Subject: **BTEC Level 3 National Extended Diploma in Applied Science**

Examination Board: **Edexcel** **Specification code: 601/7437/7**

The BTEC Level 3 National Extended Diploma is equivalent to three A-Levels, and consists of seven mandatory units, four of which are assessed externally by examination, and three of which are assessed internally by coursework. Six further, optional units (chosen by the School) will then be taken and assessed internally by coursework. In total, 42% of the course is assessed externally, 58% internally.

The units below are mandatory.

1. **Principles and Applications of Science I** Externally assessed	This unit covers some of the key science concepts in biology, chemistry and physics.
2. **Practical Scientific Procedures and Techniques** Internally assessed	Students will be introduced to quantitative laboratory techniques, calibration, chromatography, calorimetry and laboratory safety which are relevant to the chemical and life science industries.
3. **Science Investigation Skills** Externally assessed	Students will cover the stages involved and the skills needed in planning a scientific investigation: how to record, interpret, draw scientific conclusions and evaluate.
4. **Laboratory Techniques and their Application** Internally assessed	This unit covers the importance of health and safety in work place laboratories, how data is stored and communicated and how organic liquids and solids are made and tested industrially.
5. **Principles and Applications of Science II** Externally assessed	This unit builds on and extends the range of key science concepts in biology, chemistry and physics that were covered in Unit 1.
6. **Investigative Project** Internally assessed	This unit enables students to gain an understanding and the skills required to undertake an investigative project.
7. **Contemporary Issues in Science** Externally assessed	This unit will enable learners to develop their skills and understanding in evaluating the impact of contemporary scientific issues and how they are discussed in publications.

Added to this there will be six specialist units to be taken in disciplines across Chemistry, Physics and Biology, which are all internally assessed.

What students can expect from the course:

This course is ideal for students wishing to gain a science qualification that will give entry to university, apprenticeships or employment, and that is assessed by both external examinations and internal coursework. Designed as a two-year, full-time course, it meets entry requirements in its own right for learners who want to progress to higher education courses in the applied science sector before entering employment. The course is delivered through a mix of taught lessons, standard laboratory practical tasks, extended practical investigations and student research.

Expected GCSE qualifications:

We recommend students have achieved a Grade 5 in Biology, Chemistry, Physics or Double Science to be successful at BTEC level.