Design Technology, Food and Textiles

Curriculum Overview | 2026–27

Curriculum intent

Our Design Technology, Food and Textiles curriculum enables students to become thoughtful, capable and responsible designers, makers and consumers.

Students acquire secure knowledge of materials, ingredients, nutrition, processes, tools and technologies, and apply this knowledge to increasingly demanding practical challenges.

They learn to investigate needs, generate and communicate ideas, plan production, make safely and accurately, and evaluate outcomes against clear criteria.

Practical experiences are central to the curriculum.

Food education builds confidence in preparing nutritious meals safely and independently; Design Technology develops understanding of materials, systems, manufacture and environmental responsibility; and Textiles develops creativity, technical control and understanding of fibres, construction and product design.

Teaching revisits knowledge and skills through progressively more complex projects, supporting students with different starting points and preparing those who continue into KS4 qualifications.

Golden threads

Design and problem solving: Investigate needs, generate ideas, model, refine and evaluate solutions.

Technical knowledge: Understand ingredients, nutrition, materials, tools, processes, technologies and their applications.

Practical competence and safety: Use equipment safely, select appropriate techniques and work with increasing accuracy and independence.

Responsible choices: Consider health, cost, environmental impact, resource use, users and wider contexts.

Reflection and communication: Explain decisions using subject vocabulary, assess quality and respond constructively to feedback.

Teaching, feedback and homework

Lesson structure

Theory: retrieval task; homework check; direct vocabulary instruction (DVI); new learning; guided and independent practice, including reading; exit ticket/plenary.

Practical: retrieval task; homework check; teacher modelling/demonstration; practical application; evaluation/reflection.

Appropriate health and safety instruction is integral to practical teaching.

Feedback

We use live verbal feedback during practical work, whole-class feedback on common misconceptions, peer/self-assessment against success criteria, and dedicated DART time for students to act on feedback.

Homework

Tasks include - purposeful retrieval, preparation and application tasks linked to current learning, for example ingredient and equipment preparation, vocabulary practice, product research, nutritional comparison, user research or design development.

Curriculum organisation and progression

Year 7: Food and Design Technology, each taught for approximately half the year, with two 75-minute lessons per fortnight.

Year 8: Food, Design Technology and Textiles on an 11-week rotation, with two 75-minute lessons per fortnight.

Year 9: Food, Design Technology and Textiles, with three 75-minute lessons per fortnight.

Years 10–11: option pathways, with five 75-minute lessons per fortnight.

- GCSE Food Preparation and Nutrition
- Hospitality and Catering Technical Award
- GCSE Design Technology (Timber)
- GCSE Design Technology (Textiles)

Key Stage 3 curriculum maps

Year 7 | Food

Licence to Cook

Planning element	Curriculum detail
Knowledge and theory	Introduction to food; health and safety; heat transfer; parts of the cooker; weighing and measuring; healthy eating; food swaps; allergies and intolerances; menu planning.
Practical experiences / outcomes	Fruit salad; bruschetta; pitta pizza; pasta salad; flapjack; stir-fry; tomato pasta sauce; vegetable soup; carrot cupcakes; apple crumble.
Substantive knowledge	Recognise hygiene and safety requirements, basic nutritional choices, heat transfer and how ingredients are measured and combined.
Disciplinary and practical skills	Follow instructions, organise a workstation, use basic utensils and cooking equipment, weigh and measure, prepare and cook simple dishes, and reflect on quality.
Progression / transferred learning	Builds on varied KS2 food and healthy-eating experiences; establishes safe routines for Year 8 food hygiene and nutrition.
Key questions	How can I prepare food safely? What makes a balanced meal? How do heat and measurement affect a dish?
Direct vocabulary instruction	Hygiene; contamination; heat transfer; measure; portion; nutrient; allergy; intolerance; balanced diet.
Feedback / DART checkpoint	Review hygiene routines and accuracy of weighing; DART on evaluation of a completed dish.
End points: students can…	Identify key food safety practices; use equipment safely with support; prepare a range of simple dishes; describe healthier choices and basic improvements.

