

# Electronics

## A Level

**Duration:** Two Years

### Why Should You Take This Course?

Electronics is fundamental to modern life and forms the basis of most modern technology. This course provides a thorough grounding in the subject, which can help you to make sense of complex and diverse electronic systems such as computers and mobile phones. The course contains both practical and theoretical elements that will help you to develop your analytical skills, which can be useful whether you choose to go on to study Physics, Engineering or similar or go straight into employment.

### Course content

In the first year you will study both digital and analogue systems. Digital systems include both combinational and sequential logic.

Boolean algebra and Karnaugh mapping are used to analyse such systems, so some mathematical skills are required. Analogue systems involve various applications of the operational amplifier, timing and transistor circuits. The first-year coursework consists of a microcontroller programming project using Assembly Language.

In the second year you will study Communication Systems and Systems Applications, as well as more advanced digital logic, which include Audio Systems and Instrumentation Systems. The second-year project is to design-and-build a substantial electronic system. The final project needs only to be completed on prototype board, so that soldering is not required.

### How will I be assessed?

The A Level is assessed through two written exams and two pieces of coursework.

### Are there any special expenses?

You may need to buy components for your project.

### What could I do next?

Many of our previous students have gone on to study Electronics or a similar subject at university. Some have gone into employment in the local Electronics industry.

### Entry Requirements

At least 5 GCSEs Graded 9-5 including a 6/6 or above in Science and grade 6 in Maths.



Excellence      Can Do Attitude      Courage  
Respect      Team Working      Achievement Driven