

Pearson BTEC Level 3 National Extended Diploma in Forensic and Criminal Investigation

Delivery Guide

First teaching September 2017

Edexcel, BTEC and LCCI qualifications

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Welcome to your BTEC National delivery guide

This delivery guide is a companion to your BTEC Level 3 National specifications, Authorised Assignment Briefs (AABs) and Sample Assessment Materials (SAMs). It contains ideas for teaching and learning, including practical activities, realistic scenarios, ways of involving employers in delivery, ways of managing independent learning and how to approach assessments. The aim of this guide is to show how the specification content might work in practice and to inspire you to start thinking about different ways to deliver your course.

The guidance has been put together by tutors who have been close to the development of the qualifications and so understand the challenges of finding new and engaging ways to deliver a BTEC programme in the context of the new qualifications from 2017.

Guidance around what you will need to consider as you plan the delivery of the qualification(s) has been provided. You will find information around the structure of your course, how you may wish to build the course for your learners, suggestions for how you could make contact with employers and information around the other support and resources available to you.

Unit-by-unit guidance has been provided that includes suggestions on how to approach the learning aims and unit content, as well as ideas for interesting and varied activities. You will also find coverage of assessments, including useful advice about external assessment, as well as ideas around how to plan for and deliver your assignments.

You will also find a list of carefully selected resources for each unit. The lists include suggestions for books, websites and videos that you can either direct your learners to use or that you can use as a way to complement your delivery.

We hope you will find this guidance relevant and useful.

Enjoy your course!

What's new

The new BTEC Level 3 Nationals 2017 are the result of more than three years' consultation with employers, higher education institutions, and many thousands of tutors and managers in colleges and schools. Our aim has been to ensure that the BTEC Level 3 Nationals continue to allow a recognised and well-respected route into employment or higher education by meeting the needs of these key stakeholders. We want to ensure that learners continue to enjoy a stimulating course of study and develop the skills and attributes that will enable them to progress.

As a result of this consultation and on the advice of employers, higher education institutions and most importantly of those of you who teach BTEC, some key changes have been made to the BTEC Level 3 Nationals. These are described throughout this delivery guide and include the following.

- **Updated content and a larger proportion of mandatory content** – both universities and employers said they wanted a greater consistency in coverage of the subject for BTEC learners. Employers wanted to see systematic coverage of core knowledge and skills for their sector, and for the Nationals to reflect up-to-date industry practice.
- **The reintroduction of external assessment** – employers were keen to see an element of rigour and consistency across the country in terms of assessment. Higher education institutions wanted learners to be better prepared for meeting deadlines and preparing for formal exams, where



appropriate. Both were keen to see learners applying their knowledge and skills to new contexts through synoptic projects and assessments.

- **A focus on employability skills** – the BTEC approach to learning, through projects, practical assignments, group work and simulating the world of work, has always supported the development of employability skills – e.g. self-management. In the new Nationals, the balance of cognitive and skills work has been carefully calibrated to ensure that learners get a range of different opportunities across their course.
- **Broader assessment in internal units** – the assessment criteria for each unit are carefully structured to set a clear level of demand. Distinction criteria encourage and require depth of study, including demonstration of the application of knowledge and understanding as well as a synoptic element for the learning aim or unit.
- **Alignment with DfE criteria for performance measures for 16–19 year olds in England** – all new BTECs are designed as either Applied General (e.g. Forensic and Criminal Investigation) qualifications or Tech Levels to fulfil criteria for inclusion in 2018 performance tables and funding for 16–19 year olds and 19+ learners.

To support transition to the BTEC Level 3 Nationals 2017, we are providing a support programme with exemplar and practice materials, and training is available. Please see the *Support and resources* section for details of the support and the link to sign up to training, which will be available from 2017 and throughout the lifetime of the qualification.

Notes:

The specification tells you what **must** be taught and what **must** be assessed. This delivery guide provides suggestions and ideas on how you could do this.

The suggestions given in this delivery guide link with the Authorised Assignment Briefs provided by Pearson but they are not compulsory. They are designed to get you started and to spark your imagination.



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OVERVIEW

Delivery Guides as support

This delivery guide contains the information you need to deliver the **Pearson BTEC Level 3 National Extended Diploma in Forensic and Criminal Investigation**. This qualification is part of the suite of Forensic and Criminal Investigation qualifications offered by Pearson. In the suite, there are three qualifications that focus on different progression routes, allowing learners to choose the one best suited to their aspiration.

In the specification, the 'Unit content' tells you what must be taught and the 'Assessment criteria' what must be assessed. The 'Essential information for assessment decisions' explains what the assessment criteria mean.

