

DT Curriculum map 2022/23

Year 7	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge (NC driven)	<p>-understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</p> <p>-develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a</p>	<p>develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and</p> <p>-select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture &</p>	<p>-select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture</p> <p>-test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</p>	<p>use research and exploration, such as the study of different cultures, to identify and understand user needs</p> <p>- understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</p> <p>-select from and use specialist tools,</p>	<p>-develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations</p> <p>- develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and</p>	<p>- develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools</p> <p>-test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</p> <p>-select from and use a wider, more complex range of materials, components and ingredients, taking</p>

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	variety of situations	computer based tools	<p>-understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</p> <p>-select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties</p>	<p>techniques, processes, equipment and machinery precisely, including computer-aided manufacture</p> <p>-select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties</p>	computer-based tools	into account their properties
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Topic/ Resources e.g texts, experiment s, material area, sport etc	FOOD H&S - Transition project -Health and safety in DT - Materials - Tools /equipment - Vacuum forming	Transition project (cont.) -Designing - -Practical workshop skills -Making -Health and safety in the food room - Using the stove (Bain Marie) -Packaging / food labelling -Evaluation	CONSTRUCTION Re Present Jewellery - Environm ental issues - Recycling materials - Polymers	DESIGN/ Textiles technology Environmental horrors -Textiles research -Environment (effects of textiles) -sewing skills (Running stitch, back stitch EXT Cross stitch)	Puggly doll - - Designing - Development - Pattern making/ cutting - Making - branding Systems and control / circuits	CONSTRUCTION Bridges - structures - forces -
Assessmen t	Step by Step vac forming guide	End of unit exam	End of project exam	Sewing skills	End of unit exam	End of year exam

Year 8	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge (NC driven)	-understand and apply the principles of nutrition and health	--understand and apply the principles of nutrition and health	-understand and apply the principles of nutrition and health	- develop and communicate design ideas using annotated sketches, detailed plans,	- develop and communicate design ideas using annotated sketches, detailed plans,	- develop and communicate design ideas using annotated sketches, detailed plans, 3-D and

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		<p>-cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet</p>	<p>-test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</p>	<p>3-D and mathematical modelling, oral and digital presentations and</p> <p>-select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer -aided manufacture & computer based tools</p> <p>- understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers,</p>	<p>3-D and mathematical modelling, oral and digital presentations and computer-based tools</p> <p>-select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties</p>	<p>mathematical modelling, oral and digital presentations and computer-based tools</p> <p>-select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture</p> <p>-test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</p>
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				engineers and technologists		
Topic/ Resources e.g texts, experiment s, material area, sport etc	FOOD Designing for clients - Specialist diets- Research (Nutrition and dietary needs)	- Specialist diets (cont.) - Research and eating plans - Making Eating plans and branding/ Marketing)	DESIGN Drawing skills - develop drawing skills - - Drawing types Plans, Elevations, 2 point perspective s, sections)	CONSTRUCTION Architecture / /Graphic design- Kiosk - Forces and structures (developed from bridges in yr7) - CAD 2D design	Kiosk (cont.) - Designing - drawing types in practice - Design, evaluation and development - Making (3D modelling Incl. CAD Sketchup) -Systems and control / circuits (developed from yr 7 Environmental horrors) -Evaluation	DESIGN Creative Entrepreneur - develop drawing skills - develop creativity - develop presentation skills
Assessment		Eating plan / End of unit Exam	End of Project exam	Making skills	Final design / End of unit exam	End of year exam
Year 9	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge	-cook a repertoire of predominantly savory dishes	-cook a repertoire of predominantly savory	-identify and solve their own design problems and understand	-- develop and communicate design ideas using annotated	-understand and use the properties of materials and	-understand and use the properties of materials and the performance of

