

BTEC Level 3 Applied Science



BTEC Applied Science at Southborough Sixth Form

Welcome to BTEC

With a track record built over 30 years of learner success, BTEC Nationals are widely recognised by industry and higher education as the signature vocational qualification at Level 3. They provide progression to the workplace either directly or via study at a higher level. Proof comes from YouGov research, which shows that 62% of large companies have recruited employees with BTEC qualifications. What's more, well over 100,000 BTEC students apply to UK universities every year and their BTEC Nationals are accepted by over 150 UK universities and higher education institutes for relevant degree programmes either on their own or in combination with A Levels.



Why is BTEC so successful?

BTECs embody a fundamentally learner-centred approach to the curriculum, with a flexible, unit-based structure and knowledge applied in project-based assessments. They focus on the holistic development of the practical, interpersonal and thinking skills required to be able to succeed in employment and higher education.

When creating the BTEC Nationals in this suite, we worked with many employers, higher education providers, colleges and schools to ensure that their needs are met. Employers are looking for recruits with a thorough grounding in the latest industry requirements and work-ready skills such as teamwork. Higher education needs students who have experience of research, extended writing and meeting deadlines.

www.southborough.kingston.sch.uk

BTEC Level 3 Applied Science

Outline of course

Unit 1: Principles and Applications of Science I

The topic areas covered in this unit include: animal and plant cells; tissues; atomic structure and bonding; chemical and physical properties of substances related to their uses; waves and their application in communications.

Unit 2: Practical Scientific Procedures and Techniques

This unit introduces you to standard laboratory equipment and techniques, including titration, colorimetry, calorimetry, chromatography, calibration procedures and laboratory safety. Through the practical tasks in the unit, you will develop proficiency in the quantitative analytical techniques of titration and colorimetry, including learning to calculate the concentration

Unit 3: Science Investigation Skills

Advancement in science and technology has produced great benefits for society. This advancement depends on research and investigative approaches in science and technology.

Unit 8: Physiology of Human Body Systems

The human body is a complex mix of organs and organ systems. Knowledge of how they function to maintain human life is an essential part of the study of human physiology. In this unit, you will focus on three body systems: musculoskeletal, lymphatic and digestive. You will examine each of the systems as a functioning unit, identifying their structure and function.

Entry Requirements

Due to the vast difference between GCSE and BTEC Applied science we require that students wishing to do this course achieve a **grade 5 in both science (Triple or double) and Maths at GCSE.**

What could this qualification lead to?

The requirements of the qualification will mean that learners develop the transferable and higher order skills which are valued by higher education providers and employers. The qualification carries UCAS points and is recognised by higher education providers as contributing to meeting admission requirements for many courses if taken alongside other qualifications as part of a two-year programme of learning, including, but not exclusively, those which are science-related.

How does the qualification provide transferable knowledge and skills for higher education?

All BTEC Nationals provide transferable knowledge and skills that prepare learners for progression to university. The transferable skills that universities value include:

- the ability to learn independently
- the ability to research actively and methodically
- being able to give presentations and being active group members.

BTEC learners can also benefit from opportunities for deep learning where they are able to make connections among units and select areas of interest for detailed study. BTEC Nationals provide a vocational context in which learners can develop the knowledge and skills required for particular degree courses, including:

- reading scientific and technical texts
- effective writing
- analytical skills