This delivery guide provides suggestions and ideas on how to plan and deliver the qualification, and includes a summary of recent changes.

Unit-by-unit guidance has been provided that includes suggestions on how to approach the learning aims and unit content. Teaching, learning and formative assessment activities are also suggested. You will also find delivery plans to help you timetable your course and ensure your learners are well prepared for internal and external assessments.

Links to carefully selected resources are provided for each unit. The lists include suggestions for books, websites and videos that will help you plan and deliver your course. Alternatively, you may wish to direct your learners to these resources.

Use the delivery guides as model templates or an interpretation on which you can base your own plan. Every delivery guide presents each unit as an exemplar, highlighting forensic and criminal investigation links to motivate tutors and learners.



Structure

All qualifications in the suite share some common units and assessments, allowing learners some flexibility in moving between sizes. The qualification titles are given below. Some BTEC National qualifications provide a broad introduction that gives learners transferable knowledge and skills. These qualifications are for post-16 learners who want to continue their education through applied learning.

BTEC Nationals have been designed around the number of hours of guided learning expected. Each unit in the qualification has a GLH value of 60, 90 or 120. There is then a total GLH value for the qualification. Guided learning means activities, such as lessons, tutorials, online instruction, supervised study and giving feedback on performance, that directly involve tutors and assessors in teaching, supervising and invigilating learners. Guided learning includes the time required for learners to complete external assessment under examination or supervised conditions.

The **Pearson BTEC Level 3 National Foundation Diploma in Forensic Investigation** (510 GLH) is equivalent in size to one and a half A levels. It is designed as a one-year, full-time course of study, or as part of a two-year, full-time study programme for learners who wish to study another area alongside it, which may contrast or complement the qualification. The qualification supports progression to higher education if taken as part of a programme of study that includes other BTEC Nationals or A levels.

The **Pearson BTEC Level 3 National Diploma in Forensic and Criminal Investigation** (720 GLH) is equivalent in size to two A levels and is designed to be the substantive part of a 16–19 study programme for learners who want a strong core of sector study. The qualification may be complemented with other BTEC Nationals or A levels to support progression to higher education courses in forensics and criminology. The additional qualification(s) studied allows learners either to give breadth to their study by choosing a contrasting subject, or to give their studies more focus by choosing a complementary subject.

Finally, the **Pearson BTEC Level 3 National Extended Diploma in Forensic and Criminal Investigation** (1080 GLH) is equivalent in size to three A levels. It is designed as a two-year, full-time course that meets entry requirements in its own right for learners who want to progress to higher education courses in the Forensic and Criminal Investigation sector before entering employment.



Overview of the Forensic and Criminal Investigation qualification suite

Delivery

You are free to deliver BTEC Level 3 Nationals in Forensic and Criminal Investigation using any form of delivery that meets the needs of your learners. We recommend making use of a wide variety of modes, including direct instruction in classrooms or work environments, investigative and practical work, group and peer work, private study and e-learning.

Each qualification in the suite has its own purpose. The mandatory and optional content provides a balance of breadth and depth, while retaining a degree of choice for individual learners to study content relevant to their own interests and progression choices. The proportion of mandatory content ensures that all learners are following a coherent programme of study and acquiring the knowledge, understanding and skills that will be recognised and valued. Learners are expected to show achievement in all mandatory units.

Induction

Since BTEC Level 3 Nationals come in a range of sizes, each with a specific purpose, you will need to assess learners very carefully to ensure that they start on the right size of qualification to fit into their 16–19 study programme, and that they take optional units that allow them to progress to the next stage. Some learners may want to take a complementary qualification or keep their progression options open. These learners may be suited to take the BTEC National Foundation Diploma in Forensic Investigation. Learners who then decide to continue with a fuller vocational programme can transfer to a BTEC National Diploma or Extended Diploma in Forensic and Criminal Investigation, for example, for their second year.

Some learners are sure of the sector they want to work in and are aiming for progression into that sector via higher education. These learners should be directed to the two-year BTEC Level 3 National Extended Diploma as the most suitable qualification. As a centre, you may want to teach learners who are taking different qualifications together. You may also wish to transfer learners between programmes to meet changes in their progression needs. You should check the qualification structures and unit combinations carefully as there is no exact match among the different sizes. You may find that learners need to complete more than the minimum number of units when transferring. When learners are recruited, you need to give them accurate information on the title and focus of the qualification for which they are studying.

