

# APPLIED SCIENCE

Qualification: BTEC Level 3 Foundation Diploma/  
Extended Diploma



## SUBJECT OVERVIEW

**This BTEC Extended Diploma will enable you to study Applied Science alongside A-Level subjects.**

The course contains elements of Biology, Chemistry and Physics. This will equip you with a broad knowledge of Science at Level 3, allowing you to progress further along the Scientific route without having to study the separate sciences in isolation. Students also appreciate the mixture of assessment methods which involve standard exams, coursework components and assessed practicals, allowing them to achieve parts of their qualification at different times throughout the year.

The Extended Diploma is equivalent to three A-Levels in terms of work so you will be required to select one or two A-Levels to study alongside this course. Potential routes following on from this course include studying at university level in subjects such as Biomedical Science, Nursing, Biology, Chemistry or Veterinary Nursing, as well as potential direct employment in a Scientific field.



*The course also allows the student to progress into direct employment in scientific laboratories.*

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## YEAR ONE COURSE CONTENT

**In the first year you will study for a Foundation Diploma; This comprises four mandatory units and two options.**

This method of assessment varies between units, some require an exam or a task marked by the exam board whereas others are coursework based and assessed by your teachers.

### Mandatory units:

- Principles & Applications of Science I (external exam)
- Practical Scientific procedures and techniques (coursework)
- Science investigation skills (external task)
- Laboratory techniques and their application (coursework)

### Possible options (two from these, all coursework):

- Physiology of Human body systems
- Human Regulation and Reproduction
- Applications of Organic Chemistry

These units provide the grounding needed in science to progress to the second year. These units provide a mixture of science theory and practical investigation skills.

## YEAR TWO COURSE CONTENT

**The second year of the course comprises of three further mandatory units; and four more optional units.**

### Mandatory units:

- Principles and applications of Science II (external exam)
- Investigative projects (coursework)
- Contemporary Issues in Science (external task)

### Possible options (four from these, all coursework):

- Genetics and Genetic Engineering
- Practical Chemical Analysis
- Microbiology and Microbiological Techniques
- Biomedical Science
- Forensic Evidence collection and analysis

These units provide an opportunity to develop your science knowledge further, and apply it to some specific areas of science

## WHAT DOES THIS COURSE PREPARE ME FOR?

**You could progress on to a university degree in a range of subjects, such as Biomedical Science and many biology and chemistry-related degrees.**

Please note that the course may not be suitable for most physics-related degrees. Some universities express a preference for A-Levels over BTEC courses, however recent changes to the manner of assessment mean that universities are becoming increasingly accepting of these courses.

The course also allows the student to progress into direct employment in scientific laboratories.

## COURSE SUPPORT AND ENRICHMENT

**Students will be supported throughout the year by three experienced Applied Science teachers as well as the Bedford Sixth Form pastoral team.**

There is potential to participate in visits alongside other A-Level Science students, recent examples including a trip to the Sangar Institute and a visit to Warwick University to attend Biology in Action talks.

## ASSESSMENT

### Foundation Diploma

Approximately 60% of the assessment will be based on coursework completed throughout the year, focusing on four different topic areas.

The further 40% will be based on one end of year external exam covering all three science disciplines (approx. 20% of assessment), and one assessed practical which could be based on Biology, Chemistry or Physics (approx. 20% of assessment).

### Extended Diploma

Approximately 60% of the assessment will be based on coursework completed throughout the year and an investigative project.

The further 40% will be based on two end of year external exams covering all three science disciplines (approx. 20% of final grade), one assessed practical which could be based on Biology, Chemistry or Physics (approx. 10% of final grade) and one supervised research project (approx. 10% of final grade).

Updated: January 2018