



## Technology Key Stage 4 Curriculum

### GCSE Design & Technology

		HT 1	HT 2	HT 3	HT 4	HT 5	HT 6
10	Theory	<ul style="list-style-type: none"> <li>-New and emerging technologies</li> <li>-Energy generation and storage</li> <li>-Developments in new materials</li> <li>-Understanding a systems approach when designing</li> <li>-Materials and their working properties: <b>Textiles</b></li> </ul>	<ul style="list-style-type: none"> <li>-New and emerging Technologies</li> <li>- Ecological and social footprint</li> <li>-Communication of ideas</li> <li>-Materials and their working properties: <b>Wood &amp; polymers</b></li> </ul>	<ul style="list-style-type: none"> <li>-Surface treatments and finishes</li> <li>-Investigating primary and secondary data</li> <li>-The work of others</li> <li>-Communication of design ideas</li> <li>-Prototype development</li> <li>-Materials and their working properties: <b>Metals and alloys</b></li> </ul>	<ul style="list-style-type: none"> <li>-Sources of origins</li> <li>-Stock forms types and sizes</li> <li>-scale of productions</li> <li>-Communication of ideas</li> </ul>	<ul style="list-style-type: none"> <li>-Investigation, primary and secondary data</li> <li>-Specialist techniques and processes</li> <li>-Material management</li> </ul>	<ul style="list-style-type: none"> <li>-Surface treatments and finishes</li> <li>- Forces and stresses-</li> <li>- The work of others</li> <li>-Design strategy</li> <li>- Environmental, social and economic challenge</li> <li>-Prototype development</li> </ul>
	NEA	<u>Project One:</u> <b>E-Textiles</b> <b>Material Area:</b> Fabrics and fibres <b>NEA Focus:</b> Section A&B <ul style="list-style-type: none"> <li>- Develop a range of skills whilst creating a 3D product, using various Textiles equipment/ machines</li> <li>-New technologies</li> <li>-Research</li> <li>-User-centred design</li> </ul>	<u>Project Two:</u> <b>Up-cycling</b> <b>Material Area:</b> Woods and polymers <b>NEA Focus:</b> Section C <ul style="list-style-type: none"> <li>-Develop skills using hand held tools</li> <li>-Communication of ideas</li> <li>- The work of others</li> </ul>	<u>Project Three</u> <b>Jewellery</b> <b>Material Area:</b> Metals and Alloys <b>NEA Focus:</b> Section D <ul style="list-style-type: none"> <li>-Development</li> <li>-Decorative techniques</li> <li>- The work of others</li> </ul>	<u>Project Four: Design &amp; Make</u> <b>NEA Focus:</b> Section D, E and F Project focused on the iterative design process and development of project to meet the needs of the client and task.		<u><b>NEA Release date: 1<sup>st</sup> June</b></u> NEA contextual challenges released from AQA <u><b>AO1 Section A:</b></u> Identifying & investigating design possibilities <u><b>AO1 Section B:</b></u> Producing a design brief & specification
11	Theory Recall	Theory: <b>CORE</b> New and emerging technologies Energy, materials, systems and devices	Theory: <b>CORE</b> Materials and their working properties	Theory: <b>Technical</b> Forces and stresses, ecological and social footprint, sources of origin	Theory: <b>Technical and Designing/ making principles</b> Stock forms, types and sizes, scale of production, specialist techniques, surface treatment and finishes, research material, SMEC issues, the work of others	Theory: <b>Designing and making principles</b> <u>RECAP</u> on all theory <b>Final written examination</b>	
	NEA	<b>AO2 Section C:</b> Generating design ideas	<b>AO2: Section D:</b> Developing Design Ideas	<b>AO2: Section D:</b> Developing Design Ideas <b>AO2: Section E:</b> Realising Design ideas	<b>AO2: Section E:</b> Realising Design ideas <b>AO3: Section F:</b> Analysing and Evaluating <b>Deadline for NEA</b>		

## GCSE Food Preparation & Nutrition

		HT 1	HT 2	HT 3	HT 4	HT 5	HT 6
10	Theory	<b>Food, Nutrition and Health</b> Protein and Fat Carbohydrates Making Informed Choices Diet, Nutrition and Health	<b>Food Nutrition and Health</b> Vitamins Minerals and Water	<b>Food Science</b> Cooking and Heat transfer Proteins and Enzymic Browning Carbohydrates	<b>Food Science</b> Fats and Oils Raising Agents	<b>Food Safety</b> Microorganisms, Enzymes and Food Spoilage Microorganisms in Food Production Bacterial Contamination Buying and Storing Food Preparing and Cooking Food	<b>Food Choices</b> British and International Cuisines Sensory Evaluation Food Labelling Factors Affecting Food Choices
	NEA	Mini NEA2 - Plan and make a dish for a Dietary Need.	Mini NEA2 - Plan and make a dish for European Cuisine.	Mini NEA1 – Food Science investigation on Enzymic Browning	Mini NEA1 – Gluten formation investigation  Mini NEA1 – Raising Agents	Mock NEA 2	Mock NEA1
11	Theory Recall	<b>Food Provenance</b> Food and the Environment Food Provenance and Production Methods Sustainability of Food Food Production Food Processing	<b>Food Preparation Skills</b>	<b>Food Nutrition and Health</b> <b>Food Science</b>	<b>Food Safety</b> <b>Food Choice</b>	<b>Recap on all Theory</b>  <b>Final written examination</b>	
	NEA	<u>NEA 1 Released 1<sup>st</sup> September</u>	<u>NEA1 – Food Science Investigation</u>  <u>NEA 2 Released 1<sup>st</sup> November</u>	<u>NEA2 – Food Preparation Assessment</u>	<u>NEA2 – Food Preparation Assessment</u>  <b>Deadline for NEA</b>		