DESIGN & TECHNOLOGY / FOOD PREPARATION & NUTRITION GSA Curriculum Map 2021-22

Curriculum intent statement for Design and Technology and Food Preparation and Nutrition:

We aim to develop students of Design and Technology who:

- **Have a coherent framework of knowledge about past and present design, understanding it's impact on daily life and the world around them.**
- **Develop the skills needed to design and make prototypes that solve real and relevant contexts.**
- **Benefit from the opportunity to develop creative, technical and practical expertise.**

We aim to develop students of Food Preparation and Nutrition who:

- **Gain knowledge and understanding of the importance of healthy eating and the principles of nutrition.**
- **Build the skills to cook a wide range of predominantly savoury dishes.**
- **Benefit from the opportunity to explore flavours and textures whilst using a variety of techniques and processes.**

	Food Preparation and Nutrition	Skills and Knowledge	Problem Solving
Year 7			
Topics	FP&N - Healthy eating, nutrition & what makes me healthy - basic food hygiene and food preparation. ● Eatwell guide ● Macro nutrients ● Micro nutrients ● Digestion ● Fibre and water ● Life stages	Skills and Knowledge - Core knowledge and understanding of materials and how to make prototypes from them.	Problem Solving - Applying designing and making skills to solve everyday problems. Product in a tin & Designer chair.
Skills	Hygiene and safety. Use of basic tools and equipment. Knife skills - Bridge hold and claw grip. Enzymic browning Use of hob and oven. Different types of raising agent and their uses. Safe handling of raw meat. Presentation skills. Recipes: ● Fruit salad ● Anzac ● Pasta Salad ● Savoury muffins ● Pasta salad ● Mini cakes (all in one method) ● Stir fry ● Spaghetti Bolognese ● Soup ● Sausage rolls ● Chicken nuggets	Health and safety. Focussed practical task's - Cutting, shaping and finishing wood, metal and plastic. Manufacturing. Material sources and properties. Use of workshop tools. Electronics. Drawing skills. Mechanisms and types of motion. Literacy and numeracy in D&T.	Research Inc. product analysis and evaluation. Designing for others. Ergonomics & anthropometrics. Health & safety. Modelling and prototyping. Analysis and evaluation. The work of others. Problem solving. Real contexts. Packaging design. Literacy and numeracy in D&T.

	• Scone based pizza		
Links	NC: -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 cooking techniques.	NC: -Investigate new and emerging technologies. -Select from and use specialist tools, techniques, processes, equipment and machinery precisely. -Understand more advanced electrical and electronic systems. -Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling.	NC: -Develop and communicate design ideas. -Analyse the work of past and present professionals. -Identify and solve their own design problems. -Develop and communicate design ideas. -Select from and use specialist tools, techniques, processes, refine their ideas and products against a specification. -Use research and exploration, such as the study of different cultures, to identify and understand user needs.
Cross Curricular Links	**Cross-curricular:** KS3 Biology: (B1 Cells) Cells and organisation. KS3 Biology: (B3 Digestion) Nutrition and digestion. KS3 Biology: (B7 Health and Lifestyle) Health. KS3 Chemistry: (C3 Reactions) Oxidation & enzymic browning.	**Cross-curricular:** ICT: HT2 Input and output devices. Art: HT1 Observational drawing skills: shape and tone colour blending, colour theory. Physics: HT1 Forces and Motions.	**Cross-curricular:** Maths: HT4 Perimeter & HT6 Use of a calculator. Art: HT6 Observational drawing: shape, tone, accuracy, colour blending.
Resources	BBC Bitesize: https://www.bbc.co.uk/bitesize/topics/zrdtsbk/resources/1 Oak Academy https://classroom.thenational.academy/lessons/dietary-variety-70w3ed	BBC Bitesize: https://www.bbc.co.uk/bitesize/subjects/zfr9wmn Technology student: https://www.technologystudent.com/	Oak Academy: https://teachers.thenational.academy/units/para-triathlete-design-challenge-c859 https://teachers.thenational.academy/units/design-in-the-natural-world-cc65
Year 8			
Topics	FP&N - The impact that food has on diet, cultures and the environment - developing a greater understanding of food preparation. • Religious diets • Dietary illness • Healthy teeth & gums • Vegan and vegetarian diets • World foods • Food origins and the environment	Skills and Knowledge - Developing a more in-depth knowledge and understanding of materials and their application.	Problem Solving - How products are designed in relation to users interacting with them - form and function. Pizza cutter for a specific user.