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<p>(NC driven)</p>	<p>so that they are able to feed themselves and others a healthy and varied diet</p> <p>-become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and</p>	<p>dishes so that they are able to feed themselves and others a healthy and varied diet</p> <p>-become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients;</p>	<p>how to reformulate problems given to them</p> <p>- develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations</p> <p>-analyse the work of past and present professionals and others to develop and broaden their understanding</p> <p>-test, evaluate and refine their ideas and products against a specification,</p>	<p>sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and</p> <p>-select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer -aided manufacture & computer based tools</p> <p>-test, evaluate and refine their ideas and products against a specification, taking into account the views of</p>	<p>the performance of structural elements to achieve functioning solutions</p> <p>-select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture</p> <p>-analyse the work of past and present professionals and others to develop and broaden their understanding</p> <p>- understand developments in design and technology, its</p>	<p>structural elements to achieve functioning solutions</p> <p>-understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs]</p> <p>-select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture</p>
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	<p>using their own recipes]</p> <p>-analyse the work of past and present professionals and others to develop and broaden their understanding</p>	<p>adapting and using their own recipes]</p> <p>-understand the source, seasonality and characteristic s of a broad range of ingredients.</p>	<p>taking into account the views of intended users and other interested groups</p> <p>- understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</p>	<p>intended users and other interested groups</p>	<p>impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</p>	
<p>Resources Topic/ e.g texts, experiments, material area, sport etc</p>	<p>Practical cookery skills (Job role - Head chef) -Employment opportunities in Hospitality and Catering industry- Thornton Hall</p>	<p>Practical cookery skills -Ingredients (Seasonality / environmental factors) -Ingredients (New materials e.g</p>	<p>Design skills (Job role Graphic designer) - Employment opportunities in the design industry - Levers example for Product and</p>	<p>Design skills -Making -Evaluation -Presentation techniques/presenting to clients</p>	<p>Making skills (Job role - Carpenter) - Employment opportunities in Manufacturing and Construction industry - Magenta and</p>	<p>Making skills - Cutting, shaping and finishing materials - Systems and control / Circuits and electronics (developed from yr 7 Environmental</p>

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	<p>example - Job roles (experiencing in class) <u>Josh former student now chef OR girl in port sunlight hotel who is manager</u></p> <p>-Study famous chef - <u>Lesson intro - continue for homework</u></p> <p>- Types of cooking</p> <p>-Dovetailed timeplans</p> <p>-Scrambled egg on toast</p> <p>- Weighing and measuring (Practice with water for both) use for pizza dough</p> <p>- Costing, profit and loss</p> <p>- Combining ingredients -</p>	<p>vegan meat replacement)</p> <p>-Sauces</p> <p>-Knife-skills</p> <p>-Quick cheap nutritional meals -</p> <p>Stuffed peppers</p> <p>-Presentation skills</p>	<p>Graphic design</p> <p>- Types of Graphic design /Designers - <u>Howard Moore former student now Product design engineer/ technician</u></p> <p>=Study one iconic graphic designer -</p> <p><u>Lesson intro - continue for homework</u></p> <p>- Basics of Graphic design (colour theory, layout and typography)</p> <p>- Photoshop skills (developed from yr7 Charity Chocolate and Yr8 Kiosk)</p> <p>- Design ideas (drawing skills utilise learning from yr8 drawing unit)</p>		<p>Vauxhall/Jaguar examples <u>Jo Anderson former DT student = singing engineer</u> (civil engineer/apprentice lead for ICE 2016</p> <p>- Types of manufacturing (One off, mass, JIT etc.) PLUS New examples such as 3d printing and new materials</p> <p>-Study of famous architect - <u>Lesson intro and continue as homework.</u></p> <p>- Measuring and marking out</p> <p>- Costing materials</p>	<p>horrors and Yr8 Kiosk units)</p>
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	and baking - Pasta					
Assessment		Completed practicals and chef study		Completed Graphic design poster and designer study		Completed Wooden toy and architect study

Year 10 Graphic Design	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge	Unit 01 Introduction to graphic design (LO1) Understand the components of graphic design	Unit 01 Introduction to graphic design LO2 Experiment with the graphic design components	Unit 01 Introduction to graphic design LO3 Review of graphic design experiments. Unit 02 Graphic design practice LO1 Understand the work of recognised graphic designers	Unit 02 Graphic design practice LO2 Produce a graphic design inspired by the work of a chosen graphic designer.	Unit 02 Graphic design practice LO3 Review of graphic design Unit 03 Responding to a graphic design brief LO1 Understand the requirements of a graphic design brief	Unit 03 Responding to a graphic design brief LO1 Understand the requirements of a graphic design brief

