



CBE - LEVEL 2 / 3

LEVEL 2

YEAR 10		
HT1	HT2	HT3
<p>Unit 1: Construction Technology – this unit covers the different forms of construction that can be used for low-rise offices, retail units and homes. Learners will develop an understanding of the structural performance required for low-rise construction and explore how substructures and superstructures are constructed. This unit will be externally assessed by performing an exam paper. Unit 1 interlinks with all other units performed and forms a base for a wider set of knowledge and skills that will have an element of retrieval activities set until the end of year 11. Typically working through Activity sheets that are set in class and online as backup. This unit is concluded by external assessment.</p>		
HT4	HT5	HT6
<p>Unit 3: Construction and Design – in this unit learners will develop a broad understanding of the construction industry, the sort of projects it undertakes, and the contribution it makes to wider society. Learners will also look at how client needs can shape the design of a building and develop their own design ideas to a given brief. Typically creating floor plans and exterior views of designed ideas with annotations. This unit is concluded by internal assessment.</p>		

YEAR 11		
HT1 + 2	HT3+4	HT5+6
<p>Unit 3: Construction and Design as above. This unit is concluded by internal assessment.</p>	<p>Unit 2: Scientific and Mathematical Applications for Construction: In this unit learners will apply scientific and mathematical knowledge, understanding and skills to practical construction contexts. Learners will develop an understanding of the scientific principles affecting the performance of construction materials and develop skills to perform mathematical calculations in construction contexts. This unit is concluded by internal assessment.</p>	<p>Unit 10: Electrical Operations: In this unit the learner will explore and learn about the fundamentals of constructing and operating electrical circuits using specialised equipment in a workshop setting. The learners work is delivered in two parts – one in developing a presentation that is followed by constructing an electrical rig under supervised conditions. This unit is concluded by internal assessment.</p>



**CBE - LEVEL 2 / 3
LEVEL 3**

YEAR 12	
HT1 -3	HT4 - HT6
<p>Unit 1 - Construction Principles</p> <p>A) Construction materials The use of materials in construction, including their manufacture, the properties of materials linked to their use, the degradation of materials, the effects of temperature change on materials and the behaviour of materials under different loading conditions.</p> <p>B) Solving practical construction problems Application of mathematical and statistical methods and techniques used in practical construction contexts</p> <p>C) Human comfort The impact of heat, light and sound on human comfort in the built environment.</p> <p>This unit is externally assessed - exam based.</p>	<p>Unit 2 - Construction Design</p> <p>A) Stages and tasks involved in the design process The application of Stages 1–4 of the Royal Institute of British Architects (RIBA) Plan of Work 2013 to the tasks associated with the design of low- and medium-rise domestic, commercial and industrial buildings.</p> <p>B Project information and building design production Information used in the production of building designs.</p> <p>C Construction methods and techniques Construction methods and techniques used in the design and construction of low- and medium-rise domestic, commercial and industrial buildings.</p> <p>This unit is externally assessed - synoptic assignment based</p>



CBE - LEVEL 2 / 3

YEAR 13	
HT1 -3	HT4 - HT6
<p>Unit 5 - Health and Safety In Construction</p> <p>A Understand how health and safety legislation is applied to construction operations Presentations, explanatory leaflets or a formal report that references case studies, showing the impact of how legislation and regulations uphold and improve health and safety on construction sites. Reference to statistics could provide justification of legislation and regulation effectiveness.</p> <p>B Carry out the development of a safe system of work for construction operations A safety survey with completed documentation, including the production of a risk assessment and method statement.</p> <p>C Understand the need for the review of safety systems for construction operations. A report evaluating how safe systems can be improved following the reporting of accidents, utilising review procedures.</p> <p>This unit is internally assessed - assignment based.</p>	<p>Unit 4 - Construction Technology</p> <p>A Understand common forms of low-rise construction Evaluation of the effectiveness of different structural forms for use with a given a low-rise buildings project scenario.</p> <p>B+C Examine foundation and superstructure design and construction Evaluation of the construction of new low-rise buildings.</p> <p>D) Examine external works associated with construction projects Analysing the design and construction of external works for new construction projects, including the incorporation of a sustainable urban drainage system.</p> <p>This unit is internally assessed - assignment based.</p>