Skills	Hygiene and safety. Use of basic tools and equipment. Knife skills - bridge and claw Presentation skills. Safe handling of raw meat and fish. Independence and following a recipe. Sauce making – Gelatinisation. Food science - Protein coagulation. Recipes: ● Macaroni Cheese ● Swiss roll (Whisked) ● Chilled lemon Flan ● Fish Fingers ● Meat curry ● Homemade pasta	Health and safety. How to use a sewing machine and over-locker. Pinning and tacking. Inserting a zip. Seams. Working with patterns. Research skills – The work of others. Mechanisms & types of motion. Understanding CAD CAM. 3D modelling – Sketch Up 2D Design & laser cutting. Computer programming & microcontrollers.	Health and safety. Iterative design. Ergonomics and anthropometrics. Collecting data. The work of others. Templates and modelling. Prototyping and development. Product analysis. Designing for others. Using the lathe.
Links	NC: -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 cooking techniques. -Understand the source, seasonality and characteristics of a broad range of ingredients.	NC: -Use of specialist tools and equipment including CAD/CAM. -Research and analyse the work of others. -Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools. -Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. -Analyse the work of past professionals. -Understand developments in design and technology and its impact on the environment. -Apply computing and use electronics to embed intelligence in products that respond to inputs, and control outputs, using programmable components. -Understand how more advanced mechanical systems used in their products enable changes in movement and force.	NC: -Analyse the work of past and present professionals and others to develop and broaden their understanding. -Identify and solve their own design problems -select from and use a wider, more complex range of materials and components. -Create design ideas using annotated sketches. -Develop design ideas using different design strategies such as modelling and prototyping. -Problem solving skills to create design solutions.
Cross Curricular Links	**Cross-curricular:** KS3 Biology: (B7 Health and Lifestyle) Health. KS3 Biology: (B1 Cells) Cells and organisation. KS3 Biology: (B3 Digestion) Nutrition and digestion. KS4 Biology: (B5 Health and disease) Type 2 Diabetes, CHD, Obesity. KS4 Chemistry: (Chemical reactions) Acids and alkalis. KS3 Philosophy: dietary requirements.	**Cross-curricular:** ICT: HT3&4 Programming	**Cross-curricular:** Maths: HT6 Statistical diagrams. Science: HT1 Present observations and data using appropriate methods, including tables and graphs. Art: HT6 Pencil crayon techniques
Resources	BBC Bitesize: https://www.bbc.co.uk/bitesize/topics/zrdtsbk/resources/1 Oak Academy https://classroom.thenational.academy/lessons/cooking-techniques-and-preparing-food-safely-68r3ct	BBC Bitesize: https://www.bbc.co.uk/bitesize/subjects/zfr9wmn Technology student: https://www.technologystudent.com/ Oak Academy: https://teachers.thenational.academy/units/textiles-technology-and-sustainability-6f46	Oak Academy: https://teachers.thenational.academy/units/para-triathlete-design-challenge-c859 https://teachers.thenational.academy/units/design-in-the-natural-world-cc65

Year 9			
Topics	FPN - Designing suitable menus and preparing safe and balanced dishes. ● Food safety ● Food poisoning and spoilage ● Individual project responding to a given brief.	Skills and Knowledge - Developing an understanding of systems and control, how they work and can improve the quality of users lives.. Lamp manufacture.	Problem Solving - Healthy lifestyle NEA - work independently to identify and solve a real world problem.
Skills	Hygiene and safety Knife skills Presentation techniques Cooking techniques Analysis and investigation Research and planning Sensory analysis and evaluation Recipes: ● Sweet and sour chicken ● Profiteroles ● Pizza / stromboli ● Burger and chips ● Trial dishes for project	Health and safety. Motion and mechanisms - levers. The work of others. Modelling. Annotated design ideas. Use of specialist tools and equipment. Manufacturing. Developing. Testing and Trialling. Working with timber and plastic. Standard components. Evaluating and testing. Collecting and analysing data.	Addressing a context. Investigating user/client needs. The work of others. Product analysis. Further research. Design briefs and specifications. Generating design ideas with annotation. Development Inc. SCAMPER & CAD. Modelling and prototypes. Evaluating.
Links	NC: -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 cooking techniques.	NC: -Select from and use a wider, more complex range of materials, components and ingredients, considering their properties. -Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions. -Understand how more advanced electrical and electronic systems can be powered and used in their products. -Test, evaluate and refine their ideas and products against a specification, considering the views of intended users and other interested groups.	NC: - Analyse the work of past and present professionals and others to develop and broaden their understanding. -Identify and solve their own design problems and understand how to reformulate problems given to them. -Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations. -Use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses. -Test, evaluate and refine their ideas and products against a specification, considering the views of intended users and other interested groups.
Cross Curricular Links	**Cross-curricular:** KS4 Science: Gelatinisation, Yeast. Bacteria, Pathogens and microorganisms.	**Cross-curricular:** Drama: HT3&4 - GCSE Taster module in 'set design experience'	**Cross-curricular:** Art: HT1&2 Observational Drawing skills: tone, blending, highlights and shadows..
Resources	BBC Bitesize: https://www.bbc.co.uk/bitesize/topics/zrdtsbk/resources/1	BBC Bitesize: https://www.bbc.co.uk/bitesize/subjects/zfr9wmn Technology student: https://www.technologystudent.com/	Oak Academy: https://teachers.thenational.academy/units/design-in-the-natural-world-cc65