Year 7 | Design Technology

Exploring and Creating

Planning element	Curriculum detail
Knowledge and theory	Introduction to wood, metal and plastic; material properties and sources; introduction to design; health and safety; responsible design and the environment.

Practical experiences / outcomes	Wooden Block Bot; aluminium keyring; vacuum-formed photo frame combining plastic and wood.
Substantive knowledge	Identify common material families, sources, selected properties and environmental considerations.
Disciplinary and practical skills	Follow workshop rules; mark out, shape, form and finish materials; communicate simple ideas; check quality and function.
Progression / transferred learning	Introduces workshop tools and the design–make–evaluate cycle used more independently in Year 8.
Key questions	Why choose one material over another? How do we make a product safely and accurately? What makes design responsible?
Direct vocabulary instruction	Timber; metal; polymer; property; source; mark out; form; finish; sustainability.
Feedback / DART checkpoint	Safety and marking-out check; DART refinement of product quality and evaluation.
End points: students can…	Identify and compare common materials; use taught tools safely; produce and evaluate introductory products.

Year 8 | Food

Kitchen Inspectors

Planning element	Curriculum detail
Knowledge and theory	Year 7 recap; in-depth food hygiene; environmental concerns; macronutrients; micronutrients; dietary fibre; menu planning for different groups.
Practical experiences / outcomes	Cheese scones; chicken goujons; focaccia; sweet-and-sour chicken; macaroni cheese; enchiladas; shortbread biscuits.
Substantive knowledge	Explain food safety more fully and distinguish major nutrient groups and their contribution to dietary choices.
Disciplinary and practical skills	Apply hygiene independently; combine preparation and cooking methods; select recipes for different needs; evaluate nutrition and outcomes.
Progression / transferred learning	Revisits Year 7 safety, measuring and healthy eating with more complex dishes and dietary decisions.
Key questions	How do we prevent contamination? What do different

	nutrients do? How can menus meet different needs?
Direct vocabulary instruction	Cross-contamination; pathogen; macronutrient; micronutrient; fibre; dietary requirement; sustainability.
Feedback / DART checkpoint	Food hygiene knowledge check; DART on a dish evaluation or adapted menu.
End points: students can…	Explain core food hygiene measures; identify macro- and micronutrients; prepare more demanding dishes and justify menu choices.

Year 8 | Design Technology

Designing and Refining

Planning element	Curriculum detail
Knowledge and theory	Design Technology machinery; accuracy; careful use of resources; plastics; timber; responsible design; the 6Rs; design theory.
Practical experiences / outcomes	Wooden storage box; vacuum-formed insert; acrylic sliding lid.
Substantive knowledge	Compare timber and plastics, understand material use and waste, and apply responsible design principles.
Disciplinary and practical skills	Measure and mark out accurately; use appropriate machinery under supervision; make components that fit; refine design decisions.
Progression / transferred learning	Extends Year 7 material knowledge and safe making into multi-component products requiring tolerances and precision.
Key questions	Why does accuracy matter? How can the 6Rs improve a design? How do we choose materials for a product?
Direct vocabulary instruction	Tolerance; accuracy; timber; acrylic; vacuum forming; 6Rs; prototype; resource.
Feedback / DART checkpoint	Accuracy and fit check; DART to improve a component or annotated design.

End points: students can…	Explain material selection and the 6Rs; make and assess a storage product with increasingly accurate components.

