UNIVERSITY OF LINCOLN
ACADEMY TRUST

YEAR 10

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.
- *Construction technology*
- *Construction and design*
- *Scientific and mathematical application for construction.*

Option:
- *exploring carpentry and joinery principles and techniques*
- *exploring brickwork*

The assessment for Component 3: Construction and Design, learners will be able to draw on the knowledge, skills and understanding developed to design a building scenario outlined by the awarding body

AUT 1	AUT 2	SPR 1	SPR 2	SUM 1	SUM 2
Learning outcomes: A Be able to understand hazards and risk for safe production of a practical construction outcome B Be able to produce a practical construction outcome. [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 be introduced to 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. .	Learning outcomes A Understand the needs of a client and the constraints on design when designing a low-rise building B Be able to graphically communicate the design of a low-rise building. [Component 3] Learners will be introduced to understanding the client's needs for the building's use, Learners will be introduced to other influences and constraints on design. 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.	Learning outcomes A Understand the needs of a client and the constraints on design when designing a low-rise building B Be able to graphically communicate the design of a low-rise building. [Component 3] 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 & will develop drawing skills, looking at floor plans and elevations to produce initial sketches for a concept idea [Component 3] Learners will complete the assignment with floor plans and elevations to produce initial sketches for a concept idea meeting the assignment scenario.	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. 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.	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. Learners will continue developing trowel/tool skills, carrying out basic models/tasks meeting a specification and meet +/- 10mm tolerance.	Learners will be introduced to learning aim C: Explore how superstructures are constructed. Learners will cover Superstructures – walls, floors and roof all primary elements of a build, and understand what is used, where it is used, why it is used and how it is achieved. Learners will then revisit learning aim A: Understand the structural performance required for low-rise construction covered in term five of year 10. Learners will develop a deeper understanding of the underpinning knowledge for ● strength ● stability ● fire resistance ● thermal insulation ● sound insulation ● weather resistance ● sustainability. Learners will continue developing trowel/tool skills, carrying out basic models/tasks meeting a specification and meet +/- 10mm tolerance.

YEAR 11 *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.* *● Construction technology* *● Construction and design* *● Scientific and mathematical application for construction.* *Option:* *● exploring carpentry and joinery principles and techniques* *● exploring brickwork* *The assessment for Component 1: Construction Technology, is a written exam which is sent away to be marked.* *The assessment for Component 2 will be an assessment on tools, equipment and materials needed to carry out a practical task set by the awarding body; a completed risk assessment for the workshop.*	Learners will then revisit learning aim A: Understand the structural performance required for low-rise construction covered in spring term two of year 10. Learners will develop a deeper understanding of the underpinning knowledge for ● strength ● stability ● fire resistance ● thermal insulation ● sound insulation ● weather resistance ● sustainability. Learners will continue developing trowel/tool skills, carrying out basic models/tasks meeting a specification and meet +/- 10mm tolerance.	Learners will take part in mock exams and practice papers in preparation to the written exam to be taken in term three of year 11. Learners will complete practical assessments [Component 2] and any resubmissions of work relevant to dates in accordance to the BTEC assessment plan and BTEC report form standardisation verification process.	Learners will revisit learning aim B: Explore how sub-structures are constructed covered in summer term one of year 10. This allows learners to develop a deeper understanding of 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. Learners will be able to apply this knowledge to help explain answers and justify the use linked to construction context. During this time learners will practice constructing answers to given exam style scenarios	Learners will revisit to learning aim C: Explore how superstructures are constructed. Covered in summer term two of year 10. This allows Learners to develop a deeper understanding of Superstructures – walls, floors and roof all primary elements of a build, and understand what is used, where it is used, why it is used and how it is achieved. During this time learners will practice constructing answers to given exam style scenarios	Learners will sit their exam for unit one Construction Technology at the start of term three, where this will be externally marked.	Learners will finalise any paperwork to ensure its all signed and dated in accordance to BTEC assessment plan. Learners will sign any documentation required by BTEC in regards to verification process and attend any additional intervention linked to the course prior to study leave/ intervention and attend exams in accordance to GCSE timetables.