Year 10 Design and Technology						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Design Ventura project & theory knowledge	Treat dispenser & theory knowledge	Mini NEA Nature and the Environment & theory knowledge		Start NEA worth 50% of GCSE from 1st June	
Skills	Project: Iterative design skills. Drawing skills. CAD skills. Communication & organisation. Independence. Core Theory - Section A. Theory: Structures and forces. Specialist Timber knowledge - Section B.	Project: Cutting and shaping. Using tools & equipment. Finishing skills. Designing skills. CAD/CAM skills. Theory: Specialist Timber knowledge - Section B.	Iterative design. Working with a client. Writing a design brief and a specification. Designing and developing. Modelling. Evaluation skills. Theory: Design and make theory - Section C.		Investigation and research skills. Communication with a client. Iterative design and drawing skills. Development skills. Prototyping and modification skills. Evaluation skills. Theory: Design and make theory - Section C.	
Links	3.3 Section C – Designing and making principles.	3.2 Section B – Specialist technical principles.	3.3 Section C – Designing and making principles.		3.3 Section C – Designing and making principles.	
Cross Curricular Links	**Cross-curricular:** Business: Enterprise, entrepreneurship and calculations. Media: Textual analysis, understanding of context. Advertising and Marketing. Geography: Y11 Climate change. ICT, Business & Computing: Data collection & analysis, Inputs and outputs. Presenting information. Planning, Evaluation Design skills, Time Planning. Art: Drawing skills. Maths: (HT1) - SOHCATOA. Health & SS: (HT1) - Y11 Cre Values (H&S). Chemistry HT5 Polymers		**Cross-curricular:** Business: Interpretations from graphs and charts. Media: Textual analysis, understanding of industry. Business: Job, batch and flow production. Science: (Y10 HT5) - Forces. Science: (Y10 HT2) - Complete electric circuits. **Art: Drawing skills.** English: (HT1) Paper 1 Lang - analysis/evaluation. Maths: (Graphs).		**Cross-curricular:** Computer Science: Problem solving & analytical skills. Media: Graphic Design. ICT, Business & Computing: Data collection & analysis. Presenting information. ICT: Y9 -ICT in Today's World - Problem Solving. Creative I media: Design skills, Brief Analysis, Time Planning, Evaluation. Design skills, Time Planning. Art: Drawing skills. Maths: (Scale drawing).	
Resources	BBC Bitesize: https://www.bbc.co.uk/bitesize/examspecs/zby2bdm Technology student: https://www.technologystudent.com/ Seneca: https://app.senecalearning.com/classroom/course/b4e64de8-a5d1-411b-81e2-aa4e2016e908/section/32cf34cb-5489-4210-9c3c-c504c87aadf7/session Oak Academy: https://teachers.thenational.academy/units/textiles-technology-and-sustainability-6f46 https://teachers.thenational.academy/units/para-triathlete-design-challenge-c859 https://teachers.thenational.academy/units/design-in-the-natural-world-cc65					

