

## **Introduction / Why Study Electronic Products?**

If you study Electronic Products, you will gain an invaluable experience of the function and practical use of electronic components, printed circuit board design and the manufacture of product casings.

## **Exam Board**

The examination board is AQA. More details, including the full specification (syllabus) available at:

<http://www.aqa.org.uk/qual/newgcse/pdf/AQA-4540-w-sp.pdf>

## **What Will I Study / What Skills Will I Develop?**

- You will study a range of electronic components, developing the ability to use them to perform a wide range of tasks. No previous knowledge is required. The course begins with batteries and finishes with you being able to write code for programmable microchips. You will design and develop a multi flashing L.E.D. lamp that reacts to light, an egg timer for the perfect boiled egg, a random electronic dice and a buzz wire game that can count.
- You will focus on achieving high level soldering skills, be able to use a multi-meter for fault-finding and develop CAD skills for printed circuit board manufacture. You will use prototype boards to develop test circuits and to build up component knowledge, as well as manufacturing the product packaging; this will include the use of CAD/CAM to make laser cut acrylic casings and the production of vacuum formed moulds.

**Electronic Products** will enable you to handle electronic components with confidence, develop logical thinking skills and be able to make complex solutions using simple electronic building blocks.

## **How Will I Be Assessed?**

- 60% of the final mark will come from the development of a design folder and the manufacture of an electronic product, selected from a wide range of options supplied by AQA. You will not be expected to design the circuit without teacher assistance.
- 40% of the final mark will come from a final written examination that will assess your knowledge of electronic product design, component theory and circuit board operation.

## **Points to Consider When Selecting This Option**

This is a challenging subject. You must be willing to work hard and be determined to succeed. Confidence in Maths it would be an advantage to students opting for this subject.

## **What Might GCSE Electronic Products Lead To?**

In addition to developing personal attributes that employers desire, you will be well placed to continue your studies in a wide range of careers. For example, electronic technicians, auto engineers, robotic development; in fact, the list is endless. Electronic products will give you an invaluable introduction to a fascinating world that we all use and rely on, but few understand.

## **Other Information**

It is hoped to develop an industrial link with a local company that repairs PS3 consoles.