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Resources Topic/ e.g texts, experiment s, material area, sport etc	<ul style="list-style-type: none"> - Colour theory - Tone - Line - Composition - Image -Typography -Types of Graphic design -Tools, equipment and materials 	<ul style="list-style-type: none"> - Colour theory - Tone - Line - Composition - Image -Typography - Experiment with components of graphic design on paper and computer 	Produce a study of the styles and influences of two designers Margerat Calvert •Milton Glaser •Paula Scher •Peter Saville •Jacqueline Casey •Quentin Blake •Aleksandr Rodchenko •Saul Bass •Kate Moross •Chip Kidd •Ruth Ansel •Josef Müller-Brockmann -Design ideas and development	Adobe Photoshop and Illustrator - Produce book cover, record or magazine cover in style of chosen designer	Adobe Photoshop and Illustrator Design practice - Produce the following <ul style="list-style-type: none"> - Merseytravel poster - Boxing poster (Use of typography and primary colours) - Film poster (Action film composition and hierarchy) - Packaging design (Line, Tone, Typography, legislation) Evaluation of designs	In response to a set client brief, Produce a range of design ideas (at least 3) , annotate them explaining how they address the components of graphic design, choose the most effective and produce a final version (using Photoshop or a physical medium).
Assessment	Completed examples (4 for eac so 6 x 4h) of each of the 6 components	End of term written exam	4 Page study of 2 chosen designers and their work	Completed piece of work	Designs against brief and reflective content of evaluation	- Mock Project brief 8 (of 17.5 real) hour external assessment (Half marks 2/4 LO's over 5 hours - Ideas and Design

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	with annotation					sections (Miss out development and evaluation)
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Year 10 Catering	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge	Unit 1 LO4: Know how food can cause ill health. LO1: Understand the importance of nutrition when planning meals.	Unit 2 LO1: Understand the importance of nutrition when planning meals. LO2: Understand menu planning.	Unit 2 LO1: Understand the importance of nutrition when planning meals. LO2: Understand menu planning.	Unit 1 LO1: Understand the environment in which hospitality and catering providers operate.	<u>Unit 2</u> <u>Begin Practical assignment</u> <u>(9 hours overall for final pieces of work after learning)</u> <u>LO1:</u> <u>Understand the importance of nutrition when planning meals.</u> <u>LO2:</u> <u>Understand menu planning.</u>	Produce dishes to be served on a range of different menus. Revision Mock written external exam (Past paper)

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Resources Topic/ e.g texts, experiments, material area, sport etc	<ul style="list-style-type: none"> - Food poisoning - Kitchen hygiene - Macro nutrients 	<ul style="list-style-type: none"> - Macro nutrients - Micro nutrients 	<ul style="list-style-type: none"> - Considerations when planning menus - Cost - Nutrition - Customer needs - Seasons 	<ul style="list-style-type: none"> - Types of provision - Job roles - Supply - Working hours / contracts - Profit and loss 	<ul style="list-style-type: none"> -Risk assessment - Environmental health (incl. E V officer) 	<ul style="list-style-type: none"> o vegetarian/, vegan dishes o dairy free o gluten free o low fat diets o healthy school meals
Assessment	<ul style="list-style-type: none"> - Phase test results 	<ul style="list-style-type: none"> - Phase test results 	<ul style="list-style-type: none"> - Phase test results 	<ul style="list-style-type: none"> - Portfolio of evidence - Phase test results 	<ul style="list-style-type: none"> - Complete risk assessments - Environmental health officers example report 	<ul style="list-style-type: none"> Mock written external exam (Past paper) -Dovetailed Plan of making

And if appropriate...

