfolio Development: Corsets and Waistcoats

Assessments will take place in April and we will share revision information a few weeks before each assessment.

Year 11

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Portfolio Development	Externally set assignment	Externally set assignment	Externally set assignment	<i>Exams</i>	<i>Exams</i>