



Technology curriculum overview KS3



Technology curriculum overview – Year 7 (KS3)



Торіс	Resistant Materials Acrylic Picture Frame / Workshop Skills	DT 2 – Textiles Technology Fibre to Fabric	Food Technology Cooking skills / Healthy eating
Length of topic	12 Weeks	12 Weeks	12 Weeks
Links to National Curriculum	 Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling. Select from and use specialist tools, techniques, processes, equipment and machinery precisely. Develop and communicate design ideas using annotated sketches. 	 Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions Select from and use specialist tools, techniques, processes, equipment and machinery precisely. Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties Tie-dyeing of fabric 	 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 techniques skills-rubbing in method, use of bridge and claw techniques selecting and preparing ingredients, safe and correct use of equipment and electrical equipment and safe cooking of ingredients.
Assessment Task(s)	Lesson 4 – Health and Safety Assessment Technical Knowledge: Health & Safety Assessment Lesson 12 – Final Product Evaluation - Formal evaluation of project	Lesson 2 - Basic equipment Design & Make: Use of tools and equipment Lesson 8 - Product Analysis Investigate - Existing Products Assessment	Lesson 3 - Food Safety Assessment Subject Specific Knowledge - Food Safety — Principles of Food Safety Lesson 8 — Practical Assessment Plan, Prepare and Cook
Key Knowledge	Material categories, (plastics) properties and origins. Health and Safety	Material categories, (Textiles) properties and origins. Analysing and evaluating prototypes. Health & Safety Identifying tools and equipment	Food hygiene/storage Food Poisoning Enzymic Browning How to follow a recipe Eat Well Guide and Nutrition
Key Skills	Health and Safety. Working with tools, materials and workshop machinery. Marking and measuring. Organisation, time keeping. Taking pride in the presentation of work.	Basic sewing techniques. Operating the sewing machine. Taking pride in the presentation of work. Use of tools and equipment 3D Modelling Oral presentation skills	Knife skills Hygiene and cleaning Organisation Oven use and safety



Technology curriculum overview – Year 8 (KS3)



Topic	Resistant Materials CAD/CAM Ruler & Pull Along Toy	Textiles Technology Working with Fabric	Food Technology World Foods	
Length of topic	12 Weeks	12 Weeks	12 Weeks	
Links to National Curriculum	 Understand how more advanced mechanical systems used in their products enable changes in movement and force Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture Identify and solve their own design problems and understand how to reformulate problems given to them 	 Investigate new and emerging technologies Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists Use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses Develop and communicate design ideas using annotated sketches. 	 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 technical skills- use of bridge and claw, traditional creaming method, kneading a dough, accurate measuring of ingredients, safe use of electrical equipment. Use research and exploration, such as the study of different cultures, to identify and understand user needs 	
Assessment Task(s)	Lesson 4 - Written Assessment Investigate - Existing products Lesson 12 - Technical knowledge and understanding - Manufacturing including tools and equipment	Lesson 6 - Surface decoration Design & Make: Use of tools and equipment Lesson 12 - Sustainability 6R's Technical Knowledge - Sustainability 6R's	Lesson 5 - Issues relating to Food Miles Subject Specific Knowledge - Provenance – Food Miles Lesson 8 – Practical Assessment Plan, Prepare and Cook	
Key Knowledge	Material categories, (wood and boards) properties and origins. The environment, sustainable resources. Material "finishes". Developing Design Ideas. Rendering, Isometric drawing. Understanding of Computer Aided Design and Computer Aided Manufacture	Materials and their properties. Understanding of different standard components used in textile products. Sustainability - The 6'R	Understanding Food from around the World. Identify staple foods from a range of countries Food Miles Eat Well guide and Nutrition	
Key Skills	Health and Safety, good practice. Working with tools, materials and workshop machinery. Assembling more complex components. Marking and measuring. Organisation, time keeping. Developing design skills.	Health and Safety, good practice. Working with tools, materials and machinery. Developing practical skills. Pattern making. Taking pride in the presentation of work.	Using the hob/frying Independently following a recipe using hygiene and safety Working to a time plan Use of bridge and claw techniques	



