

Curriculum plan

Subject: Technology

Key Stage 3

		Year 7	Year 8	Year 9
Product Design	Half Term 1	<u>Illuminate Project</u> Tea-light candle holders inspired by Mexican Folk Art, Oaxacan animals and Alebrijes. Half term 1 is about designing and using CAD software.	<u>Trinket Box</u> Create a box to hold keepsakes. Half term 1 is about designing and developing CAD skills.	<u>Amplify Project</u> Design and make a small mp3 speaker or passive amplifier. Half term 1 is designing and using CAD independently.
	Half Term 2	<u>Illuminate Project</u> Half term 2 is using CAM equipment to create the acrylic figures and traditional tools to create the base.	<u>Trinket Box</u> Half term 2 is about developing CAM skills and using more advanced cutting equipment.	<u>Amplify Project</u> Half term 2 is manufacturing and populating circuit boards.
	Half Term 3 (7B & 9B only)	<u>Graphic Product</u> Using CAD/CAM skills to create a designed and developed font that could be batch produced.		<u>Packaged</u> Design and make a small product that could be sold for £5.00, with packaging.
Food	Half Term 1	<u>Basic Food Skills</u> Health & Safety, fruit salad, pasta salad, eatwell plate, cakes.	<u>Developing Skills</u> Meat/protein, chicken curry, world food, fats.	<u>Food in Industry</u> Catering industry, job roles, American chocolate chip muffin, risotto, curry & naan bread.
	Half Term 2	<u>Basic Food Skills</u> Spagetti bolognaise, Christmas biscuit, food hygiene.	<u>Developing Skills</u> Nutrients, eatwell plate, carbohydrates, macaroni cheese.	<u>Food in Industry</u> Swiss roll, time plans, project based practical.
	Half Term 3 (7B & 9B only)	<u>Basic Food Skills</u> Apple crumble, ginger biscuit.		<u>Food in Industry</u> Rubbing in method, creaming method, melting method.

Key Stage 4 – Product Design

	Year 10	Year 11
Autumn 1	<u>Design Ventura</u> Students take part in a national competition to design a product to be sold in the Design Museum shop. The product must cost less than £10.00 and link with one of the themes decided by the museum.	<u>Designing – CA</u> Using hand drawn sketches and CAD students create a range of ideas for their major project.
Autumn 2	<u>Apothecary Cabinet Project</u> Research and start designs for a small scale apothecary cabinet.	<u>Designing and Making – CA</u> Students finish designing and start to make their major project.
Spring 1	<u>Apothecary Cabinet Project</u> Use CAD programs (2D Design) to create a working scale prototype of the cabinet.	<u>Making & Evaluating – CA</u> Students complete their major project and evaluate their progress.

Spring 2	<u>Apothecary Cabinet Project</u> Use CAM (laser cutter and CNC router) to manufacture a cabinet capable of being batch produced.	<u>Revision for Exam</u> Materials, equipment, human factors, design approaches.
Summer 1	<u>Skill Booster Projects</u> 2 small scale projects to boost practical ability – these will be decided based on the development of skills through the Apothecary Cabinet project.	<u>Revision for Exam</u> Eco-issues, packaging, production methods, use of computers.
Summer 2	<u>Research – CA</u> Students start their research into their major project (CA – Controlled Assessment).	

Key Stage 4 – Graphic Products

	Year 11
Autumn 1	<u>Designing – CA</u> Using hand drawn sketches and CAD students create a range of ideas for their major project.
Autumn 2	<u>Designing and Making – CA</u> Students finish designing and start to make their major project.
Spring 1	<u>Making & Evaluating – CA</u> Students complete their major project and evaluate their progress.
Spring 2	<u>Revision for Exam</u> Materials, equipment, human factors, design approaches, design case studies, logos and slogans.
Summer 1	<u>Revision for Exam</u> Eco-issues, packaging, drawing techniques, branding, printing processes.
Summer 2	

Key Stage 4 – Catering

	Year 10	Year 11
Autumn 1	Practical skills- knife skills, methods of cooking, seasoning. Theory topics- Methods of cooking, catering industry/service styles)	Coursework Task 2
Autumn 2	Practical skills- Pastry Theory Topics – Nutrition, Special diets, Allergies,	Coursework task 2
Spring 1	Practical skills – Spices, meat & fish Theory Topics- Health & safety, Environmental Health, Meat & Fish	Revision for exam- Catering industry, nutrition, job roles & employment
Spring 2	Practical Skills – Cake making methods. Theory Topics – Cake making science, dairy, dough products.	Revision for exam- Environmental Factors, sustainability, Health and safety Equipment
Summer 1	Practical Skills – Preparation for coursework (practising coursework dishes. Coursework Task 1	Revision for exam- Past Papers
Summer 2	Coursework Task 1	

Key Stage 5

	Year 12 – Product Design	Year 12 – Food & Nutrition
Autumn 1	<u>Eco-Lamp Project</u> Theory – Materials; polymers, metals and timbers and their properties, design movements of the 20 th and 21 st century. Practical – CA task to design and make a lamp that has zero environmental impact.	Theory- Structure and functions of nutrients. Practical – using different pieces of equipment & tools, chicken & fish filleting.
Autumn 2	<u>Eco-Lamp Project</u> Theory – Human factors, designing for different social issues, smart materials. Practical – CA task to design and make a lamp that has zero environmental impact.	Theory – Classification of nutrients. How the human body converts nutrients. Practical - Meat & vegetable presentation, using advanced techniques.
Spring 1	<u>Designing & Prototyping</u> Theory – Ergonomics Practical – create a working prototype piece for a MPV.	Theory- Nutritional needs of specific groups/medical conditions/religion Module 1 assessment Practical- Plans of production & health & safety, Meat alternatives & gelatine
Spring 2	<u>Revision</u>	Module 1 assessment continued Practical- Preparation for Module 2

Summer 1	<u>Revision in preparation for AS exams</u>	Module 2 assessment
Summer 2	<u>Research – CA</u> Students start their research into their final major project (CA – Controlled Assessment).	Module 2 assessment

No current Year 13 students in Product Design or Food and Nutrition.