Year 10 Food Preparation & Nutrition

Topics	Eatwell Guide Macronutrients: - Carbohydrates -Protein (LBV/HBV) -Fats Nutritional analysis Fibre	Micronutrients -Vitamins -Minerals Water Needs at different stages of life Dietary needs Time planning - dovetail Energy needs and balance Viscosity & gelatinisation	Introduction to NEA1 & food science Carbohydrates: Gluten experiments Fats: Types of fat in pastry Protein: meringue/foam experiments Nutritional analysis Results How to run an investigation	Why food is cooked - cooking methods Food spoilage. Micro-organisms and enzymes. Micro-organisms in food production. Bacterial contamination and types of food poisoning. How bacteria grow and multiply. Buying and storing food. Food labelling Deboning chicken	Factors affecting food choice - religious / ethical and moral. Allergies and intolerances Food provenance. Food production. Effects on the environment. Primary and secondary food production	Filleting a fish Sensory analysis Mini NEA2 -investigation -trial dish -planning -evaluation -nutritional analysis -costing
Skills	Fresh pasta. Marinating meats. Use of the grill. Blending Knife skills / cuts Sauces Soup or salad	Roux sauce task Lasagne Meal for chosen life stage Whisked sponge (yule log competition).	Focaccia Cornish pasties Meringue nests / pavlova or Eaton mess (with plating)	Deboning chicken Chicken Ballotine Enzymic browning and apple swans (garnishing) Cook a food using 3 different methods - i.e. potato boiled / baked and fried.	Lemon meringue pie Free from practical Jam making - food preservation	Filleting a fish Trial dishes + practical exam based on a given brief linked to NEA 2 - European traditions.
Cross Curricular Links	**Cross-curricular:** PE (HT1): Macro and micro nutrients, fats, protein, carbohydrates Science	**Cross-curricular:** PE (HT1): Vitamins, Fibre. Minerals. Science	Science	Science	Philosophy Geography	
Links	AQA Food Preparation and Nutrition: Specification code 8585.					
	3.1 Food preparation skills 3.2 Food, nutrition and health 3.7 Food preparation and cooking techniques	3.1 Food preparation skills 3.2 Food, nutrition and health 3.7 Food preparation and cooking techniques	3.1 Food preparation skills 3.3 Food science 3.7 Food preparation and cooking techniques	3.1 Food preparation skills 3..4 Food safety 3.7 Food preparation and cooking techniques	3.1 Food preparation skills 3.4 Food choice 3.6 Food Provenance 3.7 Food preparation and cooking techniques	3.1 Food preparation skills 3.2 food, nutrition and health 3.7 Food preparation and cooking techniques
Resources	Illuminate Publishing https://www.illuminate.digital/aqafood/ BBC Bitesize https://www.bbc.co.uk/bitesize/guides/z3fpv4j/revision/2 Seneca: https://app.senecalearning.com/classroom/course/d59d0e60-4fa8-11e8-bbba-738ab127bed6/section/3a2ecae0-5aac-11e8-8337-b1fe33357061/session Oak Academy: https://teachers.thenational.academy/units/future-food-and-the-application-of-science-4e11 GCSE POD					

Year 11 Design and Technology			
Topics	NEA worth 50% of GCSE and theory knowledge	N/A.	N/A.
Skills	• Identifying and investigating design possibilities. • Producing a design brief and specification. • Generating design ideas. • Developing design ideas. • Realising design ideas. • Analysing & evaluating. Theory: Core, Specialist and Design and Make.		
Links	AQA Design and Technology: Specification code 8552. ● AO1 ● AO2 ● AO3		
Cross Curricular Links	**Cross Curricular Links:** **ART (HT1): Developing personal ideas.** Business: Interpretations from graphs and charts. Business: Job, batch and flow production. Media: Understanding of contexts. ICT, Business & Computing: Data collection & analysis. Chemistry: (HT5) - Using resources (6Rs). Maths: (Measures / Scale drawing / Statistics).		
Resources	BBC Bitesize: https://www.bbc.co.uk/bitesize/examspecs/zby2bdm Technology student: https://www.technologystudent.com/ Seneca: https://app.senecalearning.com/classroom/course/b4e64de8-a5d1-411b-81e2-aa4e2016e908/section/32cf34cb-5489-4210-9c3c-c504c87aadf7/session		

Year 11 Food Preparation & Nutrition					
Topics	NEA 1 15%.	NEA 2 35%.	Exam revision 50%.	N/A.	N/A.
Skills	Researching. Investigating. Evaluating. ***Due to exam changes in 2021-22 NEA1 will not be part of the assessment. NEA2 will**	Research. Trialling dishes. Dish development. Planning. Evaluating. 3 hour practical exam.	Covering the AQA criteria.		

