

Year 11 BTEC Construction Curriculum End Points and Key Vocabulary

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Units of Work	Component 3 Prep for Live PSA: Client Needs, Site Constraints, Research & Floor Plan Design (Carpentry Focus)	Component 3 Concept Sketching & Live PSA Task Preparation (Carpentry Focus)	Component 2 Live Assessment Completion & Component 1: Superstructures - Walls (Carpentry Focus)	Component 1: Superstructures - Floors & Roofs Construction and Detailing (Carpentry Focus)	Component 1: Types of Work in the Construction Industry & Transportation Systems (Carpentry & Built Environment)	Component 1 External Exam Preparation, Revision & Final Assessment Readiness
Ethos Links	<p>Sustainability: Investigating ecological impact, material efficiency, and sustainable timber building design.</p> <p>STEM: Analysing primary/secondary data, spatial area planning, and floor plan scaling.</p> <p>Milton Keynes: Researching local low-rise timber residential context needs and community planning requirements.</p>	<p>Sustainability: Integrating sustainable features and timber cladding options into concept designs.</p> <p>STEM: Dimensioning rooms, calculating floor areas, and applying drawing scales.</p> <p>Milton Keynes: Evaluating local street scene constraints and architectural styles for timber construction.</p>	<p>Sustainability: Thermal performance of timber frame walls and minimising heat loss.</p> <p>STEM: Calculating U-values, structural load paths, and thermal resistance.</p> <p>Milton Keynes: Examining regional building regulations and timber frame wall construction details.</p>	<p>Sustainability: Sustainable timber joists, eco-joists, and efficient roof timber harvesting.</p> <p>STEM: Calculating timber spans, joist spacings, and roof pitches.</p> <p>Milton Keynes: Analysing local pitched and flat roof architectural details across Milton Keynes.</p>	<p>Sustainability: Sustainable civil engineering, renewable energy structures, and environmental flood defences.</p> <p>STEM: Analysing civil infrastructure systems, structural engineering scales, and load distributions.</p> <p>Milton Keynes: Reviewing commercial, residential, and educational construction projects across Milton Keynes.</p>	<p>Sustainability: Holistic review of sustainable timber construction, lifecycle analysis, and environmental protection.</p> <p>STEM: Comprehensive synthesis of scientific, mathematical, and technical construction principles.</p> <p>Milton Keynes: Final exam readiness and preparation for Pearson external assessments.</p>
Learning End Points	By the end of this unit students will know and understand: • Component 3	By the end of this unit students will know and understand: • Advanced sketching techniques: floor plans	By the end of this unit students will know and understand: • Component 2 Live PSA assessment execution	By the end of this unit students will know and understand: • Floor types (solid, timber, engineered timber, eco-	By the end of this unit students will know and understand: • Types of work undertaken in the	By the end of this unit students will know and understand: • Comprehensive

	<p>client requirements, building uses (residential, commercial, retail), and spatial accommodation for timber structures.</p> <ul style="list-style-type: none"> • Research methodologies: collecting images of timber building types, windows, doors, and signage. • Floor plan creation and spatial orientation relative to local site plots. 	<p>to approximate scale, two-point perspective, and isometric projection.</p> <ul style="list-style-type: none"> • Line thickness and weight techniques to enhance 3D architectural sketches. • Annotating key design features, room names, circulation flow, and timber construction forms. 	<p>and task writing.</p> <ul style="list-style-type: none"> • Superstructure walls: functions (resist heat transfer, reduce sound transmission, transfer loads) and timber frame construction. • Wall features, openings, lintels, sills, jambs, DPCs, cavity trays, and timber cladding finishes. 	<p>joists) and flooring components (supporting joists, wall support, skirtings).</p> <ul style="list-style-type: none"> • Roof construction types (flat, mono pitch, double pitch, gable end, hipped end). • Roof components and timber frameworks (wall plates, trussed rafters, traditional cut rafters, purlins, ceiling joists, binders, fascia, soffit boards). 	<p>construction industry: residential, commercial, industrial, educational, healthcare, and civil engineering.</p> <ul style="list-style-type: none"> • Transportation systems (railways, tramways, roads, cycle paths) and flood defences (coastal, tidal, river defences). • Repair, maintenance, refurbishment, and facilities management. 	<p>review of all Component 1 and Component 3 theory: timber structures, sub-structures, walls, floors, roofs, and industry sectors.</p> <ul style="list-style-type: none"> • Exam command words (describe, explain, discuss, evaluate) and effective structured response techniques. • Terminal exam requirements and time management strategies.
	<p>By the end of this unit students will develop their ability to:</p> <ul style="list-style-type: none"> • Analyse client needs and produce a detailed client profile for a low-rise timber construction project. • Conduct visual research on timber building construction features and external aesthetics. • Draw initial floor plans using floor plan creator tools and scale measurements against site plots. 	<p>By the end of this unit students will develop their ability to:</p> <ul style="list-style-type: none"> • Plan and dimension building layouts against site plot constraints. • Produce clear, annotated 2D floor plans and 3D perspective sketches of timber buildings. • Apply varying line thicknesses and professional architectural annotation conventions. 	<p>By the end of this unit students will develop their ability to:</p> <ul style="list-style-type: none"> • Complete live assessment tasks (Task 1 risk assessment writing and architectural sketching) under supervised conditions. • Explain and detail timber frame wall construction, insulation placement, and vapour barriers. • Sketch, detail, and annotate wall openings, cavity closures, and timber exterior finishes. 	<p>By the end of this unit students will develop their ability to:</p> <ul style="list-style-type: none"> • Compare timber floor and roof construction methods and materials. • Sketch, detail, and annotate traditional cut rafter roofs and trussed rafter roof components. • Recall and apply technical construction knowledge of floors and roofs for exam preparation. 	<p>By the end of this unit students will develop their ability to:</p> <ul style="list-style-type: none"> • Categorise construction projects and identify specific examples across different industry sectors. • Explain how transportation systems and flood protection structures function within the built environment. • Revisit and reinforce core technical principles across all Component 1 topics. 	<p>By the end of this unit students will develop their ability to:</p> <ul style="list-style-type: none"> • Answer past paper exam questions accurately using precise technical carpentry and construction terminology. • Structure multi-mark responses and extended discussions following Pearson command word definitions. • Complete final revision tasks and enter external exams with full confidence.
Key Vocabulary	Client brief, Client profile, Accommodation, Floor plan, Site plot,	Two-point perspective, Isometric projection, Line thickness, Annotation, Circulation	Timber frame, Cavity tray, Lintel, Sill, Jamb, Vapour barrier, Breather membrane, U-value,	Eco-joist, Engineered timber, Trussed rafter, Cut rafter, Purlin, Wall plate, Ridgeboard, Fascia, Soffit,	Civil engineering, Residential construction, Commercial	Command word, Describe, Explain, Discuss, Evaluate, Terminal

	Spatial orientation, Aesthetics, Timber structure, Research, Case study.	flow, Dimensioning, Scale drawing, Concept sketch, Street scene, Aesthetics.	Thermal resistance, Wall opening, Cladding.	Flat roof, Pitched roof, Joist.	construction, Industrial construction, Flood defence, Transportation system, Refurbishment, Facilities management, Infrastructure.	assessment, Technical terminology, Revision, Examination, Synthesis.
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