

Person BTEC Level 3 Diploma in Construction and the Built Environment

Course Code: HL3011



Centre no. 75879

Pearson BTEC Level 3 Diploma is potential for the qualification to prepare learners for employment in the appropriate vocational sector and it is suitable for those who have decided that they wish to enter a particular area of work. It is broadly equivalent to two GCE A Levels. Some learners may wish to gain the qualification in order to enter a specialist area of employment or to progress to a level 4 programme.

Other learners may want to extend the specialism they studied on the Pearson BTEC Level 3 Certificate, Pearson BTEC Level 3 Subsidiary Diploma or the Pearson BTEC Level 3 90-credit Diploma programme.

Study Duration

Number of modules: 12 modules

Length of study: 1 year in evening part-time mode

Assessment

100% Assignment, requires 6,000 words for each Assignment

12 Assignments is required, each unit carry one Assignment

Course Outcome

- B3C01 Health, Safety and Welfare in Construction and the Built Environment
- B3C02 Sustainable Construction
- B3C03 Mathematics in Construction and the Built Environment
- B3C04 Science and Materials in Construction and the Built Environment
- B3C05 Construction Technology and Design in Construction and Civil Engineering
- B3C06 Building Technology in Construction
- B3C07 Project Management in Construction and the Built Environment
- B3C10 Surveying in Construction and Civil Engineering
- B3C14 Structural Mechanics in Construction and Civil Engineering
- B3C15 Building Surveying in Construction
- B3C17 Building Regulations and Control in Construction
- B3C44 Conversion and Adaptation of Buildings

Course Content

- B3C01 Health, Safety and Welfare in Construction and the Built Environment
Know the responsibilities of employers and employees under current health, safety and welfare legislation. Know how to undertake risk assessments using appropriate principles and formats. Understand the control measures used to reduce risk and meet legal requirements. Know their own role in accident recording and reporting procedures.
- B3C02 Sustainable Construction
Know the important features of the natural environment that need to be protected. Understand how the activities of the construction and built environment sector impact on the natural environment. Understand how the natural environment can be protected against the activities of the construction and built environment sector. Understand sustainable construction techniques that are fit for purpose.
- B3C03 Mathematics in Construction and the Built Environment
Be able to use basic underpinning mathematical techniques and methods to manipulate and/or solve formulae, equations and algebraic expressions. Be able to select and apply mathematical techniques correctly to solve practical construction problems involving perimeters, areas and volumes. Be able to select and apply geometric and trigonometric techniques correctly to solve practical construction problems. Be able to select and apply graphical and statistical techniques correctly to solve practical construction problems.
- B3C04 Science and Materials in Construction and the Built Environment
Know the basic factors that affect human comfort. Understand how forces act on structures. Know the performance criteria applicable to construction materials and the techniques used to produce such materials. Understand construction materials and the techniques used to prevent their deterioration.
- B3C05 Construction Technology and Design in Construction and Civil Engineering
Know the factors that influence the design process. Be able to communicate ideas between various members of the design and production teams. Know about construction methods. Be able to

translate construction details into written and graphical instructions.

B3C06 Building Technology in Construction

Understand common forms of low-rise construction currently used for domestic and commercial buildings. Understand foundation design and construction. Understand the techniques used in the construction of superstructures for low-rise domestic and commercial buildings. Understand the implications of issues and constraints on building construction.

B3C07 Project Management in Construction and the Built Environment

Know the roles and responsibilities of, and interaction between, the parties involved at each stage of a construction process. Understand the resources required to complete a construction project. Understand the functions of management in the production stage of a construction project. Be able to develop documentation for construction teams.

B3C10 Surveying in Construction and Civil Engineering

Be able to perform linear surveys to produce drawings. Be able to perform levelling surveys to produce drawings. Be able to measure angles and produce results from calculations. Be able to perform the setting out of small buildings.

B3C14 Structural Mechanics in Construction and Civil Engineering

Understand how structural elements behave under load. Be able to solve structural mechanics problems. Be able to design simple beams and columns. Be able to design mass retaining walls to withstand pressure from water and soils. Understand the use of computer software in structural analysis and design.

B3C15 Building Surveying in Construction

Know the role of the building surveyor and the route to professional status. Know the equipment, techniques and procedures involved in building surveys. Be able to carry out building surveys. Be able to produce survey reports and schedules of maintenance and repair.

B3C17 Building Regulations and Control in Construction

Understand the origins and purpose of building control. Know how to apply and enforce Building Regulations. Understand the procedures and documentation involved with Building Regulation approval. Be able to prepare a submission for Building Regulation approval.

B3C44 Conversion and Adaptation of Buildings

Understand the reasons for redefining the use of a building. Know the processes involved in the conversion and adaptation of buildings. Be able to evaluate conversion and adaptation of an existing building. Be able to design for the conversion and adaptation of an existing building.