

YEAR 7 Design and Technology

CURRICULUM PROGRESSION OVERVIEW

In Design and Technology, students begin with the fundamental foundations of knowledge; from knowing how to work safely with several different tools and pieces of equipment to preparation and cooking techniques, being able to cook a range of predominantly savoury dishes and developing their understanding of good nutrition to prepare them for later life. The curriculum will engage and enthuse a passion for the subject. Giving opportunities to explore practical activities which will enable mastery of skills and secure knowledge.

The students study half a school year of Design, followed by Technology (food) or vice versa. The room allocation dictates the task order, on a rotation.

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic	Hygiene and Safety	Key Practical Skills	Food Choices	CAD/CAM, drawing skills and electronics.	Materials, tools and equipment in the workshop. Manufacturing techniques.	Prototypes, structures and designing for a client.
Core Knowledge/ Threshold Concept	Develop an understand of kitchen routines, basic hygiene, the 4 C's: Cleaning, Cooking, Chilling, Cross Contamination Heat and knife safety	Know and understand the key skills of preparation techniques (weigh, measure, peel, cut, slice, dice, mix blend, grate, prove, knead, rubbing in), applying heat (use of kettle, hob and oven to, boil, melt, simmer, bake and hob) and quality checks (portioning, dividing, shaping)	Knowledge of the Eatwell Guide 8 Tips/ Government Guidelines for healthy eating. Food Provenance – where food comes from, how it is grown. Links to food miles and Fairtrade	An introduction to CAD and CAM, electronics and isometric drawing techniques.	Know and understand a range of tools and pieces of equipment within the workshop environment. Develop an understanding of the different materials available.	Designing for a client and creating a prototype. Developing knowledge of structures.
Why this learning now?	Learning is deliberately sequenced having considered what core knowledge is required to unlock deeper understanding of a topic and the ability to make connections between topics so that when implementing this intent, teachers can effectively and explicitly draw attention to where a keyword/concept/behaviour/pattern etc has been seen before and effectively expose the relationship to the current topic through questions such as:					

	Where have we seen this before? What does this remind us of? How does this have a relationship with what happened previously? How does our understanding of the previous concept inform our understanding of this one? And hence facilitate better learning.					
	Develop an understanding of the fundamentals of personal & kitchen hygiene and safety, being able to apply their learning to a new environment clearly and confidently.	Developing mastery of basic skills learnt possibly in KS2. Gain and further develop confidence around the kitchen and establish routines.	Develop students understanding of healthy eating and links to their own dietary choices with those of Government advice and NHS recommendations.	For some students this will be their first experience of CAD and CAM (preparing them for KS4).	Develop an understanding of the importance of health and safety, being able to apply their learning to a new environment clearly and confidently.	Develop student's presentation, designing and making skills.
Assessment Opportunities:	Following the Trusts assessment policy for termly assessment					
	PC1 Assessment. Formative in class assessment of skills and ability, knowledge and understanding.	Formative Assessment. Self-assessment of practical skills. Product evaluation of organoleptic qualities.	PC2 Assessment. Formative in class assessment of skills and ability, knowledge and understanding.	Formative in class assessment of skills and ability, knowledge and understanding.	PC3 Assessment. Formative in class assessment of skills and ability, knowledge and understanding.	Formative in class assessment of skills and ability, knowledge and understanding.
Learning at Home	Within Design and Technology, students are issued with one home learning task per half term.					
	Design task	Research task	Revision task	Design task	Research task	Revision task
Key Vocabulary	Hygiene Mise en place	Preparation Equipment Organoleptic Modification (Practical skills identified in core knowledge section)	Healthy Balance Digestion Organic Provenance	CAD/CAM Isometric Components Circuit LED Acrylic	Softwood Manufactured Board MDF PVC Vacuum former Adhesive Safety Rebate Tenon Hazard	Prototype Structure Client Aesthetics Testing Render Evaluation

Spiritual, Moral, Social and Cultural concepts covered	<ul style="list-style-type: none"> • sense of enjoyment and fascination in learning about themselves, others and the world around them • use of imagination and creativity in their learning • willingness to reflect on their experiences • understanding of the consequences of their behaviour and actions • use of a range of social skills in different contexts, for example working and socialising with other pupils, including those from different religious, ethnic and socio-economic backgrounds • ability to recognise, and value, the things we share in common across cultural, religious, ethnic and socio-economic communities • willingness to participate in and respond positively to cultural opportunities
Links to careers and the world of work	<p>All students are given the opportunity to take a Design and Technology subject as an additional option at KS4. The KS3 curriculum develops student's crucial knowledge and skills for those who wish to pursue the subject further at KS4.</p> <p>Design and Technology addresses the needs of each student in developing their confidence to work independently and with resilience, reflecting on their progress and ability.</p> <p>The subject has curriculum links to a range of careers in the design and engineering field as well as hospitality and catering, discussed throughout lessons.</p>