Technology curriculum overview – Year 9 (KS3)



Topic	Product Design Pewter Caster/Wooden Plane	Textiles Technology Iconic Cushion Project	Food Technology Skills/Food science	
Length of topic	12 Weeks	12 Weeks	12 Weeks	
Links to National Curriculum	 Strengthen CAD skills Understand various manufacturing processes with a focus on casting 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 	 Analyse the work of past and present professionals and others to develop and broaden their understanding Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups. Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties 	 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 Technical skills – Rubbing-in method, whisking method, making and kneading a dough, accurate weighing and measuring of ingredients, safe use of electrical ingredients and use of bridge and claw techniques. Understand the source, seasonality and characteristics of a broad range of ingredients. 	
Assessment Task(s)	 Written Assessment Investigate - Specifications and Design Briefs Testing and Evaluation. 	 Design ideas Design & Make: Graphic techniques and drawing skills Final product / making of the pencil case Technical knowledge – Surface finishes 	 Modifying recipes Analyse and Evaluate - Suggest modification ideas for food products. Sensory analysis experiment 	
Key Knowledge	Systems inputs, processors and outputs, Developing Design Ideas. User centered design Product evaluation and disassembly	Iterative design process Analysing and evaluating the work of others Manufacturing a textiles product Production methods Exploring the work of others	Understand different diets and benefits to health. Understand how to write a conclusion for an experiment Adapt a recipe Understand sensory descriptors	
Key Skills	Modelling - Working with tools and materials Exploring a theme - Research Skills Communicating ideas - Drawing and rendering Oral and digital presentation skills	Developing design skills. Creating more complex components. Taking pride in the presentation of work. Exploring a theme. Developing a "design language". Preparation for GCSE. Oral and digital presentation skills	Baking/whisking/rubbing in methods Following a time plan Structuring an experiment and write up. Making Pastry Frying	





Design & Technology curriculum overview KS4



<u>Design & Technology curriculum overview – Year 10 (KS4)</u> <u>Exam board: AQA</u>



Topic	Specialist based materials	Common specialist technical principles	New and emerging technologies	Energy, materials, systems and devices	Materials and their working properties	Designing and making principles
Length of topic (in weeks)	7 Weeks	8 Weeks	7 Weeks	6 Weeks	5 Weeks	6 Weeks
Links to specification	3.2 Specialist technical principles 3.3 Designing and making principles	3.2 Specialist technical principles 3.3 Designing and making principles	3.1 Core technical principles	3.1 Core technical principles	3.1 Core technical principles	3.3 Designing and making principles
Assessment Task(s)	Focused practical tasks Exam style questions End of topic assessment to identify gaps in learning.	Focused practical tasks Exam style questions End of topic assessment to identify gaps in learning.	Focused practical task Exam style questions End of topic assessment to identify gaps in learning.	Focused practical task Exam style questions End of topic assessment to identify gaps in learning.	Focused practical task Exam style questions End of topic assessment to identify gaps in learning.	Focused practical task Exam style questions End of topic assessment to identify gaps in learning.
Key Knowledge	Sources, origins and properties. Working with materials and fixings. Commercial manufacturing, surface treatments and finishes. Tolerances and allowances	Selection of materials or components forces and stresses ecological and social footprint stock forms, types and sizes scales of production Specialist tools, equipment, techniques and processes	Industry and enterprise Sustainability and the environment People culture and society Production techniques and systems Informing design decisions	Energy generation & storage Modern and smart materials Composite materials and technical textiles Systems approach to designing Electronic systems processing Mechanical devices	Papers and boards Natural and manufactured timbers Metals and alloys Polymers Textiles	Investigation, primary and secondary data The work of others Design strategies Communication of design ideas and prototype
Key Skills	Practical skills - How to shape and form using cutting, abrasion and addition How to sew, pleat, gather, quilt and pipe Communication	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Communication Organisation Technical principles Designing and making principles



