

Pearson BTEC Nationals in Construction and the Built Environment

Delivery Guide

Pearson BTEC Level 3 National Extended Certificate in
Construction and the Built Environment

Pearson BTEC Level 3 National Foundation Diploma in
Construction and the Built Environment

Pearson BTEC Level 3 National Diploma in Construction and the
Built Environment

Pearson BTEC Level 3 National Extended Diploma in
Construction and the Built Environment

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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, which 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 tips and 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 BTEC Level 3 Nationals 2017 are the result of more than three years' consultation with employers, higher education institutions (HEIs), 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 and 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 employers and universities 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, while 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 through 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 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

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 construction links to motivate tutors and learners.



Significant changes for those teaching to the new 2017 specification

Changes across the BTEC National suite as a whole are listed above. For Construction specifically, some key changes include:

- External Assessment including 'Construction Principles' (key science and maths concepts), Construction Design, and Tendering & Estimating units (depending on size of qualification)
- New content to reflect workplace practice and latest knowledge such as in Building Information Modelling, Design, Surveying, Civil Engineering for infrastructure, Quantity Surveying, Quality Control and understanding employer Commercial and Contractual requirements
- Embedding 'Sustainability' into the qualification as a key theme rather than offering a stand-alone unit in the subject
- Removal of surveying as a stand-alone qualification and inclusion in all qualifications as either mandatory or optional content
- A common core followed by a narrower choice of optional units for each 'pathway' qualification, to comply with DfE tech level criteria and to ensure a specific job-focused purpose to each
- Greater opportunities for employer involvement throughout the qualification, with specific requirements to involve employers in certain units
- Removal of underused and unpopular units following consultation with providers.



Structure

The level 3 Nationals in Construction and the Built Environment are a suite of qualifications that focus on different progression routes, allowing learners to choose the one best suited to their aspirations. Pearson has developed the content of the new BTEC Nationals in collaboration with employers and representatives from higher education and relevant professional bodies. This ensures that content is up to date and that it includes the knowledge, understanding, skills and attributes required in the sector.

Whereas the previous Nationals were internally assessed only, these new Nationals have three types of assessment: Internal, External and Synoptic. There is also more emphasis on developing and utilising links with employers. This would require a review of how the units are delivered and assessed and provides a unique opportunity to create project-based assessments which map across more than one unit and which involve employers in developing realistic briefs and case studies.

These qualifications are aimed at supporting post-16 learners interested in pursuing specialist pathways within construction-related industries. Learners will be provided with technical skills and the required knowledge to enable them to follow their desired career goals. This may be through directly into employment, or onto suitable higher education courses. As mentioned earlier, the employers must have significant involvement in these programmes.

In the Construction and the Built Environment sector, these are:

- Pearson BTEC Level 3 National Extended Certificate in Construction and the Built Environment (340 GLH)
- Pearson BTEC Level 3 National Foundation Diploma in Construction and the Built Environment (560 GLH)
- Pearson BTEC Level 3 National Diploma in Construction and the Built Environment (720 GLH)
- Pearson BTEC Level 3 National Extended Diploma in Construction and the Built Environment (1080 GLH).

All qualifications in the suite share some common units and assessments, allowing learners some flexibility in moving between qualifications where they wish to select a more specific progression route. The published programme specification provides an overview of various qualification sizes, clearly highlighting both mandatory (M) and optional (O) units. Some units are mandatory across all qualification sizes, while some units are mandatory only for larger size of the qualification. While choosing the optional units, consideration should be given to the opportunities for coordinated delivery across units as well as to the efficient use of resources.

Certain units of the qualification suite, such as mandatory *Unit 1: Construction Principles*, provide underpinning knowledge of mathematics, technology, materials and construction science, which learners then apply to solve construction problems. Such units must precede specialist units to ensure learners are well prepared for the applied part of their learning and should be taught over a longer period of time – something at times referred to as a long and skinny delivery model.

Other units, such as *Unit 10: Building Surveying in Construction*, develop skills in a specific vocational area. You could consider delivering such units over a shorter period of time – a short and fat delivery model.