Creating a course

As outlined, Pearson has developed the new BTEC Level 3 Nationals to ensure the content is up to date and that it includes the knowledge, understanding, skills and attributes required in the sector. BTEC Level 3 Nationals have always required applied learning that brings together knowledge and understanding (the cognitive domain) with practical and technical skills (the psychomotor domain). This is achieved through learners performing vocational tasks that encourage the development of appropriate vocational behaviours (the affective domain) and transferable skills. Our approach provides rigor and balance, and promotes the ability to apply learning immediately in new contexts.

For all regulated qualifications, Pearson specifies a total number of hours that it is expected learners will be required to undertake in order to complete and show achievement for the qualification: this is the Total Qualification Time (TQT). Within TQT, Pearson identifies the number of Guided Learning Hours (GLH) that we expect a centre delivering the qualification to provide. In addition to guided learning, the TQT includes other required learning directed by tutors or



assessors, which will include private study, preparation for assessment and undertaking assessment when not under supervision, such as preparatory reading, revision and independent research.

Unit structure

The units in the specification set out our expectations of assessment in a way that helps you to prepare your learners for assessment. The units help you to undertake assessment and quality assurance effectively. Each unit in the specification is set out in a similar way.

There are two types of unit format:

- internal units
- external units.

Section 3 of the specification explains how the units work. It is important that all tutors, assessors, internal verifiers and other staff responsible for the programme review this section.

Each unit has a number of learning aims (internally assessed units) or assessment outcomes (externally assessed units). This helps to define the scope, style and depth of learning of the unit. You can see where learners should be learning standard requirements ('understand') or where they should be actively researching ('investigate').

Assessment

Assessment is specifically designed to fit the purpose and objective of the qualification. It includes a range of assessment types and styles suited to vocational qualifications in the sector. There are three main forms of assessment that you need to be aware of: **external**, **internal** and **synoptic** (which is either internal or external).

External assessment

Each external assessment for a BTEC National is linked to a specific unit. All of the units developed for external assessment are of 90 or 120 GLH to allow learners to demonstrate breadth and depth of achievement. Each assessment is taken under specified conditions, then marked by Pearson and a grade awarded. Learners must achieve all external units at pass grade or above. Learners are permitted to resit any external assessment only once during their programme. The styles of external assessment used for qualifications in the BTEC Level 3 Forensic and Criminal Investigation suite are:

- **examinations** – all learners take the same assessment at the same time, normally with a written outcome
- **set tasks** – learners take the assessment during a defined window and demonstrate understanding through completion of a vocational task.

Some external assessments include a period of preparation using set information. External assessments are available twice a year. For detailed information on the external assessments, please see the table in Section 2 of the specification. For further information on preparing for external assessment, see Section 5 of the specification.

Internal assessment

Most units in this qualification are internally assessed and subject to external standards verification. This means that you set and assess the assignments that provide the final summative assessment of each unit, using the examples and support that Pearson provides. Before you assess you will need to become an approved centre, if you are not one already. You will need to prepare to assess using the guidance in Section 6 of the specification.



In line with the requirements and guidance for internal assessment, you select the most appropriate assessment styles according to the learning set out in the unit. This ensures that learners are assessed using a variety of styles to help them develop a broad range of transferable skills. Learners could be given opportunities to:

- write up the findings of their own research
- use case studies to explore complex or unfamiliar situations
- carry out projects for which they have choice over the direction and outcomes
- demonstrate practical and technical skills using appropriate equipment.

You will make grading decisions based on the requirements and supporting guidance given in the units. Learners may not make repeated submissions of assignment evidence.

Synoptic assessment

Synoptic assessment requires learners to demonstrate that they can identify and use effectively, in an integrated way, an appropriate selection of skills, techniques, concepts, theories and knowledge from across the whole sector as relevant to a key task. BTEC learning has always encouraged learners to apply their learning in realistic contexts using scenarios and realistic activities that will permit learners to draw on and apply their learning.

For these qualifications, we have formally identified units to be a focus for synoptic assessment. Centres need to plan appropriate delivery of units with synoptic assessment to ensure that learners would be ready to take assessment as they are expected to be able to draw on a range of content. Synoptic units may be internally or externally assessed. The particular units that you will need to treat synoptically for this qualification are shown in the structure in Section 2 of the specification.

Assessment of the internal and external units for these qualifications will be available in English. All learner work must be in English. A learner taking the qualifications may be assessed in British or Irish Sign Language where it is permitted for the purpose of reasonable adjustment.

The assessment outcomes show the hierarchy of knowledge, understanding, skills and behaviours that are assessed. This includes information on how this hierarchy relates to command terms in Sample Assessment Materials (SAMs).