<u>Design & Technology curriculum overview – Year 11 (KS4)</u> <u>Exam board: AQA</u>



Topic	Non Examined Assessment	Non Examined Assessment	Non Examined Assessment	Revision and Exam Preparation	Revision and Exam Preparation
Length of topic (in weeks)	7 Weeks	8 Weeks	7 Weeks	6 Weeks	10 Weeks
Links to specification	3.3 Designing and making principles NEA - AO1 Identify, investigate and outline design possibilities NEA section A & B	3.3 Designing and making principles NEA - A02 Design and make prototypes that are fit for purpose NEA section C, D & E	3.3 Designing and making principles NEA - A02 Design and make prototypes that are fit for purpose A03 - Analyse and evaluate NEA section E & F	3.1 Core technical principles 3.3 Designing and making principles	3.2 Specialist technical principles
Assessment Task(s)	Monitoring of NEA AO1 – Section A & B	Monitoring of NEA AO2 & AO3- Section C, D & E	Monitoring of NEA AO2 & AO3 – Section E & F	Exam question twice per week completed. Written feedback given for students to responds to.	Exam question twice per week completed. Written feedback given for students to responds to.
Key Knowledge	Primary and secondary data The work of other Design strategies Prototype development Material management Specialist tools and equipment Tolerances Identifying & investigating design possibilities Producing a design brief & specification	Designing and making principles Ergonomics/ anthropometrics Design strategies The work of others Selection of materials and components Material management Specialist tools and equipment Specialist techniques and processes	Research techniques Ergonomics/ anthropometrics The work of others The design process Drawing techniques Tolerances/marking out and materials management H&S Surface treatments	Review, revise and recall learning on 3.1 Core technical principles 3.2 Specialist technical principles 3.3 Designing and making principles	Review, revise and recall learning on 3.1 Core technical principles 3.2 Specialist technical principles 3.3 Designing and making principles
Key Skills	Creativity Problem solving Communication Organisation Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Exam preparation Communication Organisation Technical principles	Exam preparation Communication Organisation Technical principles Recall and revision





