Technology Department Intent

Within the Technology department we offer a wide range of courses that come under the Technology umbrella.

All the Technology subjects are a multi disciplined whereby students can experience working with a range of different Materials/Ingredients and Technological concepts.

Much of what is learnt through Technology are life skills, ie cooking, use of hand tools, ICT skills.

In each module the students use their practical skills to manufacture products – the sense of achievement is high when they are able to take their work home and the departments aim is to ensure students complete their work.

Units of work have been designed to engage students in each material area with a view to making the modules appealing to all students, but also covering the Design & Technology curriculum.

As a department we drive to ensure academic challenge – applying technical theory to real life problems.

Throughout the subject students learn how to problem solve and be independent thinkers.

Problem solving is key, asking students to be creative and think for themselves. Technology allows questions to be asked about how things are made and work. The skills developed are life skills which can offer satisfaction beyond school. We use iterative skills to develop functioning products but also developing resilience within students– if products fail students find ways to make things work.

Students are creative and we aim to enable them to develop and explore their ideas through practical outcomes. We aim to have the wow factor within all their work be it in Food / Graphics / RM / Systems / Textiles etc. Students learn how to be safe when using tools and equipment – skills they can take to their future lives be it using an oven or using a screw driver. We introduce Modern Technologies, looking at the development of design throughout time and real world designers and their influences.

Students experience a learn by doing philosophy within the department. All the modules are very hands on and practical – thus encouraging students to learn how to use tools, equipment, materials and ingredients.

The skills are built up from Year 7 whereby they undertake more Focused Practical Tasks (FPT's) so that they are able to then understand the skills needed when they come to develop their own ideas in Year 8 through to Year 11. Each lesson will begin with a short task, this may be a quick retrieval practice question or identification of tools/equipment needed in the lesson etc. Students will work through their module with learning combined with practical tasks. These are supported with home learning tasks- one every 2 weeks. The home learning tasks are a mixture of research tasks/retrieval practice quizzes/spelling of key words/design problems/organising ingredients.

We strive to encourage independent learning and working to deadlines; skills needed for adult lives. We aim to empower students in their use of tools, equipment, materials, ingredients. Our goal is to ensure they are confident Young People and are prepared for life outside school.

Key Stage 3 Technology

Key stage 3 Technology covers the core elements of the GCSE Design & Technology, GCSE Food Preparation and Nutrition and GCSE Engineering. This core knowledge is then revisited in specific material areas when students opt at GCSE. Specific material areas at GCSE cover the skills and processes of that material area in more depth and develop knowledge of processes and understanding of the material.

Food

Key Stage 3 is the foundation for the GCSE ensuring healthy choices and key skills are developed for all students

The Design & Technology and Food curriculum have been planned to be a 5 year curriculum.

Year 7 -Skills based – students introduced to the tools/equipment/materials/ingredients within all materials areas with short FPT's.

Year 8 - More creativity is brought into skills based modules.

Year 9 - Modules are specific to material areas and are more in line with emulating the NEA project. Students are given the choice to study 3 out of the 5 GCSE material areas we offer at GCSE in Year 9. This enables students to experience a longer module with a high quality outcome and more in depth theory of the specific material area.

Key Stage 4 Technology

GCSE Design & Technology

Students opt for a material area at the end of year 9. They choose from – Graphics, Textiles or Timbers. They follow a course that is 50% NEA and 50% external examination.
Core element of the D&T GCSE consists of 40% of the Exam, hence the importance of imbedding the core at KS3.

GCSE Food Preparation & Nutrition

Food have 2 NEA's but they both make up 50% of the GCSE, similar to D&T
KS 3 Food embeds the foundations for the GCSE skills and grounding in readiness for the GCSE.

GCSE Engineering

We now offer GCSE Engineering, replacing the Systems material option at GCSE, skills at KS3 are identical to D&T skills needed and the GCSE then develops the students Engineering skills and knowledge. The GCSE consists of 40% NEA and 60% External Examination.