	be released early, so will be started in Autumn term 2.				
Links	AQA Food Preparation and Nutrition: Specification code 8585.				
Cross Curricular Links	**Cross Curricular Links:** ICT: ICT in Today's World - Emerging Technologies. Creative I Media: Design skills, Brief Analysis, Time Planning.				
Resources:	Illuminate Publishing https://www.illuminate.digital/aqafood/ BBC Bitesize https://www.bbc.co.uk/bitesize/guides/z3fpv4j/revision/2 Seneca: https://app.senecalearning.com/classroom/course/d59d0e60-4fa8-11e8-bbba-738ab127bed6/section/3a2ecae0-5aac-11e8-8337-b1fe33357061/session Oak Academy: https://teachers.thenational.academy/units/future-food-and-the-application-of-science-4e11 GCSE POD				

Year 12 Design & Technology: Product Design - this curriculum map will be amended with a vertical group						
	Autumn 1		Autumn 2		Spring 1	
	Theory	NEA Prep		NEA Prep	Theory	NEA Prep
Topics	● Materials and their applications. ● Performance characteristics of Materials.	A series of small, skill-based projects to provide students with the skills needed to complete the individual NEA plus Designing and making principals: - ● Design methods and processes. ● Design Theory. ● Enhancement of Materials. ● Forming, redistribution and addition processes - Paper and board forming processes. ● Use of adhesives and fixings. ● Jigs and fixtures. ● CAD/CAM.	● Performance characteristics of Materials. ● Enhancement of Materials.	As Autumn 1 with: - ● Design processes. ● Forming, redistribution and addition processes - Polymer processes.	● Forming, redistribution and addition process. ● The use of adhesives and fixings. ● The use of finishes.	As Autumn 1 and 2 with: - ● Critical analysis and Evaluation. ● Forming, redistribution and addition processes - Metal processes. ● Forming, redistribution and addition processes - temp and permanent joining methods.
Skills	● Research, investigation, analysis and gaining understanding of topics. ● Application of knowledge to existing products and design proposals.	● The use and application of a selection of Wood preservatives/finishes/and Coatings. ● The use and application of a selection of Metal Case hardening, hardening and	● Research, investigation, analysis and gaining understanding of topics. ● Application of knowledge to existing products and design proposals.	● The use and application of a selection of Vacuum forming / Thermoforming, calendaring, line bending, laminating, injection moulding, blow moulding, rotational moulding, extrusion and compression	● Research, investigation, analysis and gaining understanding of topics. ● Application of knowledge to existing products and design proposals.	● The use and application of a selection of: - Press forming, spinning, cupping, deep drawing, forging, drop forging, bending, rolling, casting - sans, die, investment and low temperature.

		tempering. ● The use and application of a selection of Die cutting, Laser cutting, creasing and bending in paper and board.		moulding.		● Metal inert gas, tungsten inert gas, spot and oxy-acetylene welding. Soldering, brazing, riveting, temporary - self tapping, machine screws and nuts and bolts.
Links	Theory Units 3.1.1 / 3.1.2 /	Theory Units 3.2.1 / 3.2.2 / 3.1.3 / 3.1.4 / 3.1.7	Theory Units 3.1.2 / 3.1.3	Theory Units 3.2.4 / 3.1.4 /	Theory Units 3.1.4 / 3.1.4.5 / 3.1.5	Theory Units 3.2.5 / 3.1.4 /
Cross Curricular Links	**Cross Curricular Links:** Cambridge Technical. Information Technology: Communication: Problem solving, Time management. Maths: Using Graphs.	**Cross Curricular Links:** Computer Science: Data Representation, communication. Information Technology: Communication, Decision making. Maths: Using Graphs. Geography: (HT2) - Globalisation.	**Cross Curricular Links:** Computer Science: Data Representation, communication, Problem Solving.	**Cross Curricular Links:** Computer Science: Data Representation, communication, Problem Solving. Information Technology, Communication, Problem solving, Time management Communication, Decision making.	**Cross Curricular Links:** Computer Science: Critical Evaluation & Testing, Design and Modelling. Y12 Core Maths: Perimeter. Circumference and area / Similarity and Pythagorean theorem / Surface area and similarity. Information Technology: Communication, Critical thinking, Team working, Communication, Decision making. Art: Design periods.	**Cross Curricular Links:** Computer Science: Critical Evaluation & Testing, Design and Modelling Information Technology: Communication, Critical thinking, Team working, Communication, Decision making. Maths: (HT4) - Y11 -Trig; recap & Extension.