Year 10 Construction	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge	Unit 5: Exploring Carpentry and	Unit 5: Exploring Carpentry and	Unit 5: Exploring Carpentry and	Unit 2: Scientific and Mathematical	Unit 2: Scientific and Mathematical	Unit 2: Scientific and Mathematical

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	Joinery Principles and Techniques	Joinery Principles and Techniques	Joinery Principles and Techniques	Applications for Construction	Applications for Construction	Applications for Construction
Topic/ Resources e.g texts, experiments, material area, sport etc	Learning aim A: Understand tools, materials and equipment used in carpentry and joinery	Learning aim B: Develop practical skills using safe techniques to produce a timber frame.	Learning aim B: Develop practical skills using safe techniques to produce a timber frame.	Learning aim A: Understand the effects of forces and temperature changes on materials used in construction	Learning aim B: Use mathematical techniques to solve construction problems	Learning aim B: Use mathematical techniques to solve construction problem
Assessment	Assignment 1 - - Tools, equipment and materials report.	Assignment 2 - Risk assessment	Assignment 2 - complete wooden frame	Assignment 1 - Report on the the effect of materials on construction materials	Assignment 2 - using mathematical techniques to solve construction problems	Mock exam

Year 11 Graphic Design	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge	Unit 04 Graphic design portfolio	Unit 04 Graphic	Unit 04 Graphic design portfolio	Unit 04 Graphic design portfolio	Unit 04 Graphic design portfolio	Completion of internally assessed

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		design portfolio				units and unfinished work
Topic/ Resources e.g txts, experiments, material area, sport etc	LO2 Produce your final graphic design idea	LO2 Produce a graphic design portfolio	LO2 Produce a graphic design portfolio	LO2 Produce a graphic design portfolio	LO2 Produce a graphic design portfolio	LO2 Produce a graphic design portfolio
Assessment	Review of Portfolio	Review of portfolio against exam board criteria	Internal assessment of Portfolio	External assessment 10 hours (Mock)	External assessment 10 hour practical exam	

Year 11 Catering	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge	Unit 1 LO1: Understand the environment in which hospitality and catering	Unit 1 LO1: Understand the environment in which hospitality and catering	Produce dishes to be served on a range of different menus.	Internally assessed Synoptic assignment - Completion	Internally assessed Synoptic assignment - Completion	Completion of missed synoptic work - Prep and revision for Re-sit of External written exam

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	providers operate. LO3: Understand how Hospitality and catering provision meets health and safety requirements.	providers operate. LO3: Understand how Hospitality and catering provision meets health and safety requirements.				
Topic/ Resources e.g texts, experiments, material area, sport etc	- plan, trial, prepare, cook and serve a three course meal or range of dishes for a target group, or target catering outlet.	- plan, trial, prepare, cook and serve a three course meal or range of dishes for a target group, or target catering outlet.	o vegetarian/, vegan dishes o dairy free o gluten free o low fat diets o healthy school meals			
Assessment	Planning/ Portfolio	Planning/ Portfolio -External written exam	Internally assessed Synoptic assignment - Completion -External written exam	Internally assessed Synoptic assignment - Completion	Internally assessed Synoptic assignment - Completion	External written exam

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Year 11 Construction	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Key knowledge	UNIT 1: Construction Technology	UNIT 1: Construction Technology	UNIT 1: Construction Technology	Unit 3: Construction and Design	Unit 3: Construction and Design	Unit 3: Construction and Design
Topic/ Resources e.g texts, experiments, material area, sport etc	Learning aim A: Understand the structural performance required for low-rise construction	Learning aim B: Explore how sub-structures are constructed	Learning aim C: Explore how superstructures are constructed	Learning aim A: Understand the work of the construction industry	Learning aim B: Understand a client's needs to develop a design brief for a low-rise building	Learning aim C: Produce a range of initial sketch ideas to meet the requirements of a client brief for a low-rise building.
Assessment	External exam -	External exam	External exam	Assignment 1 - Understand the work of the construction industry	Assignment 2 - Understand a client's needs to develop a design brief for a low-rise building	Assignment 3 - Produce a range of initial sketch ideas to meet the requirements of a client brief for a low-rise building