Construction Big Ideas	Y10	Y11
Research and Evaluate Construction Technology Component 1	Develop knowledge and understanding of processes, terminology and technology used in construction	Understanding Structural Loads buildings must be able to resist. - Self-weight, Imposed, Dynamic, Snow, Wind.
	Demonstrate knowledge and understanding of the work of the construction indusrty.	Sustainable construction - Know the purpose of sustainable construction. Know ways in which sustainable construction is achieved.
	Performance requiremnts for low rise construction Strength. Stability. Fire resistance. Thermal resistence. Sound reduction and absorption. Weather resistance.	Structural forms Understand ways structural forms in low-rise construction are used and their features. Sub-structures - Identify desk-based preconstruction work.
	Understand the ways strength and stability in buldings are achieved by : testing materials, grading hardcore, slump testing, compressive testing, stress grading, mortar testing, compliance with building regulations.	Sub-structure groundworks Hazards and risks associated with groundworks.
	Explore how superstructures are constructed Superstructures - Walls, Floors, Roofs	Explore how superstructures are constructed Superstructures - Walls, Floors, Roofs
	Understand the work of the construction indusrty The type of work undertaken in the construction industry. The construction indusrty and the built environment.	Understand the work of the construction indusrty The type of work undertaken in the construction industry. The construction indusrty and the built environment.
Make Construction in Practice Component 2 Pearson Set Assignment	Introduction to hand tools, equipment and machinery. Develop skills to safely produce a quality practical joinery outcome.	
	Understand hazards and risks associated with the production of a practical construction outcome.	
	Develop a Risk Assessment identifying risks and hazards associated with construction practical tasks.	
	Understand the processes used in the development of a practical outcome - Measuring, marking and setting out.	
	Reading and Interpretation of construction drawings	
	Understand the uses of different tools and materials used in the indusrty to construct a practical outcome.	
	Produce a practical construction outcome. Develop knowledge and understading of different methods and use the vocationally correct techniques for accuracy and construction used in the construction of the pracitcal outcome.	
	Work accurately to tolerances +/- 3/4 mm Length, Height, Depth, Square, Joint gap	
Design Construction and Design Component 3 Pearson Set Assignment	Understanding of clients' needs, develop skills in producing Design Briefs and Sketches that consider construction constraints.	Understanding of clients' needs, develop skills in producing Design Briefs and Sketches that consider construction constraints.
	Understand the needs of a client and the constraints on design when designing low rise buildings. Clients needs: Building Use, Accommodation, Style and Aesthetics, Sustainabilty. Constraints on design: Resources, Budget, Site, Building, Environmental, Planning and buidling control requirements	Understand the needs of a client and the constraints on design when designing low rise buildings. Clients needs: Building Use, Accommodation, Style and Aesthetics, Sustainabilty. Constraints on design: Resources, Budget, Site, Building, Environmental, Planning and buidling control requirements
	Client Brief for a design of a low rise building. Analyse the clients needs and constraints on design to create appropriate design solutions.	Client Brief for a design of a low rise building. Analyse the clients needs and constraints on design to create appropriate design solutions.
	Graphical communication techniques. Understand and know how to use graphical communication techniques such as 2 Point perspective and Isometric Drawing techniques to communicate design ideas. Use plan views to communicate design ideas.	Graphical communication techniques. Understand and know how to use graphical communication techniques such as 2 Point perspective and Isometric Drawing techniques to communicate design ideas. Use plan views to communicate design ideas.
	Appropriate use of annotations to communicate design ideas - Room names, floor area, circulation an flow, features.	Appropriate use of annotations to communicate design ideas - Room names, floor area, circulation an flow, features.