Year 8 | Textiles

Safety in the Dark

Planning element	Curriculum detail
Knowledge and theory	Health and safety; sewing-machine driving licence; introduction to fibres; fabric construction; fabric embellishment; product analysis and design.
Practical experiences / outcomes	Drawstring bag with decorative pocket.
Substantive knowledge	Identify basic fibres, fabric construction methods and the purpose of safe machine operation.
Disciplinary and practical skills	Thread and operate a sewing machine safely after training; join and embellish fabric; plan and assess a simple functional product.
Progression / transferred learning	Introduces textiles techniques later extended into patterns, garment construction and innovative design in Year 9.
Key questions	How are fabrics made? How do we create a secure seam? How does embellishment affect a product?
Direct vocabulary instruction	Fibre; woven; knitted; seam; stitch; embellishment; drawstring; product analysis.
Feedback / DART checkpoint	Machine safety sign-off; DART on seam quality and decorative pocket.
End points: students can…	Demonstrate safe machine use; construct a drawstring bag; identify fabric properties and evaluate finish and function.

Year 9 | Food

Family Meals

Planning element	Curriculum detail
Knowledge and theory	Recap of Years 7–8; nutritional needs for different groups; menu planning; eating well for less; nutritional analysis; costing; time plans.

Practical experiences / outcomes	Cheese straws; pasta bake; leek au gratin; fajitas; breakfast muffins; jambalaya; chicken skewers; Christmas cookery (listed as autumn-term practical work).
Substantive knowledge	Explain how nutrition, cost and user needs influence family meal choices.
Disciplinary and practical skills	Plan sequences and timings; calculate costs; compare nutritional profiles; prepare multi-stage dishes; evaluate suitability for a brief.
Progression / transferred learning	Applies hygiene, nutrient knowledge and practical methods from Years 7–8 with greater independence and constraints.
Key questions	Can you eat well for less? How do age and activity affect nutritional needs? How do time and cost influence a menu?
Direct vocabulary instruction	Budget; portion; nutritional analysis; costing; time plan; dietary need; evaluate.
Feedback / DART checkpoint	DART on a costed menu and time plan; practical review against user needs.
End points: students can…	Plan and cost family meals; explain nutritional suitability; prepare and evaluate dishes with increasing independence.

Year 9 | Design Technology

Innovating and Problem Solving

Planning element	Curriculum detail
Knowledge and theory	Wood joints; knock-down fittings; CAD/CAM; laser cutter; 3D printer; new materials and technology; responsible design; design movements.
Practical experiences / outcomes	Bird boxes; steady-hand game; graphics including CAD, laser cutting and 3D printing; trinket box.
Substantive knowledge	Explain selected joining methods, digital manufacture

	and the influence of technology and design movements.
Disciplinary and practical skills	Select joints and fittings; develop CAD ideas; produce or prototype using taught digital and traditional processes; test and refine.
Progression / transferred learning	Builds on Year 8 accuracy, materials and responsible design; prepares for GCSE technical content and iterative design.
Key questions	When should a designer use CAD/CAM? What makes a joint appropriate? How can technology solve a user problem?
Direct vocabulary instruction	CAD; CAM; laser cutting; additive manufacture; joint; knock-down fitting; innovation; iteration.
Feedback / DART checkpoint (	DART on CAD development or prototype testing; quality check of joints and manufacture.
End points: students can…	Compare traditional and digital processes; justify material/joint choices; develop and evaluate a functional product.

Year 9 | Textiles

From Concept to Creation

Planning element	Curriculum detail
Knowledge and theory	Joining fabric; decorating; creating shape; fabric construction; patterns and sizing; fashion; design movements; innovative design; smart textiles (source text is truncated after “Smart”).
Practical experiences / outcomes	Textiles techniques sketchbook; doorstops; pyjamas; children’s books.
Substantive knowledge	Understand pattern use, sizing, garment shaping, fabric construction and the influence of fashion and design movements.
Disciplinary and practical skills	Create technique samples; interpret or adapt patterns; join and decorate fabric; construct increasingly complex products; evaluate fit and finish.
Progression / transferred learning	Builds on Year 8 machine licence, seam construction and embellishment; prepares for KS4 textiles design.

