# Forensic and Criminal Investigation at KS5

**Overview**

Forensic and Criminal Investigation is a Pearson BTEC Level 3 Foundation Diploma course. It aims to develop a wide understanding of scientific concepts that are applicable to the forensic science industry. The topics in this course combine theoretical science with a strong focus on the practical skills.

Students will learn the science required to be a forensic scientist as well as how a crime scene investigator processes the scene of a crime and a number of different pieces of evidence. The course will help to develop a number of skills including leadership, organisation, communication and independent learning skills.

## BTEC Level 3 Foundation Diploma in Forensic and Criminal Investigation

Students will sit two external assessments, one in January (this can be sat up to three times) and one in May/June which is practical-based. The other four units will be internally assessed assignments.

### Year 12

During year 12 the students will cover three main areas:

**Unit 1 – Principles and applications of science 1**

- Animal and plant cells
- Tissues
- Atomic structure and bonding
- Chemical and physical properties of substances and their uses
- Waves and applications in communications

Assessment – external exam

**Unit 2 – Practical scientific procedures and techniques**

- Titration and colorimetry to define the concentration of solutions
- Colorimetry to study cooling curves
- Chromatographic techniques to identify components in mixtures

- Review personal development of scientific skills for laboratory work

Assessment – internal assessment

**Unit 3 - Science investigation skills**

- Plan a scientific investigation
- Data collection, processing and analysis interpretation
- Drawing conclusions and evaluations
- Enzymes
- Diffusion
- Plants and environment
- Energy content of fuels
- Electrical circuits

Assessment - external assessment

## Year 13

**Unit 4 – Forensic investigation procedures in practice**

- Procedures used to preserve collect and record forensic evidence
- Use analytical procedures to examine forensic evidence collected
- Draw conclusions and report on the results of the analysis of the forensic evidence

Assessment –Internal assessment

**Unit 8 – Physiology of the human body systems**

- Musculoskeletal system, disorders and treatments
- Lymphatic system, disorders and treatments
- Digestive system, disorders and treatments

Assessment - Internal assessment

**Unit 10 – Forensic fire investigation**

- Combustion, methods of extinction and heat transfer
- Causes, phases and behaviour of fire
- Processing a fire scene, roles in prevention and investigation

Assessment - internal assessment