The **delivery plans** highlight the mandatory and optional units (that can be substituted dependent on the centre). It is anticipated that there should be a large amount of taught content in the first term, in order to build a strong foundation of basic skills and knowledge, associated to forensic investigation. This solid foundation is paramount in the delivery of hands on units where learners are applying skills in a vocational context. Staff teams are encouraged to draw from industry practice, case studies and industry protocols as much as is feasibly possible. The development of transferable employability skills is absolutely critical for the long-term development of learners.

This structure of delivery is all about developing an essential 'tool kit' of skills and knowledge. The first six weeks of the course offers an opportunity to embed some of the core skills and knowledge learners will need to progress to the more specialist units. These weeks can be used to secure essential theory, work ethic, expectations and academic study skills.

At the end of the course, learners should feel equipped and empowered to seamlessly progress into employment or higher education.



Making the right choice for your learners

As a centre it is your responsibility to ensure that learners who are recruited have a reasonable prospect of success on the programme. Learners are most likely to succeed if they have:

- five GCSEs at good grades, including science, and/or
- BTEC qualification(s) at level 2
- achievement in English and mathematics through GCSE or Functional Skills.

Learners may demonstrate ability to succeed in various ways. For example, learners may have relevant work experience or specific aptitude shown through diagnostic tests or non-education experience.

What could this qualification lead to?

It is also vital that you advise your learners on the right qualification for their future ambitions.

In addition to the applied science, forensic science, criminology and criminal and forensic psychology sector-specific content, the requirements of the qualification will mean learners develop the transferable and higher order skills that are highly regarded by higher education and employers. For example, the study of applied and forensic science, criminology and criminal and forensic psychology, particularly, encourages development of skills such as evaluation, analysis and synthesis. These skills are developed through the variety of approaches to teaching and learning enabled by the specification.

The range of higher education degree courses that learners can progress to include:

- BSc (Hons) in Policing and Criminal Investigation
- BSc (Hons) in Forensic Science and Criminal Investigation
- BSc (Hons) in Forensic Science
- BSc (Hons) in Forensic Psychology
- BSc (Hons) in Psychology and Criminology
- BSc (Hons) in Forensic Psychology and Criminal Investigation
- BA (Hons) in Criminology
- BA (Hons) in Criminology and Law.

The qualification is intended to carry UCAS points and is recognised by higher education providers as meeting admission requirements for many relevant courses. Learners should always check the entry requirements for degree programmes with specific higher education providers.



Making contact with employers

Securing work experience, for example, in a hospital laboratory or as a school laboratory technician, will allow your learners to give evidence for attention to detail and accuracy. It is difficult to get real-life crime scene work experience as health and safety legislation prevents this, as does the sensitivity of crime scene investigations. Working as a special constable would be one way to gain an insight into police work.

Other related careers are:

- Police Officer
- Forensic Computing and Computer Security
- Forensic Photographer
- Forensic Medicine
- Forensic Archaeology
- Toxicology
- Pharmacology
- Analytical Chemist
- Teaching
- Law
- Intelligence & Security Work
- Hospital Scientist
- Research Scientist
- Social Worker
- Probation Officer
- Criminal psychologist

Potential employers include:

- **Police Laboratories:** In Scotland, police carry out analysis of forensic evidence in their own laboratories, whereas in England and Wales it is usually contracted out to Forensic Science Service independent forensic contractors. There are four laboratories in Scotland: in Aberdeen, Dundee, Edinburgh and Glasgow.
- **Forensic Science Agency of Northern Ireland** in Belfast www.fsni.gov.uk
- **Institution of Fire Engineers**
- **The Defence Science and Technology Laboratory (DSTL):** The **Forensic Explosives Laboratory** of DSTL specialises in forensic work on explosives at Fort Halstead in **Kent** such as analysis of terrorist-related explosive materials.
- **The Home Office Centre for Applied Science and Technology** carries out some research and development on equipment and systems used for the police and fire services.
- **HM Revenue and Customs** is involved in the forensic examination of vehicles for drugs etc.

How does the qualification provide employability skills?

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 guide, we are generally referring to skills in the following three main categories:

- **cognitive and problem-solving skills:** use critical thinking, approach non-routine problems applying expert and creative solutions, use systems and technology
- **intrapersonal skills:** communicating, working collaboratively, negotiating and influencing, self-presentation
- **interpersonal skills:** self-management, adaptability and resilience, self-monitoring and development.



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.

How does the qualification provide transferable knowledge and skills for higher education?

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
- to be able to give presentations and be 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.