Key questions	How does a flat pattern become a 3D product? How do sizing and construction affect fit? What makes textile design innovative?
Direct vocabulary instruction	Pattern; seam allowance; sizing; shaping; construction; fashion; smart textile; finish.
Feedback / DART checkpoint	DART on technique samples and pattern accuracy; evaluation of completed textile product.
End points: students can…	Use a wider range of textile techniques; explain pattern and sizing decisions; develop and evaluate a more complex textile outcome.

Key Stage 4 curriculum maps

The following pathways are presented separately within this combined departmental overview.

Year 10 | GCSE Food Preparation and Nutrition

Theory, technical skills and mock NEA preparation

Planning element	Curriculum detail
Knowledge and theory	Food nutrition and health; food science; food safety; food choice; food provenance; time planning including health, safety and quality control; costing; nutritional analysis; effective evaluation; mock NEA and mock final practical.
Practical experiences / outcomes	Shortcrust, puff and choux pastry; pasta shapes; whisked, melted, rubbed-in and creamed cakes; bread including enriched yeast doughs; roux/béchamel, all-in-one and mayonnaise sauces; dauphinoise and duchess potatoes; desserts and gelatine; cheesecakes and panna cotta; meat and fish preparation including deboning, filleting and reshaping.
Substantive knowledge	Understand how ingredients, processes, nutrition, food safety, choice and provenance influence outcomes.
Disciplinary and practical skills	Select and demonstrate technical skills; plan, cost,

	analyse and evaluate dishes; manage time and quality during practical work.
Progression / transferred learning	Deepens KS3 food knowledge and independence for GCSE practical and written assessment.
Key questions	How does food science explain a successful result? How can technical dishes meet a brief? How do we evaluate quality objectively?
Direct vocabulary instruction	Provenance; coagulation; gelatinisation; emulsification; aeration; quality control; nutritional analysis.
Feedback / DART checkpoint	Mock NEA feedback; time-plan review; DART on scientific explanation and evaluation.
End points: students can…	Explain key food principles; demonstrate a broad technical repertoire; produce coherent time plans, analyses and evaluations.

Year 10 | Hospitality and Catering Technical Award

Industry understanding and practical preparation

Planning element	Curriculum detail
Knowledge and theory	Hospitality and catering provision; how provisions operate; health and safety in the sector; food safety; importance of nutrition; menu planning; mock NEA; mock final practical.
Practical experiences / outcomes	Technical practical repertoire listed in the starting map parallels the GCSE Food pathway: pastry, pasta, cakes, bread, sauces, potatoes, desserts, cheesecakes, and meat/fish dishes.
Substantive knowledge	Describe hospitality and catering provision, operations, food safety and nutritional requirements.

Disciplinary and practical skills	Plan and prepare dishes suitable for a brief; apply safe working practices; evaluate service suitability and quality.
Progression / transferred learning	Uses KS3 cooking, safety, budgeting and menu planning in a vocational context.
Key questions	How do catering businesses operate safely? How can a menu meet a customer brief? What makes production practical and efficient?
Direct vocabulary instruction	Provision; customer; service; food safety; risk; nutrition; menu; specification.
Feedback / DART checkpoint	Mock NEA and practical feedback; DART on menu justification and production planning.
End points: students can…	Explain features of hospitality and catering; apply food safety and nutrition; prepare and evaluate dishes for a specified context.