Food Preparation & Nutrition curriculum overview KS4





Topic	Food Preparation Skills	Food Nutrition and Health	Food Science	Food Safety	Food Choices	Food Provenance
Length of topic (in weeks)	7 Weeks	8 Weeks	7 Weeks	6 Weeks	6 Weeks	6 Weeks
Links to specification	3.1: Food Preparation Skills	3.1: Food Preparation Skills 3.2: Food, Nutrition and Health	3.1: Food Preparation Skills 3.3: Food Science	3.1: Food Preparation Skills 3.4: Food Safety	3.1: Food Preparation Skills 3.5: Food Choice	3.1: Food Preparation Skills 3.6: Food Provenance
Assessment Task(s)	Focus ed practical task Exa m s tyle questions End of Unit test	Focus ed practical task Exa m s tyle questions End of Unit test	Focused practical task Exam style questions End of Unit test	Focus ed practical task Exa m s tyl e questions End of Unit test	Focus ed practical task Exam style questions End of Unit test	Focus ed practical task Exa m s tyle questions End of Unit test
Key Knowledge	Food Preparation Skills	Food Nutrition and Health	Food Science	Food Safety	Food Choices	Food Provenance
	Knife Skills Fish Meat Prepare, combine and shape Dough Practical List Knife skills Vegetable soup Bread Pizza Pastry - shortcrust Own choice chosen from a selection	Protein and Fat Carbohydrate Vitamins Minerals and Water Making informed choices Diet, Nutrition and Health Practical List Dough – bread based Fat investigation Fats in pastry - Puff pastry products Flaky pastry products Choux pastry	Cooking of food, Heat transfer and Selecting Appropriate cooking Methods Proteins and Enzymic Browning Carbohydrates Fats and Oils Raising Agents Practical List Protein based practical Carbohydrate based practical Use of raising agents Own choice chosen from a selection	Microorganisms, Enzymes and Food Spoilage Microorganisms in food production Bacterial Contamination Buying and Storing Food Preparing and Cooking Food Practical List Tofu and coconut milk curry and rice Vegetable and bean casserole Vegetarian cottage pie / Bolognaise sauce/chill Lentil and bean roast Own choice chosen from a selection	Food Choices British and international Cuisines Sensory Evaluation Food Labelling Factors Affecting Food Choices Mock NEA 1 Practical Individual Recipes	Food and the Environment Food Provenance and Production Methods Sustainability of food Food production Food Processing Mock NEA2 Meal Planning
Key Skills	Accurate knife skills Accurate weighing/measuring of ingredients Able to combine range of ingredients Importance of hygiene and safety Accurate timings Working independently to follow a recipe	Identify main macro/micro nutrients and their function/access/deficiency How nutritional needs change in life stages BMR/PAL Major diet related health risks	Identify and choose appropriate cooking methods How food is cooked through conduction/convection and radiation	Identify High Risk Foods enzymic action/mould growth/ yeast action. campylobacter • e-coli • salmonella • listeria • staphylococcus aureus. Temperatures: Danger zone/fridge/freezers	physical activity level (PAL) • celebration/occasion • cost of food • preferences • enjoyment • food a vailability • healthy eating • income • lifestyles • seasonality • time of day • time available to prepare/cook. Students must be a ble to cost recipes and make modifications.	organic and conventional famin • free range production intensive farming • sustainable fishing • advantages and disadvantages of local produced foods, seasonal foods and Genetically Modified (GM) foods



Food Preparation & Nutrition curriculum overview — Year 11 (KS4) Exam board: AQA





Topic	NEA 1 Food investigation (30 marks)	NEA 2 Food preparation assessment	NEA 2 Food preparation assessment	NEA 2 Food preparation assessment	Exam Preparation	Exam Preparation
Length of topic	5 weeks	7 Weeks	8 Weeks	7 Weeks	6 Weeks	5 weeks
Links to specificati on	3.3 Food Science	3.7: Food Preparation and cooking techniques Section A – Researching the Task Section B – Demonstrating Technical Skills	3.7: Food Preparation and cooking techniques Section B – Demonstrating Technical Skills Section C – Planning for the final Menu	3.7: Food Preparation and cooking techniques Section D – Making the final dishes during the 3 hour practical session Section E – Analysis and Evaluate.	3.1: Food Preparation Skills 3.2: Food, Nutrition and Health	3.3: Food Science 3.4: Food Safety 3.5: Food Choices 3.6: Food Provenance
Assessme nt Task(s)	Set by AQA	Monitoring of NEA AO3 & AO4	Monitoring of NEA AO3 & AO4	Monitoring of NEA AO3 & AO4	Mock Examination	Exam Questions
Key Knowledg e	Students must be able to show: Students' understanding of the working characteristics, functional and chemical properties of ingredients.	Plan and carry out research into chosen life stage, dietary group or culinary tradition. Develop research skills to gather and use primary and secondary sources of information. Develop analysis and evaluation skills and explain how findings will influence practical investigations.	Select a range of three or four suitable dishes to trial further. Justify choices and explain suitability, creativity and technical skill. Record evidence of the choice of dishes made during the technical skills demonstration. Demonstrate a good understanding of ingredients and making processes. Justify reasons for choice of final dishes and menu with reference to skills, ingredients, nutrition, cooking methods, costs, provenance, sensory properties and portion size.	Prepare, cook and serve three final dishes in one three-hour making session demonstrating some complexity and challenge. Execute a range of technical skills with confidence, precision and accuracy. Select and use appropriate equipment accurately. Demonstrate a range of appropriate finishing and presentation techniques Cost the final dishes. Evaluate the success of the dishes and identify improvements.	Reinforce/revisit Knife Skills Fish Meat Prepare, combine and shape Dough Protein and Fat Carbohydrate Vitamins Minerals and Water Making informed choices Diet, Nutrition and Health	Reinforce/revisit Cooking of food, Heat transfer and Selecting Appropriate cooking Methods Proteins and Enzymic Browning Carbohydrates Fats and Oils Raising Agents Microorganisms, Enzymes and Food Spoilage Microorganisms in food production Bacterial Contamination Buying and Storing Food Preparing and Cooking Food Food Choices Factors Affecting Food Choices Food Provenance and Production Methods Sustainability of food
Key Skills	Application of Knowledge	Application of Knowledge Research Skills Analysis and evaluation skills Planning skills	Creativity and presentation skills Technical Skills Work safely and hygienically Sensory analysis Time planning and costing	Creativity and presentation skills Technical Skills Work safely and hygienically Organisational skills Time planning and costing Analysis and evaluation skills	Application of Knowledge	Application of Knowledge





