

DESIGN AND TECHNOLOGY CURRICULUM MAP

DESIGN AND TECHNOLOGY CURRICULUM MAP							
	Design					Make	
	Research and explore to identify different user needs	Identify and solve design problems	Develop specifications to inform design	Use a variety of approaches to generate creative ideas	Use a range of methods to develop and communicate design ideas	Select appropriate tools, techniques and processes	Select from a complex range of Materials, components and ingredients
Food							
Year 7	-Understanding nutritional needs and a balanced diet					Basic foundation techniques including: -Weighing/ measuring -Using oven/grill -Knife skills	Selecting ingredients to form balanced meals based on healthy eating guidelines.
Year 8	-Understanding nutritional needs of different user groups					Further essential techniques: -Boiling -Baking -Roux sauce -Rolling	Selecting ingredients based on characteristics, flavour and function.
Product Design							
Year 7 Making an Acrylic key fob	Identifying different users and their needs by addressing clients in their specification.	Marking up materials and the parts to remove. Position of functional holes.	Considering most of the main areas that would need addressing when designing.	Learning about perspective in design and using this to make their design work appear more sophisticated.	Skills based designing using perspective	Using abrasive paper Filing Drilling /drill press Melting and forming Pliers /vices	-Some students use higher-level skills to polish work and adapt from the original.
Year 8 Designing and making a clock	Identify users and their needs by addressing clients whilst in the design process.	-Considering material properties. Modular component compatibility. Connecting different elements of clock face.	Aesthetics, client group and functionality are focused on.	CAD enables controlled and meticulous attention to detail. Students urged to work to their areas of strength.	Design for different contexts e.g. Watches, public clocks. Digital display	-CAD CAM using to Design and cut numerals. -Using scroll saws. for clock faces	-CAD CAM using to design and cut module elements for their clock.
Textiles							
Year 7 Beatriz Milhazes Mixed Media Project	-Analysis of project brief -Looking at existing artwork		-generate specification points from research findings considering form, function, materials and sustainability	4x4 design generation in groups		Pattern drafting and cutting Sewing machine: -applique -construction Hand embroidery	Selecting and using a range of alternatively constructed fabrics based on the appropriateness of their properties.
Year 8 Design and make a thermochromic cup cosy		Make a cup of tea – consider process, practicalities, safety of making and drinking a hot drink	-generate specification points from research findings considering user needs, form and function			Machine quilting Bias binding Mixing and using thermochromic pigments	

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		Evaluate			Technical Knowledge			
	Analyse work of others to develop understanding	Investigate new and emerging technologies	Test/evaluate/refine ideas against specification, taking into account users	Understand the impact D&T has on individuals, society and the environment	Understand and use the properties of materials and the performance of structural elements	Understand how advanced mechanical systems enable change in movement/force	Understand how electronics can be used and powered in their products	Use electronics to imbed intelligence that respond to inputs
Food								
Year 7				Environmental impact of food miles and seasonality of ingredients.				
Year 8				Understanding nutritional needs and impact/consequences of imbalances.	-Function of eggs, flour, fat, sugar -Raising agents- Chemical, biological, mechanical			
Product Design								
Year 7 Making an Acrylic key fob	Looking at and analysing existing similar products		Evaluation pro forma addressing all elements of the specification.	Briefly look at environmental considerations for using plastic.	Looking at the molecular make up of polymers and how they can be changed.	Some work on basic mechanical systems.	If mini-light project used: LED and smart materials.	
Year 8 Designing and making a clock	Looking at and analysing existing similar products	Potential to 3D print numerals and connecting parts of a modular clock	Peer reviews and photographic evaluation completed.	Functionality of the clock affecting environment	Analysing different man made boards and surface finishes	Structural components of the clock mechanism.	Electronic/quartz movement of the clock. Digital LCD display considered.	Using components to enhance functionality of product
Textiles								
Year 7 Beatriz Milhazes Mixed Media Project	Analysis of existing artwork by chosen artist		Test effectiveness of own product against specification	Social/cultural awareness of other cultures through research	Select/use a range of alternatively constructed fabrics based on the appropriateness of properties.			
Year 8 Design and make a thermochromic cup cosy			Test effectiveness of own product against specification	Understand the need for products to solve problems and enhance our lives				

