

CURRICULUM PROGRESSION PATHWAY – Design and Technology : Product Design

1 hour per week y7-9 / 2 hours per week y10-11 (GCSE Design and Technology)

	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn 1	Health and safety induction. Picture Frame Project: Mixed material project introducing a number of manufacturing techniques (shaping, joining, finishing.) Material properties and processes.	Health and safety induction / recap. LED circuits / soldering.	Health and safety induction / risk assessments. Board Game design and make project exploring graphic design skills (colour, imagery, typography, composition.) Designing techniques.	Understanding the design process. Design Ideas and development. Design Movements. Materials and properties. Specialist technical skills.	Exam board - NEA Task A full range design and make activity covering all aspects of the design process and leading students towards a final prototype and portfolio. Alongside – review of core content in preparation for examination.
Autumn 2		Mood light design and make project. Mixed materials and manufacturing techniques creating a housing unit and lighting effect. Work of existing famous designers. Circuits and soldering techniques.			
Spring 1	Drawing skills. Developing 3d hand drawing techniques.		Electronic Dice Project. Understanding the function of components to make the circuit. Making and housing the dice circuit for the board game (nets).	Mini NEA task - Design and make activity exploring the main elements of the NEA and how the portfolio is prepared.	
Spring 2	Textile jewellery design and make project. Understanding the structure of fabrics.	Structures Project / Disaster shelters – group work problem solving project to design and			

Summer 1	How to manipulate and create with fabrics.	Model a structure that solves a real world problem.	Programming – Electronic Dice	Embedding core content. Focussed practical tasks.	Examinations
Summer 2	CAD / CAM – 2D design and make project. Vector based design software.	Mechanisms and types of motion investigations.	CAD / CAM – how to design and make in 3d using computers. Types of 3D printing and materials.	NEA Task - open end of term.	

CURRICULUM PROGRESSION PATHWAY – Design and Technology : Food Technology 1 hour per fortnight 7-9 / 2 hours per week y10-11 (GCSE Food Preparation and Nutrition)					
	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn 1	Health and Safety / food hygiene. Mixing methods - buns	Health and safety. Mixing methods –muffins	Health and safety. Mixing methods – Swiss roll	Food nutrition and health Food safety	Exam board - NEA Task 1: Investigation activity.
Autumn 2	Understanding a healthy diet.	Food poisoning - Handling high risk foods.	Macro Nutrients – Chicken Fajitas.	Food choice Food provenance	
Spring 1	Food commodities.	Understanding food labels.	Food Science – pastry. Quiche	Mini NEA 2 task - Design and make	Exam Board – NEA Task 2: A full range design

		Pastries		activity exploring the main elements of the NEA and how the portfolio is prepared.	and make activity – 3 course meal
Spring 2	Function of ingredients.	Pastas and sauces.	Nutritional needs of different food groups. Cottage Pie / Lasagne		
Summer 1	Function of ingredients	Food provenance breads	How cooking affects sensory analysis. Focaccia	Food science	Examinations
Summer 2	Sensory analysis	Food and its role in religions	Functional and chemical properties of food. Heat transfer	NEA 1 Task - open end of term.	

CURRICULUM PROGRESSION PATHWAY – Design and Technology : Textiles Technology

1 hr per fortnight 8-9 / 2 hours per week y10-11 (GCSE ART Design – Textiles Focus)

	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn 1	Taught within DT : product design Note: it may be that in year 8 and 9 food is taught for 20 hours and	Design and Make Pod Pillows: Health and safety/Risk assessment. Tie dye / Decorative stitches / Fibres to fabric	Health and safety Health and safety/equipment/careers Batik and sample Finish Batik sample and evaluation		Exam board - Controlled assessment – 10 hour practical exam.
Autumn 2				Coursework - Project one – Nature forms. Lino printing / Free machine embroidery	
Spring 1					
Spring 2					

	then textiles for the next 20 hours to complete the year or vice versa.	/ Applique design / Sewing machines.	Fabric pens/samples 6 R's Initial design ideas Final design idea and template. Smart fabrics Recap on sewing machine/test Stitch together pillow Evaluation Assessment	/Stitch and slash/ tucks	
Summer 1		Analysis / Specification / Design / Development / Evaluation		Coursework - Project 2 – Structure.	Examinations
Summer 2				Felting / needle felting / tie dye / batik / applique / reverse applique.	

CURRICULUM PROGRESSION PATHWAY

2 hours per week y10-11 additional KS4 subjects

	GCSE Engineering		Engineering - Level2 Cert		Level1/2 Graphics		Level1/2 Hosp & Catering	
	Year 10	Year 11	Year 10	Year 11	Year 10	Year 11	Year 10	Year 11
Aut 1	Intro core content –	Exam board - NEA Task covering all	Unit 1 - H&S in engineering environment.	Core content review – Units 1-3	Components of graphic design. Theory and	Graphic design production.	A04 – food safety	Exam board – unit 2 – hospitality and

	Electronics Practical. CAD / CAM	aspects of the design process with a final prototype & portfolio. Alongside –preparation for examination.	U3 - Practical applications –material properties.		application - colour, imagery, typography, line, tone and composition.	Digital skills, choice and use of resources, summative evaluation.		catering in action – create a 2 course meal.
Aut 2				Synoptic Assessment: Portfolio of evidence and practical application of all units of work covered.	Components of graphic design. Theory and application - colour, imagery, typography, line, tone and composition.	Graphic design production. Digital skills, choice and use of resources, summative evaluation.	A04 – food safety	
Sp 1	Mini NEA task- Exploring the main elements of how the		U1 - engineering businesses. U3 – Practical applications –material choice		Work of graphic designers. Types of graphic design, features and job opportunities.	Design, present and promote graphic design work. Purpose of presenting	A01 – hospitality and catering provision	

	portfolio is prepared.					and promoting. Methods of presenting and self promotion.		
Sp 2					Requirements of a design brief. Types, requirements and constraints of different types of design briefs.	Design, present and promote graphic design work continuation. NEA - 17.5 hours assessment (60% of final grade).	A02 – how H&C providers operate.	
Sum 1	Review core content - FPT	Examinations	U2 – Engineering drawings & forms of communication	Examinations	Planning: Development. Realising design ideas and development process - stages,	Examinations 1.5 hours written exam (40% of final grade).	A03 – health and safety in hospitality and catering	Examinations

			U4 – CAD / CAM - 3d printing		techniques, components, properties.			
Sum 2	NEA available	Examinations		Examinations	Planning: Experimentation. Components, tools, materials and techniques. Ongoing review.	Examinations	Unit 1 assessment	Examination