The key to successful delivery is the ability to engage learners. Providing a practical construction context to the delivery should be your focus. This could be through site visits to reinforce learning in class or developing sessions to explore field-based exercises. Making use of images, animations and a wide range of



web-based resources will be of great benefit in the classroom, and suggestions to such resources have been included alongside each unit of this guide. You should also, where possible, invite in guest speakers to engage with learners who will be interested and inspired to hear first-hand about the current practices from local professionals.

The content for a unit, or across units, can be delivered in parallel or linear sequence as appropriate. Whatever route you take, adopting a holistic project-based approach in combining the delivery of content as well as assessment will work well. You could use industry projects; for example, *Unit 4: Construction Technology* and *Unit 5: Health and Safety in Construction* could be delivered and assessed using this approach, wherein construction of various elements could be integrated with relevant health and safety regulations and codes.

Depending upon the size of qualification, the choices available to you for optional units vary. Choosing optional units is an important decision. Staff expertise and the availability of physical resources to support delivery and assessment will be a priority concern, as will meeting the aspirations of your learners. You may also wish to consider the local job market and the anticipated future needs when making these decisions.

The mandatory units could be either externally or internally assessed. You should prepare your learners for external assessment throughout delivery, especially where they must sit an examination. Such a preparation involves frequent quizzes, class tests, mock examinations, supported by explanations of keywords used in assessments and general examination techniques.

The mandatory synoptic units require learners to apply learning from across the qualification to the completion of defined vocational tasks. This should be planned to be completed at the end of the programme or when learners have gained adequate knowledge and understanding by studying other relevant units of the programme.



Making the right choice for your learners

You should support your learners in making the right choice that aligns with their future aspirations, whether aiming for starting a degree or a specific job role in the industry.

For example, the **Extended Diploma** is largest size of qualification within the suite:

- It is equivalent in size to 3 A levels and allows the learner to develop a substantial common core of knowledge.
- Learners have the choice to study topics in depth across full range of optional units.
- Learners will develop the broader skills highly valued by higher education institutions, such as critical thinking.
- A range of written and verbal communication skills required in the construction sector will be covered.

Hence, such a qualification would suit a learner if they are studying full time over a period of two years and want to pursue a career in construction. This could be proceeding directly to employment as a technician as this qualification is intended to meet the requirements to registration as a technician. Alternatively, this qualification will allow learners to progress to higher education.

For each qualification, no prior study of the sector is needed, but the learner should normally have a range of achievement at level 2, in GCSEs or equivalent qualifications, including English, mathematics and science.

The smaller size qualifications, such as the **Foundation Diploma**, cater for learners who wish to learn about construction alongside other areas of study, such as an A level, and as a support in their progression to higher education.



Making contact with employers

The employers in the construction industry range from small design consultancies to large national and international construction companies. Which of these business models would benefit your learners will depend upon the size of the qualification as well as the optional units that you have chosen.

If your centre has well established construction programmes, you could start by contacting employers who are already on your customers' database. If this is not the case, developing a list of local companies using internet-based searches is a good start. You could also develop a list of relevant staff within, for example, the local council, Highway Agency and Environment Agency. You should also look to build links to professional bodies, such as Chartered Institute of Building (CIOB), Chartered Institute of Building Services Engineers (CIBSE) and Institution of Civil Engineers (ICE).

Making contact through email or phone is a good start, but before making contact, be clear on the unit content which you could ask them to relate to. You should also be flexible with the timing of any site visits or guest speakers. While talking to the employers, it is always worthwhile to articulate the mutual benefits of developing a positive relationship between the centre and the employers. For example, one of the benefits they are likely to get from this relationship could be offering work placements, which will provide them opportunities for low-risk employee recruitment while contributing towards the local and national skills agenda.