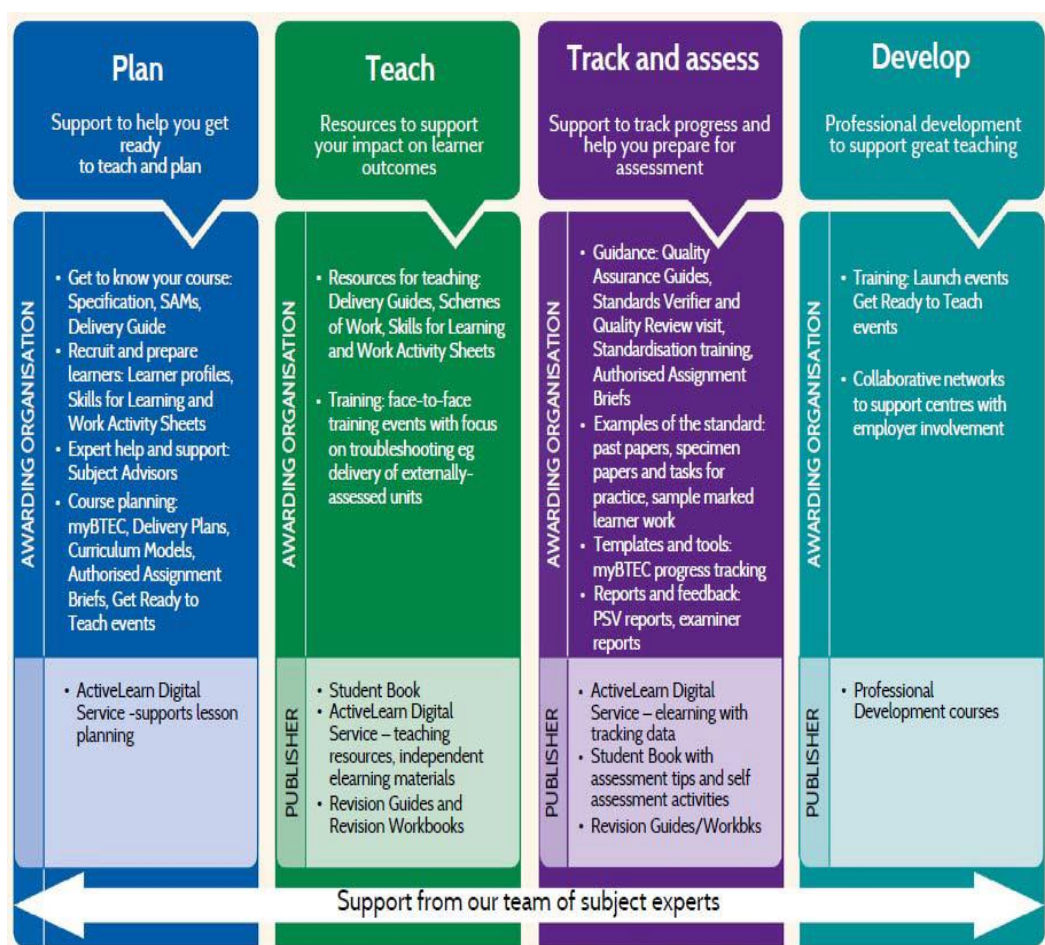
SUPPORT AND RESOURCES

Free support

All the 'Awarding Organisation' resources can be found on the Pearson Qualifications [website](http://qualifications.pearson.com/en/qualifications/btec-nationals/forensics-and-criminal-investigation-2017.html) <http://qualifications.pearson.com/en/qualifications/btec-nationals/forensics-and-criminal-investigation-2017.html>.

Paid for resources

We do not offer any paid for resources or books as such for this qualification, but **where units are common to both Forensics and Criminal Investigation and Applied Science**, some are included in the Applied Science resources produced by Pearson Learning Services ('Publisher' in the tables below), i.e. units 1, 2, 3, 4, 8 and 16.



In addition to the 'publisher' resources listed above, publishers other than Pearson may produce textbooks that are endorsed for BTEC. Check the Pearson website (<http://qualifications.pearson.com/en/support/published-resources.html>) for more information as titles achieve endorsement.



There are also a number of people who are available for you to speak to:

- **Standards Verifiers** – they are subject specialists who can support you with ensuring that our assessment plan is fit for purpose and whose role is to confirm that you are assessing your learners to national standards as outlined in the specification by providing quality assurance through sampling.
- **Customer Services** – the 'Support for You' section of our website gives the different ways in which you can contact us for general queries. For specific queries, our service operators can direct you to the relevant person or department.

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Training for the new BTEC Level 3 Nationals can be found on the Pearson website here: <http://qualifications.pearson.com/en/support/training-from-pearson-uk.html>