BTEC Forensic and Criminal Investigation

Science Curriculum Intent - BTEC level 3 National Diploma in Forensic and Criminal Investigation

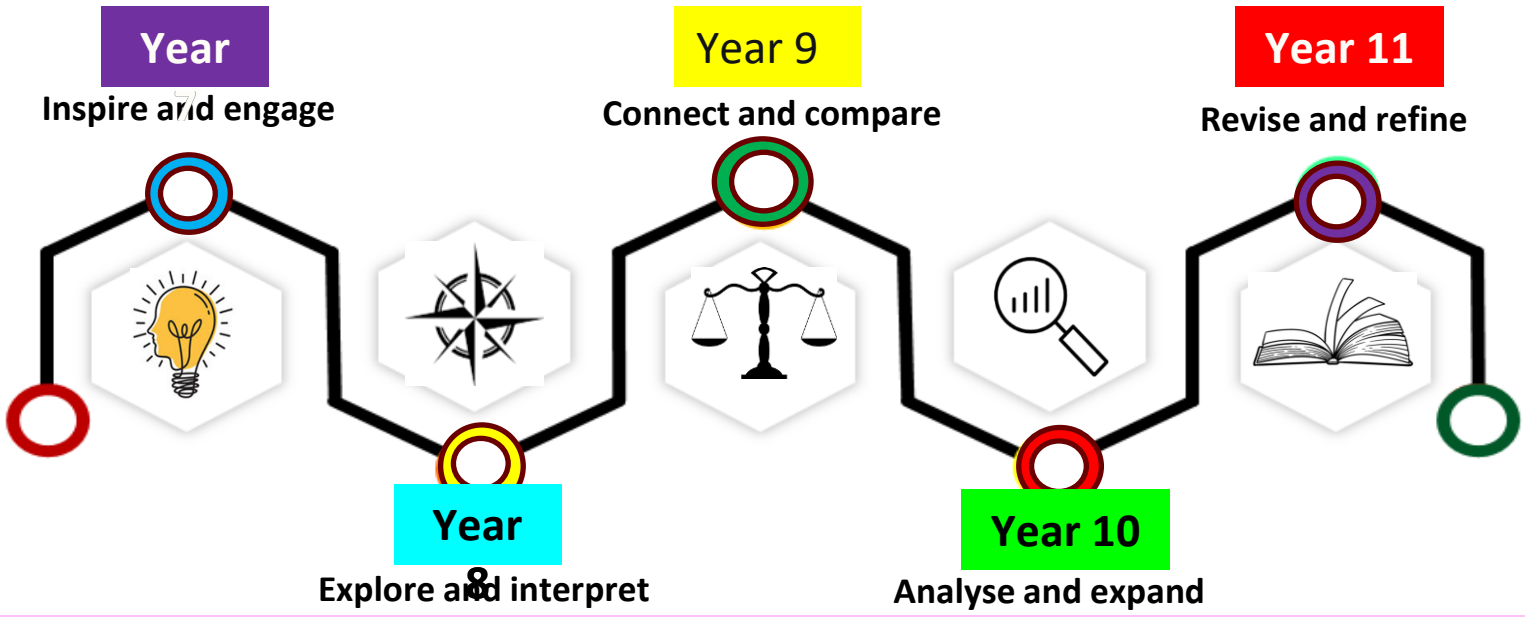
The requirements of the qualification will mean learners develop the transferable and higher-order skills that are highly regarded by both higher education and employers. Skills include carrying out practical laboratory tasks, planning investigations, evaluating case studies/sources of information to draw arguments together and produce forensic reports for use in court hearings.

The qualification is intended to carry UCAS points and is recognised by higher education providers as contributing to admission requirements for many relevant courses. Taken on its own, the National Diploma in Forensic and Criminal Investigation will offer learners the opportunity to progress to some applied degree courses

