

# The Fast Track Level 3 BTEC Qualification in Construction and the Built Environment

## Introduction

BTEC is one of the world's most recognised applied learning brands, engaging students in practical, interpersonal and thinking skills, for more than thirty years.

BTECs are work-related qualifications for students taking their first steps into employment, or for those already in employment and seeking career development opportunities. BTECs provide progression into the workplace either directly or via study at university and are also designed to meet employer's needs. Therefore, Pearson BTEC qualifications are widely recognised by industry and higher education as the principal vocational qualification at Levels 3, 4 & 5.

There is now a greater emphasis on employer engagement and work readiness. The new BTEC qualifications in Construction and The Built Environment are designed to reflect this increasing need for high quality professional and technical education pathways at Levels 3, 4 and 5, thereby providing students with a clear line of sight to employment and to progression to a degree at Level 6.

## Why choose Pearson BTEC's?

Pearson BTEC's are designed to help students secure the knowledge skills and behaviours needed to succeed in the workplace. They represent the latest in professional standards and provide opportunities for students to develop behaviours for work, for example by undertaking a group project, or responding to a client brief. A student may even achieve exemption from professional or vendor qualifications, or student membership of selected professional bodies, to help them on their journey to professional competence.

At the same time the BTECs are intended to keep doors open for future study should a student wish to progress further in their education after their level 5 study. They do this by allowing space for the development of higher education study skills, such as the ability to research. Clear alignment of level of demand with the Framework for Higher Education qualification descriptors at level 4 and 5 means that students wishing to progress to level 6 study should feel better prepared. The BTEC Higher Nationals address these various requirements by providing:

- A range of general and specialist units, each with a clear purpose, there is something to suit each student's choice of programme and future progression plans.
- Content that is closely aligned with the needs of employers, Professional Bodies and higher education for a skilled future workforce.
- Learning outcomes mapped against Professional Body standards and accreditation requirements.
- Assessments and projects chosen to help students progress to the next stage.
- Levels 4 and 5 are aligned with the Framework for Higher Education Qualifications (FHEQ).

## **Key features**

Pearson BTEC qualifications in Construction and The Built Environment offer:

- A stimulating and challenging programme of study that will be both engaging and memorable for students.
- The essential subject knowledge that students need to progress successfully into further study and the world of work.
- Refreshed content that is closely aligned with Professional Body, vendor, employer and higher education needs.
- Assessments that consider cognitive skills (what students know) along with effective and applied skills (respectively how they behave and what they can do)
- Unit-specific grading.
- Pearson-set assignments.
- A diverse approach to assessment that supports progression to Level 6 accommodating and enhancing different learning styles.
- A qualification designed to meet the needs and expectations of students aspiring to work in an international business environment.

## **Professional Bodies**

This qualification has been developed to meet the requirements of the following Professional Bodies:

- Institution of Civil Engineers
- Institution of Structural Engineers
- Royal Institution of Chartered Surveyors
- Chartered Institute of Building
- Chartered Institute of Architectural Technologists
- Chartered Institution of Building Services Engineers
- Chartered Institute of Plumbing and Heating and Engineers

## On successful completion of the Programme, the candidate will have the knowledge and understanding of the following:

The 30-credit Pearson BTEC Level 3 Certificate offers a specialist qualification that focuses on aspects of employment within the appropriate vocational sector. The Pearson BTEC Level 3 Certificate is a qualification which can extend a learner's programme of study and give vocational emphasis. The Pearson BTEC Level 3 Certificate is broadly equivalent to one GCE AS Level.

The Pearson BTEC Level 3 Certificate is also suitable for more mature learners, who wish to follow a vocational programme of study as part of their continued professional development or who want to move to a different area of employment.

Units	Level 3 Pearson (BNC) BTEC National Certificate Modules
	<b>Mandatory Units (Level 3)</b>
<b>1</b>	Health Safety and Welfare in Construction and the Built Environment
<b>2</b>	Sustainable Construction
	<b>Required Optional Units (Level 3)</b>
<b>6</b>	Building Technology in Construction

### Health, Safety and Welfare in Construction and the Built Environment

This unit is a core unit of the qualification and is a vital component of any construction-related teaching course. Health and safety in construction does not have a good track record; statistically the industry has the worst fatal accident rate year on year. Recent legislation trying to curb this trend in construction has been included in this new edition. This unit is divided into four outcomes.

The first outcome deals with the health and safety legislation, specifically the construction-related legislation. The learner must examine the roles and responsibilities of people within the Health and Safety at Work Act. Due to the high fatality rate from falls, a close look at working at height and the responsibilities of the employer is required; thus, the Working at Heights Regulations has also been included. The Management of Health and Safety at Work Regulations deals with risk assessment. It also crosses over to the second outcome.

The second outcome asks the learner to identify the hazards that cause so many accidents on construction sites. It also asks the learners to focus on the severity of the hazards and assess the risk from these hazards using a typical risk assessment.

From the risk assessment the learner will develop in the third outcome the ability to correctly identify the control methods that reduce the high-risk elements down to an acceptable level. Industry standard risk assessments may be used to provide actual examples of typical hazards and risks associated with construction. The learners will be required to review workplace policies and see how these contribute as control measures.

Finally, in the fourth outcome, the learner looks how an accident is reported and the legal requirements associated with this procedure.

## **Sustainable Construction**

In this unit, the learner will develop an understanding of how we can protect our environment by looking into the relevant areas of legislation. Control of our environment through agencies and local authorities will also be explored, as will sustainable design and specification with regard to their role in encompassing energy reduction and usage. The management of construction sites will also be considered in this aspect.

Finally, the learner will examine the fit-for-purpose techniques that are now be employed in domestic construction to provide the sustainability of our built environment. The modern techniques of construction will be looked at regarding renewable resources and the reduction of wastage from production.

## **Building Technology in Construction**

This unit is designed to introduce learners to the ‘nuts and bolts’ of buildings. It begins with an analysis of how ground conditions and the subsequent soil parameters lead to the effective selection of appropriate foundations. Learners will also learn about the range of secondary elements. It naturally follows that in order to do this successfully and have a clear understanding of how buildings are constructed, the techniques employed and the materials available for selection will need to be understood fully. Technicians are required to know about materials and their scientific composition and about the safe and effective assembly of components. An understanding of the health, safety and welfare of operatives along with the use of machinery, plant and equipment is necessary to work in the field.

Construction activity uses a considerable amount of natural and raw materials, most of which are finite, and their continued use contributes to the greenhouse effect and resource depletion. Current government policy in the UK is moving toward sustainable construction and those persons engaged in the construction of buildings will need a greater awareness of legislative controls that will determine the suitability of materials. Moreover, current best practice is to enable designers and contractors to ‘design in’ many features that promote sustainable construction, the reduction of CO<sub>2</sub> emissions and to produce buildings that use less energy for heating, lighting and other activities that consume fuel.