

GCSE Design and Technology

Why study Design and Technology?

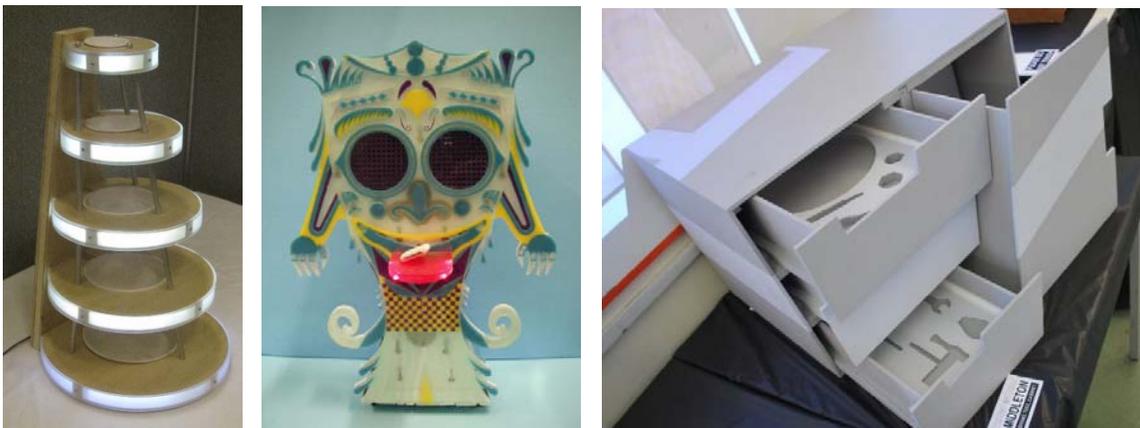
People have been designing and making products for thousands of years. Everything around us is designed and manufactured, everything from your I-pad, to chairs, to pens and buildings. From your KS3 technology lessons you will know if you want to be part of this process. If you enjoy being creative, thinking through problems, and making new and innovative products, then this is the subject for you!

What will you be learning?

This GCSE course allows students to study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth. Projects in Year 10 are designed to build up students' skills and include; designing and manufacturing a children's toy, pewter casting, use of Computer Aided Design (CAD) and hands on experience of CAM outputs such as laser cutting and 3D printing. Throughout these projects you will also look at the theory of D&T such as manufacturing on an industrial scale; how manufacturing impacts on society, safety issues and analysis of existing products.



The majority of Year 11 will be spent on the Non-Exam Assessment (NEA) which represents 50% of the GCSE grade. During this time you will work on an individual design and make project, taking your project through from design brief to completed prototype.



Examples of D&T NEA work – Lighting, amplifiers, and storage units.

At the end of Year 11 you will sit a two hour exam on 'Design and Technology in the 21st Century' (50% of the GCSE grade). This will consist of a mix of short answer, structured and extended writing questions that will assess your knowledge and understanding of technical principles, designing and making principles, wider issues in design and technology and your ability to analyse and evaluate.

What are the lessons like?

The lessons in D&T are very varied because of the wide range of skills and materials that we cover. Some lessons are theory based but the majority are made up of learning and applying designing skills, developing making skills in the workshop, or using CAD and CAM to produce professional outcomes. Some of these tasks will be focussed learning tasks and in others you will have a free rein to express your exciting ideas.

What can it lead to?

A GCSE in Design and Technology can be a stepping stone to a wide variety of future options. It is the perfect starter for 'A' level Product Design or a BTEC in engineering, these in turn can lead to university degrees in a subjects such as architecture, product design, industrial design or engineering. Alternatively, if you are more 'hands-on' you can take up an apprenticeship or go to college to learn a trade such as plumbing or joinery. D&T will also help to develop many skills that would be welcome in any profession, such as working in a team, problem solving and ingenuity.

Want to know more?

Speak to Mrs Vose, Mrs Merritt, Mr Morton, or Mr Roberts or your KS3 teacher to find out more about the D&T course and discuss your suitability for it.