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Food

	Understand and apply principles of nutrition and health	Cook a repertoire of mainly 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	Understand the source, seasonality and characteristics of a range of ingredients
Year 7	<ul style="list-style-type: none"> -Food safety and hygiene -Eatwell guide -Nutritional analysis -8 tips for healthy eating -Nutrients and energy balance -Understand carbohydrates (starchy and sugar) 	<ul style="list-style-type: none"> -Explore food and eating traditions around the world. -Food etiquette in GB Cook a variety of dishes, predominately savoury: Herby cheese scones Caribbean Red Pepper Salad Leek and Potato Soup Spaghetti Bolognaise Fishcakes Vegetable Curry Victoria Sandwich 	<ul style="list-style-type: none"> -Weighing and measuring -Rubbing in -Combining and dividing -Bread-crumbling (pane) -Using the grill -Using oven/grill safely -Knife skills (bridge and claw) -Creaming method -Saute/sweating boiling 	<ul style="list-style-type: none"> -Organoleptic analysis -Food miles -Where does our food come from? -What grows when?
Year 8	<ul style="list-style-type: none"> -Understand the nutritional needs of specific groups of people -Understand the importance of water and fibre in the diet -Understand the consequences of nutritional imbalance 	<ul style="list-style-type: none"> Cook a variety of dishes, predominately savoury: Macaroni Cheese Pizza Risotto Frittata Chicken Stirfry Mediterranean Tomato Soup Fruit Crumble Chocolate and Pear sponge 	<ul style="list-style-type: none"> -Vegetable cuts. Julienne, brunnoise, baton -Boiling -Baking -Roux sauce -Rolling -Stir frying 	<ul style="list-style-type: none"> -Function of eggs, flour, fat, sugar -Raising agents- Chemical, biological, mechanical -Understand food science terms: Coagulation Detrinisation Enzymic browning Oxidation Gelatinisation

DESIGN AND TECHNOLOGY CURRICULUM MAP

Textiles

Eduqas GCSE Art and Design: Textiles

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	<p><u>Under the Microscope</u> An exploration of microscopic images producing an outcome of a combined class installation, incorporating research, photography, drawing and surface decoration techniques.</p>		<p><u>Pyjama Project</u> Students will design and make their own set of pyjamas. This will be their first experience of garment production. They will understand how to design for function and purpose as well as use various decoration techniques.</p>	<p><u>Fashion Illustration</u> A project focusing on photographic and drawing skills.</p>	<p><u>Open Style Brief</u> Students will chose from internally set briefs and work more independently by selecting appropriate methods of working for themselves and apply them to their chosen brief.</p>	
Year 10	<p><u>Skirt Project (Portfolio)</u></p>				<p><u>Selfie Project (Portfolio)</u></p>	
	Surface decoration Fabric manipulation Fabric construction Print	Artist research – Alison Willoughby Photography Drawing Transcriptions	Artist research – Mandy Pattullo Machine and Hand Embroidery Patchwork and quilting Dying	Pattern drafting and cutting Garment construction Garment print/decoration/embellishment	Photography Mixed media drawing Hand embroidery Free-motion machine embroidery Applique	Artist research (self-selected) Exploration and Development of ideas
Year 11	<p><u>Selfie Project (Portfolio)</u></p>		<p><u>Component 2: Externally Set Assignment</u></p>		<p><u>Submission and Moderation</u></p>	
	Final outcome: self portrait		Respond to chosen externally set theme; developing, exploring and recording ideas working towards final outcome produced in 10 hour public exam		Mounting and presentation of work. Completion of accompanying paperwork	

Recovery Curriculum Map

Textiles – Medium Term Plan

Eduqas GCSE Art and Design: Textiles

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9		<p><u>Dia de los Muertos</u></p> <p>A creative mixed media response to the Mexican 'Day of the Dead' festival.</p> <ul style="list-style-type: none"> -Artist research -Transcriptions -Stenciling -Suffolk Puffs -Applique -Hand Embroidery 	<p>Final Outcome: Mixed Media skull textile art piece incorporating all techniques learnt.</p> <p>Project Focus: Analysis of artwork and technique knowledge</p>	<p><u>Under the Microscope</u></p> <p>An exploration of microscopic images incorporating research, photography, drawing and surface decoration techniques.</p>	<p>Final Outcome: Combined class installation</p> <p>Project Focus: Photographic skills and collecting primary research</p>	<p><u>Fashion Illustration</u></p> <p>A project focusing on photographic and drawing skills.</p> <p>Project Focus: Drawing skills and selection of appropriate tools and media</p>
Year 10		<p><u>Bisa Butler</u></p> <p>A textiles portraiture project inspired by the work of African American Textile Artist Bisa Butler</p> <ul style="list-style-type: none"> -Life Drawing -Drawing from original sources -Artist transcriptions -Quilting -Trapunto -Applique -Batik -Free motion embroidery 	<p>Final Outcome: Textile Portrait of influential or historical figure in black history.</p> <p>Project Focus: Analysis of artwork and technique knowledge Annotation to convey ideas.</p>	<p><u>Skirt Project (Portfolio)</u></p> <p>Artist research – Alison Willoughby</p> <ul style="list-style-type: none"> -Photography -Drawing -Transcriptions -Surface decoration -Fabric manipulation -Fabric construction -Print 	<p>Artist research – Mandy Pattullo</p> <ul style="list-style-type: none"> -Machine and Hand Embroidery -Patchwork and quilting -Dying 	<ul style="list-style-type: none"> -Pattern drafting and cutting -Garment construction -Garment print/decoration/ Embellishment <p>Project Focus: Responding to artists' work and creative development of ideas. Annotation to convey ideas.</p>
Year 11	<u>Open Brief – Component One</u>			<u>Submission and Moderation</u>		
	Students will chose from internally set briefs and work more independently by selecting appropriate methods of working for themselves and apply them to their chosen brief.		Students complete 10 Hour component one intensive workshop in order to produce developed final outcome.	Mounting and presentation of work. Completion of accompanying paperwork		

