GCSE D&T: Electronic Products Examination Board: AQA Specification No: 4540

Why choose to study GCSE D&T: Electronic Products?

There is a need for skilled people who can design and/or manufacture using electronics or electrical systems. An appreciation of electronic control devices using a variety of inputs and output devices such as sensors, switches, buzzers and LEDs provides an interesting content to this course that teaches skills and knowledge by means of making working circuits. Students who progress to higher levels have an advantage over those with only a theoretical background and can therefore cope with more challenging problems.

What will I learn?

Year 9 introduces electronics with programmable IC's and simple circuits and is developed further in this GCSE course. Work is practically based using a purchased component kit (£25) that allows independent work both in school and as homework. Industry standard software to help the design of circuits and PCB's is free for all students and downloadable through the school intranet. Knowledge of electronic components and how they can be used in circuits is taught through their use with the kits. An understanding of control is part of this course and we have heavily invested in programmable IC's to take the outcomes to a higher level. The students design and manufacture plastic casings, produced to house the designed and built circuits. Commercial methods of production are also taught on this course.

How is GCSE D&T: Electronic Products assessed?

Year 11 projects are set by the examining body, AQA, and cover a broad range of areas. Everything from programmable alarm systems to innovative games can be chosen for investigation and design by pupils. Projects are limited to around 25 A3 pages from start to finish and counts for 60% of the overall GCSE qualification. A written exam makes up the remaining 40% of the GCSE. The exam is a 2hour paper which covers all grades from A* to U. Circuits are designed and built, during year 10 learning the many different ones required, and in Year 11 this information is used for the final project outcomes. Because the subject has a practical making element, the plastic casing, it does require an ability to shape materials but unlike resistant materials, there is greater emphasis upon the assembly of electronic components rather than working with materials.

Where will GCSE D&T: Electronic Products lead?

Course progression	Career opportunities
Pupils taking any one of the GCSE Design and Technology options can continue the subject at A Level which is known as Design and Technology Product Design (3D Design)	Working with, designing with and assembling electrical or electronic control technology provides a breadth of careers at various levels. The subject option provides a foundation and for a variety of jobs using skills that can be put to use on leaving school or developed further through further education or employment.

What do students say about GCSE D&T: Electronic Products?

"Wow! Can I make that?"

"I was eager to start building circuits but had to master simple circuit construction before the more exciting projects. It was worth the wait!"

"We made it to the final of the 2014 3D Printshow Educational Excellence Award"