Year 10 | GCSE Design Technology – Timber

Core and specialist technical knowledge

Planning element	Curriculum detail
Knowledge and theory	New and emerging technologies; energy generation and storage; smart, composite and technical materials; mechanical devices and movement; electronic systems; programmable components. Specialist technical knowledge: material properties, origins and uses; responsible design; specialist techniques and processes; production.
Practical experiences / outcomes	Wooden automata; lamp combining wood, fabric and electronics; wooden children's toy; wood-joint exercises.
Substantive knowledge	Understand technical systems, timber and related materials, production methods and responsible design.
Disciplinary and practical skills	Investigate users; design and model; select and use processes safely; construct, test and evaluate increasingly complex prototypes.
Progression / transferred learning	Extends KS3 timber, joints, accuracy, CAD/CAM and design evaluation.
Key questions	How do mechanisms create movement? How should a material or process be selected? How can testing improve

	a prototype?
Direct vocabulary instruction	Mechanism; automata; composite; circuit; programmable; prototype; tolerance; manufacture.
Feedback / DART checkpoint	DART on technical explanations, prototype development and evaluation.
End points: students can…	Explain key technical principles; justify material and process choices; develop functional prototypes and communicate iterative decisions.

Year 10 | GCSE Design Technology – Textiles

Core and specialist technical knowledge

Planning element	Curriculum detail
Knowledge and theory	New and emerging technologies; energy generation and storage; smart, composite and technical materials; mechanical devices and movement; electronic systems; programmable components. Specialist technical knowledge: material properties, origins and uses; responsible design; specialist techniques and processes; production.
Practical experiences / outcomes	Designer- or theme-led cushion; wrap, skater or ra-ra skirt; child's apron; fashion top; technique samples for NEA preparation.
Substantive knowledge	Understand material properties, specialist textiles processes and the common GCSE Design Technology core.
Disciplinary and practical skills	Investigate, design, pattern, construct, finish and test textile outcomes; document iterative development.
Progression / transferred learning	Extends KS3 fibres, machine sewing, pattern work, sizing and construction.
Key questions	How does a user brief shape textile design? Which construction techniques best meet the specification? How can prototypes be refined?

Direct vocabulary instruction	Specification; pattern; seam allowance; prototype; smart material; finish; iteration; production.
Feedback / DART checkpoint	DART on technique samples, garment fit, construction accuracy and design evaluation.
End points: students can…	Select and justify materials and techniques; construct increasingly demanding textile products; document design development.

Year 11 | NEA and examination preparation

Planning element	Curriculum detail
Timetable	Five 75-minute lessons per fortnight; additional after-school support for non-examination assessment (NEA).
Food – source timeline	NEA 1: 1 September–31 October; NEA 2: 1 November–12 February; revision February–May; examination shown as 24 May. Source also lists a three-hour final practical in January 2027.
Food – practical work	Four technical dishes; mock examination practical; final three-hour practical.
Design Technology – source timeline	NEA from June of Year 10 to 12 February 2027; revision February–June; examination shown as 15 June.
Design Technology – practical work	Design modelling and final prototype.
Knowledge and skills	Independent research and response to a brief; iterative design or food investigation; production planning; safe practical execution; testing, evaluation and examination recall.
Suggested feedback	Milestone feedback on NEA research, development, planning and evaluation, within applicable assessment rules; targeted exam-question DART and practical rehearsal.
End points: students can…	Complete the applicable NEA and practical requirements independently, justify decisions with technical vocabulary, and apply knowledge to examination questions.

Assessment and progression overview

Planning element	Curriculum detail
Year 7	Safety, basic material and ingredient knowledge, supported practical routines, simple evaluation.
Year 8	Greater precision, more complex cooking and

	construction, nutrition/fibres knowledge, responsible resource use.
Year 9	Independent planning and costing, CAD/CAM and joint selection, pattern/sizing, more demanding projects and evaluations.
Year 10	GCSE/vocational subject knowledge, technical repertoire, iterative design, mock NEA and practical assessment.
Year 11	NEA completion, final prototype or practical execution, responsive revision and examination preparation.

Qualification and implementation notes

- AQA GCSE Food Preparation and Nutrition (8585)
- Level 1/2 Hospitality and Catering Technical Award
- Pearson Edexcel GCSE Design and Technology for Timber
- AQA GCSE Design and Technology specification for Textiles.