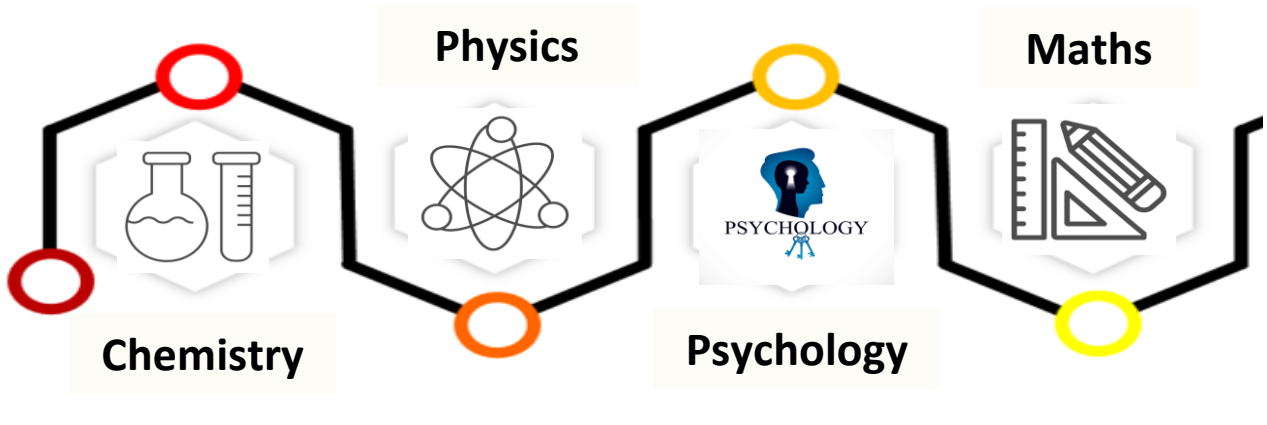
CURRICULUM LESSONS ALLOCATED OVER THE WEEKLY TIMETABLE						
Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
					10	10

INSPIRE	MOTIVATE	ACHIEVE
In the BTEC National units there are opportunities during the teaching and learning phase to give learners practice in developing employability skills. Where employability skills are referred to in this specification, we are generally referring to skills in the following three main categories: • cognitive and problem-solving skills: using critical thinking, approaching non-routine problems applying expert and creative solutions, using systems and technology • interpersonal skills: communicating, working collaboratively, negotiating and influencing • intrapersonal skills: self-management, adaptability and resilience, self-monitoring and development, self-presentation. There are also specific requirements in some units for assessment of these skills where relevant, for example, where learners are required to undertake real or simulated activities.	All BTEC Nationals provide transferable knowledge and skills that prepare learners for progression to university. The transferable skills that universities value include: • the ability to learn independently • the ability to research actively and methodically • being able to give presentations and being active group members. BTEC learners can also benefit from opportunities for deep learning where they are able to make connections among units and select areas of interest for detailed study. BTEC Nationals provide a vocational context in which learners can develop the knowledge and skills required for particular degree courses, including: • reading scientific and technical texts • effective writing • practical and analytical skills • preparation for assessment methods used in degrees.	The qualification carries UCAS points and is recognised by higher education providers as contributing to admission requirements to many relevant courses. Taken on its own, the Pearson BTEC Level 3 National Diploma in Forensic and Criminal Investigation offers the opportunity to progress to some applied degree courses. Taken alongside other qualifications, it will prepare students to progress to a wider range of degree programmes.

SUBJECT CURRICULUM THEMES



CONTINUING THE CURRICULUM PATH



Future Pathways

The qualification is intended to carry UCAS points and is recognised by higher education providers as contributing to admission requirements for many relevant courses. Taken on its own, the National Diploma in Forensic and Criminal Investigation will offer learners the opportunity to progress to some applied degree courses. Taken alongside other qualifications, it will prepare learners for progression to a wider range of degree programmes. For example, if taken alongside:

• an A Level in Chemistry, learners can progress to forensic science degree courses
• an A Level in Psychology, learners can progress to psychology courses
• an A Level in Sociology, learners can progress to criminology courses.

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BTEC Forensics

Curriculum theme:

Academic study and self directed learning

Year 13

Potential destinations

Physiotherapist, sport trainer, exercise physiologist, criminology and criminal justice, forensic psychology and other related higher education courses. It also prepares you for a broad range of employment opportunities such as in the police, probation or prison service, criminal justice agencies, volunteering and victim support agencies.

