

Coombe Sixth Form Applied Science Extended BTEC Level 3



Adeeba

"For two years I've been a member of the Coombe community. Studying science at Coombe Sixth Form, I've worked hard at my coursework and enjoyed free time with my peers; it's been very productive but also incredibly enjoyable.

Coombe has helped me come close to achieving my future in Biomedical Science."



What does studying Applied Science involve?

This is an alternative qualification for students who want to study science at a more advanced level than GCSE offers but do not wish to follow the traditional 'A' level route. The BTEC National in Applied Science is a vocational qualification that covers many of the same aspects of science as 'A' level courses and develops fundamental knowledge and understanding of biology (cell function and human physiology), chemistry (preparation and analysis of useful compounds) and physics (using energy transfers) but emphasises the skills needed to work competently and safely in a modern laboratory.

The course develops students' ability to set up experiments, carry out risk assessments, then interpret and report on their own scientific findings in ways that are used by the scientific community today.

What skills will I develop and where could studying this subject lead?

Learners will develop skills and knowledge of techniques through carrying out practical investigations in biology, chemistry and physics in the

first year. This will be extended to cover the knowledge and techniques needed for the study of biochemistry by investigating biological molecules, enzymes, metabolic pathways and the structure of proteins.

Students will investigate the physiology of the human body and use appropriate tests to investigate the cardiovascular, respiratory and digestive systems. The course will cover the analytical techniques used in industrial and commercial laboratories, particularly titration, spectroscopy and chromatography.

The BTEC National in Applied Science provides the underpinning knowledge, understanding and skills for science technicians in the areas of laboratory and industrial science, the forensic science service and the medical science service. It also provides a progression route to higher education vocational qualifications such as BTEC Higher National Certificates in Applied Sciences or a degree in science.

If studied for two years, completion of the Extended Diploma is equivalent to 3 science 'A' levels and worth up to 168 UCAS points

Assessment details

These qualifications offer an approach which is different to other Level 3 qualifications in science. Students will develop a portfolio of evidence in a variety of formats that will demonstrate their understanding and knowledge of different areas of science and their ability to carry out a variety of scientific investigations. Of the 13 units studied, four are assessed externally.

Other useful information

Students who gain BTEC qualifications will also earn UCAS points at the same time. Students completing the BTEC qualifications can apply for university places through UCAS - the Universities and Colleges Admissions Service. Further information about UCAS can be obtained from their website www.ucas.com.

Entry Requirements

Four 9-5 grades at GCSE with a minimum of a numerical grade 4 in English Language although a grade 5 is recommended. 1 equivalence to a GCSE subject is permissible.