

YEAR 10 Construction & The Built Environment

Rationale: the course allows learners to study construction and the built environment, giving them the opportunity to gain a broad knowledge and understanding of the industry.

Intent	Implementation	Impact
<p>This course allows learners to study construction and the built environment, giving them the opportunity to gain a broad knowledge and understanding of the industry.</p> <p>Learners will develop skills such as interpreting and analysing information, identifying the infrastructure required for safe and efficient work and in understanding how client needs can shape building design.</p> <p>The qualification is 120 GLH, which is the same size and level as a GCSE, Guided learning directly involve tutors and assessors in teaching, supervising, and invigilating learners, such as lessons, tutorials, online instruction and supervised study.</p> <p>It gives learners the opportunity to learn about one of the most important sectors of the UK economy.</p> <p>Learners will study three mandatory units, covering the fundamental knowledge, skills and understanding required construction technology and design:</p> <ul style="list-style-type: none"> ● Construction technology ● Construction and design ● Scientific and mathematical application for construction. <p>Learners will build on the knowledge gained in the mandatory units within their chosen option unit. This will provide you with an opportunity to develop a wider understanding and appreciation of a specific aspect of the construction industry, depending on their interests.</p> <p>The areas covered are:</p> <ul style="list-style-type: none"> ● exploring carpentry and joinery principles and techniques ● exploring brickwork 	<p><u>Subject Knowledge</u> All staff working within the construction department are fully qualified with site experience and close links within the industry, allowing staff to keep up to date with new developments, completing any training needed to support the understanding and delivery of any changes within the industry.</p> <p>[Component 2] Introduce learners to the tools, materials and personal protective equipment (PPE) used in industry. Delivery about the potential health and safety hazards in construction and what is safe working practice in the use of common tools and equipment. Learners will also develop the knowledge, skills and techniques to carry out basic practical tasks linked to option.</p> <p>[Component 3] Introduction to what the construction industry Undertakes in terms of the different types of buildings and structures it designs and builds. How client briefs can be developed by analysing the client's requirements for the building and considering the external constraints on development. You will also gain an understanding of the different types of construction activities.</p> <p><u>How will It be assessed?</u> Learners will carry out tasks/assignments throughout the course. These will be marked, and feedback given as to how they are getting on. The assessment for Component 1: Construction Technology, is a written test which is sent away to be marked. The assessment for Component 2 will be the completion of presentation of tools, equipment and materials needed to carry out a practical assessment; a completed risk assessment for the workshop The assessment for Component 3: Construction and Design, learners will be able to draw on the knowledge, skills and understanding developed in the qualification as a whole.</p>	<p>This qualification has a core of underpinning knowledge, skills and understanding, and a range of options to reflect the breadth of pathways in a sector.</p> <ul style="list-style-type: none"> ● gain a broad understanding and knowledge of a vocational sector ● investigate areas of specific interest ● develop essential skills and attributes prized by employers, further education colleges and higher education institutions. ● provides opportunities for learners to progress to either academic or more specialised vocational pathways. ● give learners opportunities to link education and the world of work in engaging, relevant and practical ways ● enable learners to enhance their English and mathematical competence in relevant, applied scenarios ● support learners' development of transferable interpersonal skills, including working with others, problem solving, independent study and personal, learning and thinking skills ● give learners a route through education that has clear progression pathways to further study or an Apprenticeship. <p><u>Developing employability skills</u> The vast majority of employers require learners to have certain technical skills, knowledge and understanding to work in a particular sector, but they are also looking for employability skills to ensure that employees are effective in the workplace. Throughout the BTEC Level 1/Level 2 First Award in Construction and the Built Environment, learners will develop a range of employability skills, engage and carry out work-related activities. This allows learners that are employment ready to train and develop a deeper understanding through the means of an apprenticeship.</p> <p><u>Apprenticeships</u> This allowing learners to apply for apprenticeships within bricklaying, building, carpentry and joinery to gain a qualification recognised within the industry.</p> <p><u>Sixth form or college</u> Learners will develop a range of practical skills and underpinning knowledge to progress onto a CSKILLS qualification in bench joinery or trowel occupations. The CSKILLS qualifications are recognised qualification within the construction industry, registered with the construction institute training board (CITB) and are the first steps to gain employment into a lifelong carrier with the opportunities to progress.</p>

Autumn Term 1	Spring Term 3	Summer Term 5
<p>[Component 2] Introduce learners to the tools, materials and personal protective equipment (PPE) used in industry. Delivery about the potential health and safety hazards in construction and what is safe working practice in the use of common tools and equipment.</p> <p>Learners will also develop the knowledge, skills and techniques to carry out basic practical tasks linked to option. Practical tasks will be linked to basics, setting up work area, preparing of materials and carrying out basic measuring.</p>	<p>Learners will be introduced to Component 3 assignments. The Importance & Scale of Work in the Construction Industry. Learners will build on prior knowledge from term three; developing independent learning skills where they will research up to local and national projects, explaining the activities undertaken in these projects and how they contribute to the society locally and nationally. Learners will aim to write the content for a booklet or website covering all level one and two criteria. The assignment will be internally assessed and IV'ed with BTEC sampling sent on request. Learners will continue developing trowel/tool skills, carrying out basic models/tasks meeting a specification and aiming to meet +/- 10mm tolerance.</p>	<p>Learners will develop drawing skills, looking at floor plans and elevations to produce initial sketches for a concept idea meeting the equipment's delivered in Spring Term 2 including the application of maths, that meet the requirements of a client brief.</p> <p>Learners will continue developing trowel/tool skills, carrying out basic models/tasks meeting a specification and meet +/- 10mm tolerance.</p>
Autumn Term 2	Spring Term 4	Summer Term 6
<p>Learner will be introduced to the practical unit within their chosen option and produce a presentation to present to the class, explaining the selection and use of appropriate tools, materials and equipment to carry out a practical task. They will show an understanding and be able to explain the safe use and storage of tools, materials and equipment justifying their reasons. Learners will carry out a risk assessment to go with their practical assessment model at level 1. Learners will also develop the knowledge, skills and techniques to carry out more intermediate practical tasks linked to option. Learners will complete the theory at level 2 and complete a practical tasks. The assignment will be internally assessed and IV'ed with BTEC sampling sent on request.</p>	<p>Learners will be shown how to identify a client's needs for a given project scenario, and identify constraints on a design. Learners will then go onto analyse needs and constraints, considering resources, planning and timescales to develop a client brief for a given project scenario that prioritises the design requirements. This linking to learning aim B at level one and two.</p> <p>Learners will continue developing trowel/tool skills, carrying out basic models/tasks meeting a specification and aiming to meet +/- 10mm tolerance.</p>	<p>Learners will be introduced to learning aim A: Understand the structural performance required for low-rise construction. This is in preparation for the external exam set for term three of year 11. They will identify the requirements for elements of a building, the characteristics, properties, location, features and applications, and the interaction of different elements making up the sub-structure and superstructure. Elements covered in this section will allow learners to identify and gain underpinning knowledge of ● strength ● stability ● fire resistance ● thermal insulation ● sound insulation ● weather resistance ● sustainability.</p> <p>Learners will be introduced to learning aim B: Explore how sub-structures are constructed. Identifying preconstruction work activities that have to be completed before work can begin on site, understand why they are carried out, what has to be provided on a site, and how it is accomplished. Be able to identify Sub-structure groundworks, how sub-structures are constructed safely. Show an understanding of what is used, why it is used (including potential hazards), where it is used and how it is achieved.</p>