Design & Technology - Key Stage 3

All students in KS3 spend two lessons a fortnight studying within Design and Technology. Group sizes are in most classes around 24 students are taught in mixed ability groups.

Students work within two areas each year, Food and Nutrition and Product Design taught by specialist staff. At the end of each unit of work students' progress against target is recorded and this information is then available to all concerned parties. Assessment is designed to both record progress and inform students of areas for improvement.

Design & Technology - Year 7 Long Term Curriculum Map

Students will work on a range of projects covering work with materials, CAD/CAM, structures, textiles, designing, food and healthy eating. Some of the work is structured, with other elements of the course allowing the students scope to design and make in a more open manner.

List of the main skills and focus for this year.

- Knowledge of natural and manufactured Wood to make products for commercial sales.
- Laser cutting.
- Orthographic drawing Reading and knowledge.
- Drilling using cordless drill and pillar drill.
- Using a industrial Milling machine.
- Marking out Skills
- Cutting and shaping.
- Developing practical skills.
- Quality assurance and Quality control. Jigs, Templates.
- Planning flow charts.
- Applying a finish.

TERM 1	TERM 2	TERM 3
TEST: Glossary / Key words H&S GCSE exam questions Intro: Brief, problem, Target & specification Isometric drawing Rendering and shading Orthographic (working Drawing) Christmas FUN MAKING LESSON	Identify and function of tools. Marking out tools/skills Cutting and shaping finishing Developing motor skills and tool handling Drilling safety and skills Evaluation and planning.	**EASTER** Investigating Manufactured boards Candle holder practical work MAD TIME TEST **HALF TERM** Finishing skills and application of Varnish Mini plastics project ID TAG Laser cutter/plastic memory

Design & Technology - Year 8 Long Term Curriculum Map

In year eight pupils build on the work done in year seven. Again students have a two lessons over a fortnight one in food and nutrition and one in Product Design accessing a wide range of resources.

Main skills and focus for this year.

- Metal, Wood & Plastics combined to make one product.
- Fixings and fastenings discovery.
- Vacuum forming or Press Forming.
- Folding (fabrication) on Aluminium and Copper.
- Laser engraving.
- Drilling.
- Marking out Skills.
- Quality assurance and Quality control. Jigs, Templates Go-NoGo Gauge.
- Planning flow charts.

TERM 1	TERM 2	TERM 3
Intro: Glossary / Key words TEST: GCSE style exam questions Intro: Brief, problem, target & specification Perspective drawing Metal / shading textures e.g. concrete Orthographic (working Drawing) Christmas fun making lesson.	Identify and function of tools. Marking out tools/skills Cutting and shaping finishing Developing motor skills and tool handling Drilling safety and skills in metal/wood Mini one of practical task.	Planning. Task tools, time, equipment, process. Flow chart symbols Metals investigation / processes TEST Finishing of metal wood and plastics. Presentation drawing of final outcome. Mad Time and finishing final packaging for product. FUN MAKING LESSON mini product.

Design & Technology at KS4

Pupils can choose to study one Design and Technology courses. They are able to choose from the following GCSE's:

Food Technology - Graphics - Resistant Materials

Food and nutrition GCSE	***Resistant Materials GCSE***	***Graphics GCSE***
Exam board - AQA. **http://www.aqa.org.uk/subjects/food/gcse/food-preparation-and-nutrition-8585** Subject content Food preparation skills – these are intended to be integrated into the five sections:	**Exam board - AQA.** http://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-resistant-materials-4560 Resistant Materials Technology 4562	

Food, nutrition and health Food science Food safety Food choice Food provenance Assessments Paper 1: Food preparation and nutrition What's assessed Theoretical knowledge of food preparation and nutrition from Sections 1 to 5. How it's assessed Written exam: 1 hour 45 minutes 100 marks 50% of GCSE Questions Multiple choice questions (20 marks) Five questions each with a number of sub questions (80 marks) Non-exam assessment (NEA) What's assessed Task 1: Food investigation (30 marks) Students' understanding of the working characteristics, functional and chemical properties of ingredients. Practical investigations are a compulsory element of this NEA task. Task 2: Food preparation assessment (70 marks) Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task. Students will prepare, cook and present a final menu of three dishes within a single period of no more than three hours, planning in advance how this will be achieved. How it's assessed	This specification is one of a suite of eight in Design and Technology offered by AQA. There is one tier of assessment covering grades A* to G. Unit 1: Written Paper (45601) 2 hours –120 marks – 40% Candidates answer all questions in two sections Pre-Release material issued Unit 2: Design and Making Practice (45602) Approximately 45 hours – 90 marks – 60% Consists of a single design and make activity selected from a range of board set tasks	

Task 1: Written or electronic report (1,500–2,000 words) including photographic evidence of the practical investigation. Task 2: Written or electronic portfolio including photographic evidence. Photographic evidence of the three final dishes must be included.		