Recovery Curriculum Map

Hospitality - Medium Term Plan

Eduqas Vocational Award: Hospitality and Catering

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	<p>Introduction to H&S, personal hygiene Kitchen environment, equipment and utensils, how to use the cooker, generally catch up on year 7&8 curriculum. Topic - Cake making Practicals – swiss roll, crumble, gingercake, muffins, scones Focus on accurate weighing and measuring Reading recipes (following instructions)</p>	<p>Introduction to nutrition Topic - Pastry Quiche, fruit tart, profiteroles, sausage rolls. Futurechef competition Christmas Cake make, decorate, gift wrap. Focus on suitability of dishes for catering business Spellings</p>	<p>Introduction to knife skills, different cuts of vegetables. Nutrition- 8 tips healthy eating/ eatwell guide, Topic - Knife skills Practicals – carrots cuts, Minestrone soup, stir fry, spring rolls, vegetable chilli, composite salad Focus on safe knife skills, understanding the role of a chef (careers) Spellings</p>	<p>Introduction to sauces Key terms – gelatinisation, emulsion, coagulation. Nutrition – carbohydrates Topic – Sauces (sweet and savoury) Practicals – Tomato sauce leading to Bolognese, leading to béchamel leading to Lasagne (homemade pasta) Emulsion sauce -mayonnaise (coleslaw), Reduction sauce – beurre blanc Egg - Crème Anglaise (custard) Focus - Role of the chef de partie in a big kitchen Spellings</p>	<p>Introduction to cooking meat. Nutrition – Protein and Fat Topic – Food Safety, allergens and intolerances Practicals – Pork pie, sweet and sour chicken, jerk chicken, fish pie, chicken goujons, beef casserole – leading to steak and mushroom pie (recap on pastry) Bread Focus – Importance of good food safety practices and personal hygiene Combining different skills to create combination dishes</p>	<p>Introduction to LO 1 AC 1.1 – Understand the environment in which hospitality and catering providers work Nutrition – Micronutrients Topic – Students to design a menu suitable for a school cafeteria Practical - to cook menu item on their menu, one savoury and one sweet Class showstopper competition</p>
Year 10	<p>LO1 Understand environment H&C operates AC1.1 Describe the structure of the H&C industry AC1.2 Analyse job requirements AC1.3 Job roles, working conditions AC 1.4 Explain factors affecting success of H&C industry End of unit test Spellings</p>	<p>LO2 Understand how H&C operates AC2.1 Describe the operation of kitchen AC2.2 Describe the operation of the FoH AC2.3 Explain how H&C meet customer requirements End of unit test Spellings Nutrition – Macronutrients Practical – Risotto LO3 Understand how H&C meets H&S requirements</p>	<p>LO4 –Know how food can cause ill health <i>Project - Students to develop their own H&C business. Design it, staff it and create a menu for it, following FS rules</i> AC4.1 Describe food related causes of ill health Food safety scenario project AC4.2 Role and responsibilities of the EHO (Design leaflet for new employees following HS rules)</p>	<p>LO4 continued AC4.3 Food safety legislation (HACCP – for 2 dishes on menu) AC4.4 – Describe common FP bacteria (design poster for display in kitchen inc. temperatures and storage) AC4.5 Describe symptoms of food induced ill health Practical – Spicy Seafood Linguine, Lemon Meringue Pie End of unit test</p>	<p>LO5 – Be able to propose a H&C provision to meet specific requirements Continuing on development of business, students to produce a business plan (considering target customers, marketing, type of provision, P&L, overheads. Presentation to others Practical – Recap on knife skills, Filleting fish Practical – Pan fried fillets of sea bass, fish cakes</p>	<p>Revision Unit 1 exam June 22nd</p>

