BTEC Level 3 Applied Science Curriculum

External Exam units
Internal Coursework units

Course Title	Year 1 Route (Year 12)	Year 2 Route (Year 13)
BTEC Level 3 Certificate	Pathway 1	n/a
BTEC Level 3 Extended Certificate	Pathway 1	Pathway 2
BTEC Level 3 Foundation Diploma	Pathway 1+2	Pathway 3 Spring 1 + Spring 2 + Summer 1 ONLY
BTEC Level 3 Diploma	Pathway 1+2	Pathway 3+4

Autumn	
Unit 1: Principals	

Pathway 1

Pathway 2

Pathway 3

Pathway 4

applications of Science

Unit 3: Science Investigation skills

Unit 5: Principals and Applications II

Unit 6: Investigative Project

Autumn 2

Unit 1: Principals and applications of Science

Unit 3: Science investigation skills

Unit 5: Principals and Applications II

Unit 6: Investigative Project

Spring 1

Unit 2: Practical Scientific Procedures and techniques

Unit 9: Human Regulation and Reproduction

Unit 4: Lab Techniques and their Application

Unit 11: Genetics and **Genetic Engineering**

Spring 2

Unit 2: Practical Scientific Procedures and techniques

Unit 9: Human Regulation and Reproduction

Unit 4: Lab Techniques and their Application

Unit 11: Genetics and **Genetic Engineering**

Summer 1

Unit 2: Practical Scientific Procedures and techniques

Unit 9: Human Regulation and Reproduction

Unit 4: Lab Techniques and their Application

Unit 11: Genetics and **Genetic Engineering**

Summer 2

COURSE COMPLETION

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 9	Unit 11
External Exam January Biology- Cells, Tissues, organ systems Chemistry – periodic table, physical properties of elements Physics- Waves	Practical Techniques and scientific reports: Titrations Chromatography Cooling Curves Personal reflection and skills	External Exam January Scientific investigations in: Enzymes Diffusion Circuits Sampling Fuels	Health and safety Making organic products Storing Scientific information	External Exam January Biology- cardio, ventilation, kidneys and transport Chemistry — Extraction and purification Physics- thermodynamics	Investigative project- Research Plan Implement Review	Regulation of cardiovascular and respiratory systems Homeostatic mechanisms Hormonal control of reproduction	Structure and function of Nucleic acids Cell division Human inheritance DNA Technologies