

Applied Science

Level 3 Certificate

General Information

This course aims to extend your knowledge and understanding of science and technology and develop an appreciation of their practical applications. Applied Science is excellent for providing breadth to students studying Humanities subjects of any kind. It would be of interest to anyone keen to study how science is used in everyday life or who might be considering a career in which a scientific training would be useful.

Course content

The Certificate course consists of three units, one of which is internally assessed via a student portfolio. All of the units involve study of Biology, Chemistry and Physics. The units are as follows:

■ Key Concepts in Science

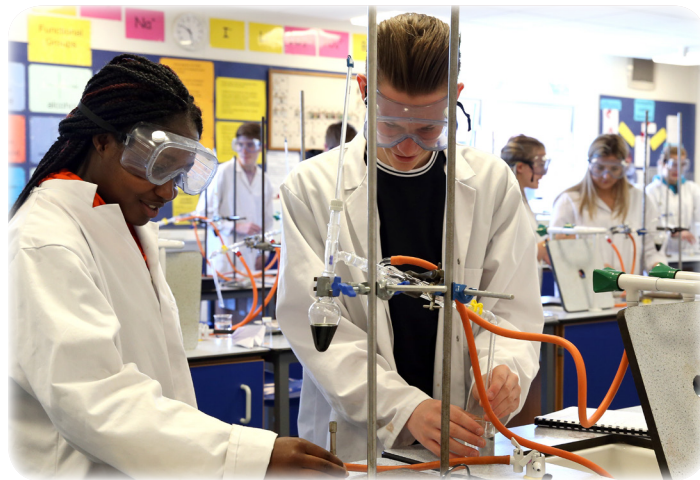
Develops knowledge and understanding of key concepts in Biology, Chemistry & Physics. Equal weighting is given to each subject area.

■ Applied Experimental Techniques

Develops practical scientific skills to plan, implement, analyse and evaluate a range of experiments in Biology, Chemistry, and Physics. Assessment is by completion of a coursework portfolio.

■ Science in the Modern World

Develops critical thinking skills to analyse and evaluate how scientific information is used in the media. This unit is assessed by an exam involving a mixture of short answer and extended-answer type questions based on pre-release case study material.



Entry requirements

You must have at least a grade 4 in GCSE Maths and English. In addition, you should have a minimum grade 4 in at least one GCSE Science subject or grade 4 in both of the Combined Science grades.

You should meet the general college entry requirements for A Level study. Please refer to the current Prospectus – advanced programmes, entry requirements. In this subject, particular skills and aptitudes will be required, many of which will be demonstrated by students' GCSE profiles.

Entry requirements might be changed in light of curriculum reform.

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Progression to Extended Certificate in Applied Science

Completion of the Level 3 Certificate allows progression to the Extended Certificate course in the second year of study. The Extended Certificate is a Level 3 qualification (equivalent to A level) and as such is acceptable for entry to degree courses in a wide range of subjects.

The course consists of 3 units, two of which are assessed by a coursework portfolio. These involve you researching into the way science and analytical methods are used in various industrial and commercial situations and provide an opportunity for you to develop your own practical skills in the laboratory. The units are as follows:

■ The Human Body

Developing knowledge and understanding of digestion, movement, cardiovascular system and brain. Assessed by exam.

■ Investigating Science

An extended investigation involving research, and experimental work in an applied science context. Assessed by portfolio.

■ Medical Physics

Research and practical work to investigate the use of imaging, radioisotopes, optical fibres and lasers in a medical context. Assessed by portfolio.

How it is taught

An important activity is the completion of assignments, with one-third of the final grade being based on this internally assessed work. You learn research skills and spend a significant amount of time preparing your portfolios, which involves the use of computers. There are opportunities to develop practical laboratory skills and carry out investigations. Preparation for the examined units in each year involves more formal teaching, with note-making, problem-solving and data analysis exercises.

Useful / common subject combinations

This subject combines well with any other programme of study. It can be taken as your only science subject, providing breadth; it can also be combined with other science A Levels, providing opportunities to study scientific issues in a range of contexts.

Careers / HE information

This is an excellent course for progression onto a wide range of higher education and training. This enables Applied Science students to develop careers which need an understanding of science e.g. teaching, nursing, health care, environmental sciences, forensics, and sport science. Students will find the UCAS points awarded for this qualification useful for pursuing careers in Humanities subjects.

This qualification allows you to progress to technical training in a wide range of industries.

This qualification is not sufficient for progression onto specialist courses in chemistry, biology, physics, engineering, medicine or dentistry without other science A Levels. However, there are Foundation Science courses from which students with Applied Science A Level could progress to more specialised science degrees.