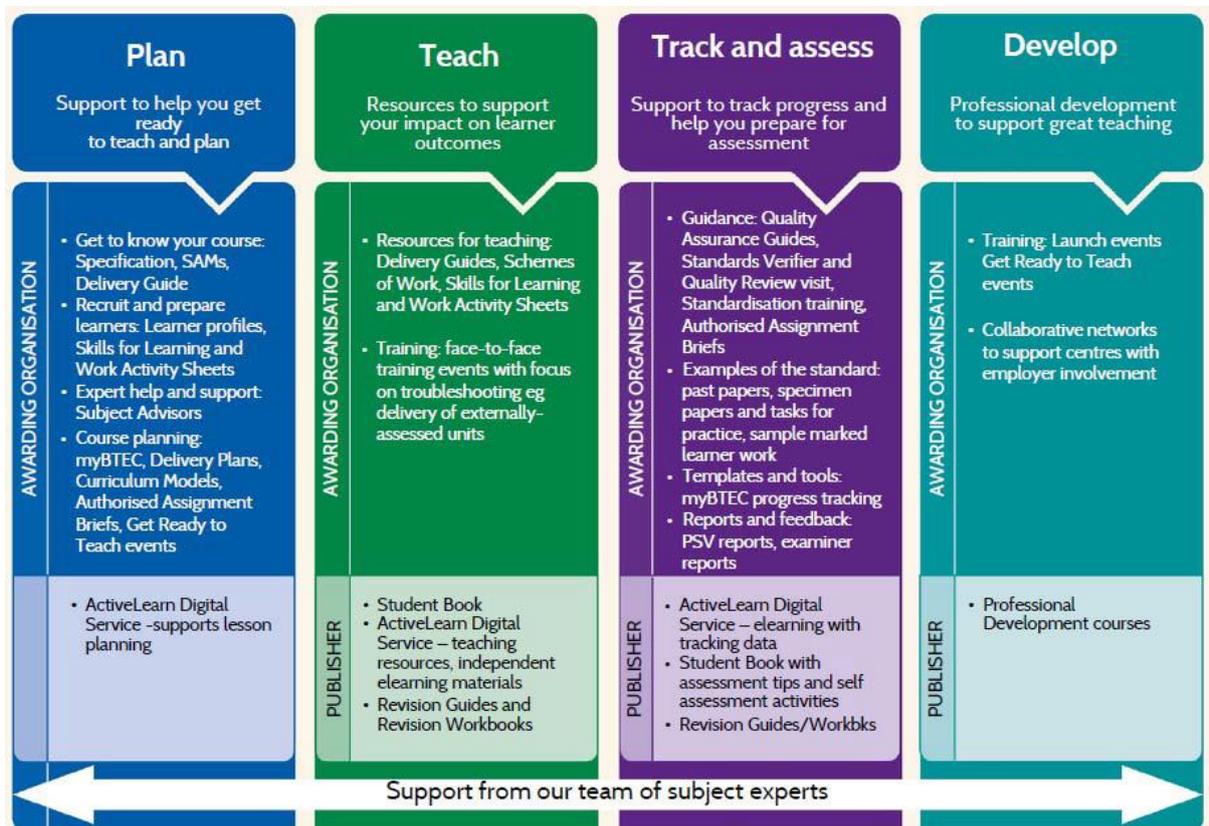
SUPPORT AND RESOURCES

There are a wealth of resources available to ensure that you feel confident delivering your BTEC National qualification throughout your entire course.

All the 'Awarding Organisation' resources can be found on the Pearson Qualifications website here: <https://qualifications.pearson.com/en/home.html>

As well as the free resources supporting the qualification, provided by Pearson as an Awarding Organisation, Pearson Learning Services ('Publisher' in the tables below) provides a range of engaging resources to support BTEC Level 3 Nationals, including:

- Student books in e-book and print formats
- Revision guides and revision workbooks in e-book and print formats
- Teaching and assessment packs, including e-learning materials via the ActiveLearn Digital Service.



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 your 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.
- **Curriculum Development Managers (CDMs)** – they are regionally based and have a full overview of the BTEC qualifications and of the support and resources that Pearson provides. CDMs often run network events.
- **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.

Subject Advice

TeachingConstruction@pearson.com

020 7010 2168

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>