

	APPLIED SCIENCE	
	Qualification Level	BTEC, National Extended Certificate
	Exam Board/ Syllabus	Edexcel
Contact(s)	Mrs Ballinger	

Why Study This Course?

Science (BTEC) is aimed at students who prefer coursework to solely examinations. It is a good alternative to traditional science A-Levels for those students who wish to study only one Science Level 3 qualification. As a substantial vocational qualification it provides a broad understanding of applied science to support progress to higher education. This qualification can also prepare learners to take up employment in the applied science sector, either directly after achieving the qualification or via higher education.

Students develop transferable and higher-order skills that are highly regarded by both HE and employers. For example, when studying the science investigative unit students will further develop their capability to plan investigations, collect, analyse, and present data and communicate results. Employability skills are developed by learners throughout the course, including:

- Cognitive and problem-solving skills: e.g. critical thinking
- Intrapersonal skills: communicating, working collaboratively, negotiating and influencing, self-presentation
- Interpersonal skills: self-management, adaptability and resilience, self-monitoring and development

Course Content/Assessment Pattern/Structure

The course is split into four units of which one is examined as a written paper, one is a practical assessed task and two are coursework based. Each of the four units have equal weighting. The course covers elements of biology, chemistry and physics as well as the development of investigative and practical skills.

Unit	Assessment Structure	Course Contents
Unit 1 Principles and Applications of Science 1	Externally marked via three 40 minute exams	This unit covers some key science concepts in biology, chemistry and physics, including animal and plant cells; tissues; atomic structure and bonding; chemical and physical properties, waves and their application
Unit 2 Practical Scientific Procedures and Techniques (Assignment)	Internally moderated through four pieces of coursework	This unit covers standard laboratory equipment and techniques, including titration, calorimetry, chromatography, calibration procedures and laboratory safety, which are relevant to the chemical and life science industries.
Unit 3 Scientific Investigation Skill	Externally assessed: Analysis of a practical investigation task (45, exam conditions) followed by 1 ½ hour exam	This unit covers the stages involved and the skills needed in planning a scientific investigation: how to record, interpret, draw scientific conclusions and evaluate.
Unit 8- Physiology of Human Body Systems (assignment)	Internally moderated through three pieces of coursework	This unit will focus on the physiological make-up of three human body systems (musculoskeletal, lymphatic and digestive), how the systems function and what occurs during dysfunction.

Higher/Further Education & Career Links

This is an excellent course for students considering any laboratory-based career. Technicians work in a wide range of industries – the National Health Service (nursing, midwifery, paramedic work), forensics, food technology and sports

<i>Business & Innovation</i>	<i>English</i>	<i>Expressive Arts & Languages</i>	<i>Humanities</i>	<i>Mathematics</i>	<i>PE</i>	Science
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science. This qualification can enable students to progress to courses in science education, combined/integrated science or applied science courses such as crime scene science.

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