Hospitality & Catering curriculum overview KS4



Hospitality & Catering curriculum overview – Year 10 (KS4) Exam board: WJEC



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Topic	H&C Operating Environment	H&C Operating Environment	H&C Provision	Health and Safety	Ill Health	Specific Requirements
Length of topic (in weeks)	7 weeks	8 Weeks	7 Weeks	6 Weeks	6 Weeks	6 Weeks
Links to specification	LO1: Understand the environment in which hospitality and catering providers operate. AC1.1-1.2	LO1: Understand the environment in which hospitality and catering providers operate. AC 1.3 – 1.4	LO2: Understand how hospitality and catering provision operates AC: 2.1 – 2.3	LO3: Health and safety AC: 3.1 – 3.3	LO4: Know how food can cause ill health AC: 4.1 – 4. 4	Unit 2 - NEA preparation 7 week
Assessment Task(s)	Focused practical tasks to develop key practical skills Practical assessment Case studies Exam style questions to reinforce knowledge Written feedback/targets set	Focused practical tasks to develop key practical skills Practical assessment Exam style questions to reinforce knowledge Written feedback/targets set	Focused practical tasks to develop key practical skills Practical assessment Exam style questions to reinforce knowledge Written feedback/targets set	Focused practical tasks to develop key practical skills Case studies Practical assessment Exam style questions to reinforce knowledge Written feedback/targets set	Focused practical tasks to develop key practical skills Practical assessment Case studies Exam style questions to reinforce knowledge Written feedback/targets set	LO 1: Understand the importance of nutrition when planning menus LO 2: Understand menu planning
						Practice controlled assessment task Teacher feedback for the LO and targets set
Key Knowledge	AC 1.1 Describe the structure of the HCI Structure of the Industry and types of establishments that provide food and drink The types of services available in different establishments Standards and ratings AC 1.2: Analyse job requirements The different roles and duties within the industry The training available for staff within the industry The career opportunities locally, nationally and internationally	AC 1.3: Describe working conditions across HCI Contracts Rates of pay Costing AC 1.4: Explain factors affecting success of HC providers Profit and loss Technology Social media Competitions Environment	AC 2.1; Describe the operations of the kitchen Operations of the kitchen Work flow Kitchen layout/equipment Stock control/ documentation Dress code AC 2.2: Operational activities of front of house Food service/equipment/stock control/dress code/ Record keeping AC 2.3: Meeting customer requirements Types of customer Customer trends Customer rights/ law Equality	AC 3.1: Understand how HC meets HS requirements Employee Responsibilities/ HASAWA Employer Responsibilities Accidents at work Preventions First aid Fire safety COSHH PPE/PPER/MHOR AC 3.2: Identify risks to personal safety Risk assessment for all employees in front of house/back of house/customers/suppliers AC3.3: Recommend personal safety control measures for HCI Prevention Control measures	AC: 4.1, 4.4 and 4.5 Microbes/cross- contamination/moulds/yeasts Bacterial growth Common names Sources of bacteria Types of food poisoning Symptom comparison Chemicals Metals Poisonous plants Allergies and Intolerances AC 4.2: Role and responsibilities of EHO EHO's Roles and responsibilities AC 4.3: Describe Food Legislation Food Safety Act Food Hygiene HACCP Labelling Regulations	AC 1.1: Describe the functions of nutrients in the body AC 1.2: Compare nutritional needs of specific groups AC 1.3: Explain characteristics of unsatisfactory nutritional intake AC1.4: explain impact of cooking on nutritional content AC 2.1: Factors to consider when proposing dishes AC 2.2: Explain how dishes on a menu address environmental needs
Key Skills	Identify types of commercial/noncommercial sectors Types of food service systems HC standards and ratings: hotels/restaurants/	Employment rights and contracts Factors affecting the success of hospitality and catering providers	Application of knowledge to identify structures of kitchen brigade/front of house Identify how customer requirements are met in given HC establishments	Identify the legislation needed in different HC establishments Assess risks to employees in different scenarios Be able to put in place control	Identify: Food poisoning symptoms/types of food poisoning Explain how to deal with allergies Identify risks in a HC environment	Extracting relevant subject information needed Understanding of different nutritional intake needed at different stages Able to compare different intakes