Year 12 Design & Technology: Product Design - this curriculum map will be amended with a vertical group						
	Spring 2		Summer 1		Summer 2	
	Theory	NEA Prep	Theory	Real NEA	Theory	Real NEA
Topics	● Modern industrial and commercial practice. ● Digital design and manufacture.	As Autumn 1/2 and spring 1 with: - ● Forming, redistribution and addition processes - Wood wasting processes. ● Wood joining. ● Metal finishes. ● Wood finishes.	The requirement for product design and development Health and Safety. Protecting designs and intellectual property.	● Start of real NEA portfolio	● Design for manufacturing, maintenance, repair and disposal. ● Design Communication ● Feasibility studies. ● Enterprise and marketing in product development.	● Real NEA portfolio
Skills	● Research, investigation, analysis and gaining understanding of topics. ● Application of knowledge to existing products and design proposals.	● The use and application of a selection of: - Milling, turning, flame cutting, plasma cutting, laser cutting and punch/stamping. ● The use and application of a selection of: - Addition/fabrication processes. Traditional wood	● Research, investigation, analysis and gaining understanding of topics. ● Application of knowledge to existing products and design proposals.	● AO1 Section A -identifying and investigating design possibilities.	● Research, investigation, analysis and gaining understanding of topics. ● Application of knowledge to existing products and design proposals.	● AO2 Section c - Development of Design proposals.

		joints, component jointing. ● Laminating, steam bending, machine processes.				
Links	Theory Units 3.1.6 / 3.1.7 /	Theory Units 3.1.4 /	Theory Units 3.1.8 / 3.1.9 / 3.1.10 /		Theory Units 3.1.11 / 3.1.12 / 3.1.13 /	Maths: (Y13 HT2) Forces in Context, Moments
Cross Curricular Links	**Cross Curricular Links:**	**Cross Curricular Links:** **Maths:** Trigonometric Functions and equations / Triangle Geometry.	**Cross Curricular Links:**	**Cross Curricular Links:**	**Cross Curricular Links:** Geography: (HT2) - Globalisation.	**Cross Curricular Links:**
Resources	Student Hub: https://sites.google.com/george-spencer.notts.sch.uk/designtech/a-level/start-here Classroom: https://classroom.google.com/c/MTU4Njg5NDMzNTEw					

Year 13 Design & Technology: Product Design - this curriculum map will be amended with a vertical group						
	Autumn 1		Autumn 2		Spring 1	
	Theory	Real NEA	Theory	Real NEA	Theory	Real NEA
Topics	● Technology/cultural changes and the impact on designers. ● Product life Cycle. ● Selecting tools, equipment and processes.	● Real NEA portfolio	● Accuracy in design and manufacture. ● Responsible Design. ● Design for manufacture and project management. ● National and international standards	● Real NEA portfolio	● Real NEA portfolio	● Real NEA portfolio
Skills	● Research, investigation, analysis and gaining understanding of topics. ● Application of knowledge to existing products and design proposals.	● AO2 Section c - Development of Design proposals - continued.	● Research, investigation, analysis and gaining understanding of topics. ● Application of knowledge to existing products and design proposals.	● AO2 Section C - Development of Design prototypes	● AO2 Section C - Development of Design prototypes	● AO2 Section C - Development of Design prototypes
Links	Theory Units 3.2.3 / 3.2.3.4 / 3.2.6		Theory Units 3.2.7 / 3.2.8 / 3.2.9 / 3.2.10			
Cross Curricular Links	**Cross Curricular Links:** Business Studies: Quantitative skills, interpret index numbers, calculation of decision trees, ratios, averages, percentages and fractions. Interpret, apply and analyse information in written, graphical and numerical forms.	**Cross Curricular Links:** Computer Science: Analysis, Design, Development, Testing, Evaluation.	**Cross Curricular Links:**	**Cross Curricular Links:**	**Cross Curricular Links:**	**Cross Curricular Links:**

Year 13 Design & Technology: Product Design - this curriculum map will be amended with a vertical group						
	Spring 2		Summer 1		Summer 2	
	Theory	Real NEA	Theory		Theory	
Topics	● Real NEA portfolio ● Exam Prep - Exam technique. ● Revision techniques.	● Real NEA portfolio	● Exam Prep - Exam revision.	● External Exams		
Skills	● A03 Section E - Analysing and Evaluation. ● Understanding questions, what is asked for. ● Point, evidence, example. ● Reading questions. ● Revision techniques	● A03 Section E - Analysing and Evaluation	● As spring 2	● External Exams		
Links			All Theory sections			
Cross Curricular Links	**Cross Curricular Links:**	**Cross Curricular Links:**	**Cross Curricular Links:**			
Resources Student Hub: https://sites.google.com/george-spencer.notts.sch.uk/designtech/a-level/start-here						