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	<p>Nutrition – Macronutrients Practical – Pasta, Futurechef</p>	<p>AC3.1 Personal safety responsibilities Practical – Potato dish, Scotch eggs End of unit test</p>	<p>Practical – Jointing a whole chicken Practical – Chicken Pie (design label, including nutritional and allergenic info) Practical – Chicken Roulade, Chicken Goujons and Wedges Chicken Noodle Soup Lemon Meringue Pie Mid unit test</p>			
<p>Year 11</p>	<p>Introduction to Unit 2 Students to work on Mock assessment portfolio Practical Mock exam Revision Unit 1 exam - January</p>		<p>Revision Unit 1 exam, 14th Januar Unit 2 — Complete portfolio, and practical exam</p>		<p>Unit 2 completed sent to moderator Unit 1 exam June</p>	

Recovery Curriculum Map

Design – Medium Term Plan

BTEC Tech Award: Art and Design Practice

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	“Streamlining” project		“Lights on” Project			
	<p>Skills based lessons Using Tools/Machinery</p> <p>Making a holder/product Focus on: Genre research and features of the movement. Using plastics. Vacuum forming and Polymer forming techniques. Prototyping. Mould making using timber. Wasting techniques. Looking at the molecular make up of polymers. How these are changed by external sources. Briefly look at environmental considerations for using plastic. Plaster of Paris moulding</p>	<p>Project Outcomes :</p> <p>Responding to the work of designers within the genre.</p> <p>Applying features of the Design movement.</p> <p>Learning many new skills and experience on machinery.</p>	<p>Students design and make a light. Desk lamp /torch/bike light/pendant lamp. Focus Client research Materials properties Systems and control CAD CAM Using laser cutter to form slot together shades. Selecting components from suppliers. LED and smart materials are considered. Surface graphics Using stikka machine. Prototyping Thread tapping and cutting Mechanical fixings Plastic welding Soldering</p>	<p>Project Outcomes :</p> <p>Producing functioning product Evaluating it in relation to the student’s specifications.</p> <p>Students produce a “Design Journal” Including annotation, Photographic evidence and consistent analysis/evaluation of their outcomes.</p>	<p>Product rendering and Cad Cam Skills TechSoft 2D Design Using google sketch up. 3D printed product.</p> <p>Focus on smart materials and external influences.</p> <p>Initial ideas and design development focused on.</p> <p>A selection of Open design briefs. Combination of functions /materials.</p>	<p>3D printed product. Functionality and aesthetics</p>
Year 10	Automata Project		Introduction to the Hybrid Project		Hybrid Project	
	<p>Some work on basic mechanical systems. Levers /Cams /springs/gravity.</p>	<p>A successful product that is creative and assembled to a high standard. It should use materials in a sympathetic way. Also having a novel motion and animation.</p> <p>Ext’n Students can try to power the Automata via an external source. E.g. Wind / solar.</p>	<p>Learning Aim A1 :The purpose of research in Design The Design Problem Primary and secondary research. Designer investigation. Design investigation process Client Identification Product analysis, relevant to the students chosen brief.</p>	<p>Outcomes Design journal started and evidence gathered for all above Tasks.</p> <p>At least 3 Artists investigated Responses produced in light of this. Identifying their areas of strength and choosing a brief within that genre of Design ...</p>	<p>Learning Aim A2: Exploring Design Practice. Experiment with Design Practices. Responses produced as inspired by artists researched in A1. Size /Shape / Materials/ media used. Computer generated design. Social and moral implications investigated. Testing</p>	<p>Outcomes Design journal developing.</p> <p>Responses produced</p> <p>Experimented with A variety of materials</p> <p>A range of different design implications investigated.</p>

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				e.g. Interior/ product /transport/fashion.	outcomes and making decisions about progress.	
Year 11	Hybrid Project					
	<p>Learning Aim B1: Generating ideas for Design work. Informing ideas and reflecting on the audience's needs. Other designer's solutions.</p>	<p>Learning Aim B2: Visually communicate ideas in art and Design How the student has visualised their design intentions... In addition, their Initial ideas.</p>	<p>Working on individual project briefs and producing final ideas. Supporting their work with continual annotation</p>	<p>Presentation of practical work and Design Journal (usually in the form of a PowerPoint) Students sign authentication sheets. Teacher assessment starts. Moderation sample sent away.</p>		