High Tunstall College of Science Curriculum Intent

Unit 1: Construction Technology

BTEC Construction & The Built Environment

Leaning Aim C— Explore how superstructure are constructed

	Design & Technology	Progress		
Topic	**Key ideas** (With regards to Superstructures)	R	A	G
Iterative design process	Walls: Function; Detailing; Materials; and Types of Finishes			
	Walls: Openings; Components, detailing and functions of openings;			
	Floors: Functions and detailing			
	Floors: Materials; Types of Finishes; and Components of a floor			
	Roofs: Functions and detailing			
	Roofs: Materials; Types of Finishes; and Components of a floor			

Lesson	Learning Focus	Assessment	Key Words
1	Introduction to Unit 1: Learning Aim C. Understand how walls are detailed; functions of a wall; the materials used to create a wall; and types of finishes	Live marking/Formal examination	*Wall-ties spacing, Internal partitions, shelter, security, render, blockwork, pointing*
2	Understand functions of wall openings; the different components of a wall opening; and detailing around openings	Live marking/Formal examination	*Ventilation, Aesthetics, Lintel, Sill, Window, Door, Threshold, Cavity tray, Cavity closer, Weepholes, Damp Proof Course (DPC)*
3	Wall sketching: Cavity masonry; Timber frame; Insulated panels (SIPs)	Live marking/Formal examination	*Wall, Cavity, Masonry, Timber, Frame, Insulated Panels (SIPs)*
4	Understand how floors are detailed; functions of a floor; and the materials used to create a floor	Live marking/Formal examination	*Area, Volume, Perimeter, Distance, Level Surface, Stress-graded, Joists, Beam and block, Eco-joists, Precast concrete plank*
5	Understand types of floor finishes and the different components of a floor	Live marking/Formal examination	*Screed, Chipboard, Tongue-and-groove, Skirting*
6	Floors sketching: Solid; Timber; Engineered timber; Suspended	Live marking/Formal examination	*Floor, Solid, Timber, Engineered, Suspended*
7	Understand how roofs are detailed; functions of a roof; and the materials used to create a roof	Live marking/Formal examination	*Discharging, Waterproof, Structure, Recreational, Trussed rafters, Purlins, Breather membrane, Tile & Bitumen felt, Tile battens*
8	Understand types of roof finishes and the different components of a roof	Live marking/Formal examination	*Downpipes, Rafters, Jack rafters, Cripple jack rafters, Wall plates, Roof Trusses, Binders, Fascia, Eaves, Valley, Soffit, Gable, Hip, Dormer*
9	Roofs sketching: Flat; Lean-to; Pitched	Live marking/Formal examination	*Roof, Flat, Lean-to, Pitched*
10	Formative assessment (Using past examination questions covering Unit1:Learning Aim C)	Live marking/Formative Assessment & Deep Marking grid/Formal examination	*Formal, Examination, Objectives*
Assessment task (Formal Examination)	Formal Examination: • 65 Marks • 1 hour and 15 minutes • Objectives: Multiple choice, short answers, extended writing questions and sketching techniques • First attempt in January; second attempt in May • Highest mark is allocated as Unit 1 grade (L1P/L2P/L2M/L2D)		