Unit 6

In this unit, you will develop an understanding of the Criminal Justice System (CJS), including the police and courts. You will cover the legal framework that criminal investigators must work to in order to protect individual rights, as well as the adversarial system where prosecution and defence set out evidence in court to determine guilt or innocence. It is important that investigators know the tools available to them and make use of the most appropriate resources. You will learn about interviewing techniques that, when used well, can draw out intelligence for the police to act on. You will look at the wide range of tools, skills and powers that can be used by investigators. Criminal investigations can range from minor crimes to major incidents but the procedures to be followed must be equally rigorous in all cases. If the evidence collected by the police or other investigating service is not secure and reliable, the defendant may be acquitted, even if guilty. This illustrates the importance of rigorous criminal investigation procedures. In order for you to appreciate how to collect reliable and secure material evidence, this unit looks at the principles developed to minimise the risk of an innocent person being found guilty or the guilty being acquitted. You will have an opportunity to present interview evidence just as a professional witness such as a police officer/criminal investigation department (CID) officer would. To complete the assessment tasks within this unit, you will need to draw on your learning from across your programme.

Assessment: Coursework

Unit 3

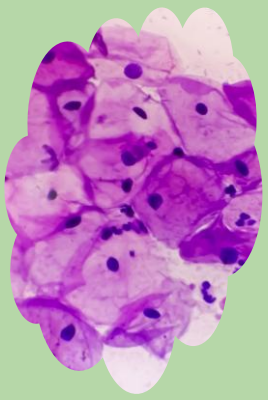
Advancement in science and technology has produced great benefits for society. This advancement depends on research and investigative approaches in science and technology. In research, development, analytical and industrial laboratories, laboratory technicians and scientists are employed to safely carry out practical investigations, or follow prescribed laboratory procedures. They repeat measurements to obtain consistent, reliable results. They use investigative skills, including planning, recording and interpreting data, analysing and evaluating findings in order to test a hypothesis to inform further research and development. In this unit, you will develop the essential skills underpinning practical scientific investigations. As well as drawing on Unit 1 and Unit 2, these skills will be delivered through subject themes ranging from enzymes and diffusion to electrical circuits. The subject themes provide different contexts for the development of the investigative skills. To complete the assessment task within this unit, you will need to draw on your learning from across your programme.

Assessment: Unit 3 exam in May 2027

Unit 5

Criminology is the study of crime and criminal behaviour, drawing on psychology, sociology, law, and other disciplines to explain the causes and prevention of crime. In this unit, you will study how different aspects of criminology help us to understand the reasons why some people may commit crimes and the various methods of crime prevention in England and Wales. There are many different approaches to defining and explaining the extent of crime in England and Wales. You will determine why, according to criminological theories, certain groups are more likely to commit crime than others. You will look at differences between the various sets of crime statistics that explain crime and criminal behaviour. You will also look at the impact of crime on society, focusing on how the media can shape our perception of crime, as well as determining what may influence the likelihood of an individual being a victim of crime. This unit will also look at the theories underlying methods of crime prevention and the different punishment methods used for those convicted of a crime.

Assessment: Unit 5 exam in May 2027



Unit 1

Scientists and technicians working in science and science-related organisations must have a good understanding of core science concepts. A strong grasp of these concepts will enable you to use and apply this knowledge and understanding in vocational contexts when studying other units within this specification. The topic areas covered in this unit include: animal and plant cells; tissues; atomic structure and bonding; chemical and physical properties of substances related to their uses; waves and their application in communications.

Scientists and technicians working in the chemical industry need to have an understanding of atoms and electronic structure. This allows them to predict how chemical substances will react in the production of a wide range of products – anything from fertilisers in the farming industry to fragrances in the perfume industry. Metals play an important role in the construction industry, in providing the structure to buildings, as well as in electrical wiring and the production of decorative features. So understanding the chemical and physical properties of metals is essential when selecting appropriate building materials.

Medical professionals need to understand the structure and workings of cells. They build on this knowledge to understand how the body stays healthy as well as the symptoms and causes of some diseases. This allows them to diagnose and treat illnesses. The study of bacterial prokaryotic cells gives an understanding of how some other diseases are caused and can be treated. Scientists and technicians in the food industry also need to understand the structure and function of plant cells to enable them to develop food crops that produce greater yields. Knowledge of waves is essential in a wide range of industries and organisations. In the communication industry, scientists and technicians apply their knowledge of the electromagnetic spectrum when designing mobile phone and satellite communication, and fibre optics are used to transmit telephone and television signals. Fibre optics are also used in diagnostic tools in medicine.

Assessment: 3 x Unit 1 exams in Biology, Chemistry and Physics in January 2027