Teacher Resource Bank

GCE Electronics

Key Features
KEY FEATURES

This specification aims to attract students to study Electronics by offering a stimulating and rewarding programme of study. The inclusion of compulsory coursework elements at both AS and A2 will enable students to reach the full level of their individual potential.

The knowledge and skills acquired through the study of this specification form a sound base, not only for taking the subject further, but also for employment in the scientific and technological professions. In addition, in studying Electronics students will encounter techniques and disciplines of value in many other subject areas.

The specification applies basic electronic principles and a systems approach in order to lift the lid on many modern electronic systems encountered in everyday life. It reflects up-to-date practice, encourages a safe approach to using electronic systems, and promotes an awareness of the social, economic and cultural impact of Electronics.

The specification will enable students to develop positive attitudes towards learning. Ability and confidence in Electronics are developed throughout the specification by an emphasis placed on learning through doing, with straightforward practical work. Practical skills are internally assessed at both AS and A2 through a coursework project. The project will enable students to develop a rigorous approach to electronics using terms and techniques unique to the subject. At AS students are required to identify a problem, devise a specification for a solution and then build and test it; at A2 students follow the same process with the added requirement to produce a full evaluation of the system.

The specification also provides ample opportunities for students to develop the six Key Skills.

Delivery of the specification requires a minimal amount of specialist equipment. By emphasising skills and processes in the teaching of the specification, teachers will ensure that students have the opportunity to develop constructional and communication capabilities of a high order. These capabilities will be of value beyond the confines of the students' work in Electronics.

Key features of this specification include:
- a simple assessment structure
- based on a systems approach
- equally weighted external examinations
- coursework elements at both AS and A Level
- practical problem solving is encouraged
- modern developments in electronics and its applications are considered
- previous experience of the study of electronics is not a pre-requisite
- The specification is available to private candidates.

This specification provides continuity from the existing AQA GCSE Electronics specification and offers a coherent progression route into Higher Education.

This new specification has many core elements in common with the one it replaces and teachers will find the transition between them straightforward.