Hospitality & Catering curriculum overview – Year 11 (KS4) Exam board: WJEC



Topic	Unit 2: Controlled Assessment Practise	Unit 2: Controlled Assessment	Unit 2: Controlled Assessment	Exam Preparation	Exam Preparation
Length of topic (in weeks)	7 weeks	6 weeks	6 weeks	6 weeks	10 weeks
Links to specification	LO 2: Understand Menu Planning LO 3: Be able to cook dishes	LO 1: Understand the importance of nutrition when planning menus	LO 2: Understand menu planning LO 3: Be able to cook dishes	LO1: Understand the environment in which hospitality and catering providers operate LO2: Understand how hospitality and catering provision operates	LO3: Health and safety LO4: Know how food can cause ill health
Assessment Task(s)	Produce Production plan Practical assessment with witness statement and feedback	Set by WJEC	Set by WJEC	Practise examquestions Case studies Mock Exam	Practise exam questions Case studies
Key Knowledge	AC 2.3: Explain how menu dishes meet customer needs AC 2.4: Plan production of dishes for a menu AC 3.1 Use techniques in preparation of commodities AC 3.2: Assure quality of commodities AC 3.3: Use techniques in cooking of commodities AC 3.4: Complete dishes using presentation techniques AC 3.5: Use food safety practices	AC:1.1 – 1.4, 2.1 – 4 and 3.1 -5 All criteria MUST be covered for each LO to ensure a grade. Application/re calling of knowledge for LO1. Planning a menu and a production plan for LO2 2.1 -3 Producing a detailed time plan for 2.4 – initial plan LO3 shown through 3 hours practical assessment task – practise	Planning a menu and a production plan for LO2 2.1 -3 AC 2.1: Factors to consider when proposing dishes AC 2.2: Explain how dishes on a menu address environmental needs AC 2.3: Explain how menu dishes meet customer needs 2.4 Producing a detailed time planfinal LO3 shown through 3 hours practical assessment task- March	Reinforce/revisit: Structures of HCI/commercial and non commercial Job descriptions and contracts Operations within the kitchen/front of house HC provision	Reinforce/revisit Personal safety Laws HACCP/risk assessment Food related illness: food poisoning/allergies Food safety legislation EHO
Key Skills	Working independently Able to follow a production plan for 2 given products within an allocated time Working safely and hygienically	All key skills shown in half term 1 and 2 will be demonstrated	All key skills shown in half term 1 and 2 will be demonstrated	Application of knowledge to given scenarios and questions	Application of knowledge to given scenarios and questions