Module Synopses

MC1 - Certificate in Building Technology

BE0601 Structure & Fabric 1

Gives students an understanding of the construction of simple buildings. It includes an introduction to the construction industry, architecture and structural elements, and their functions. It covers foundations, walls, partitions, floors, roof with coverings, wall, floor & ceiling finishes, windows, doors, stairs and suspended ceilings. Students will learn different forms of construction and apply this understanding to new work, renovation and refurbishment work to buildings.

BE0602 Material Technology

Provides students with an understanding of the properties of common building materials and their uses in construction. Emphasis is placed on characteristic of material, their selection, use and application in appropriate situations.

BE0603 Drawing & Visualisation

Gives students the ability to interpret and comprehend architectural, structural drawings and details, to draft by manual means to produce scale drawings and sketches of simple constructional details. An appreciation is also given, of design & its importance to the design process as applied to building design and detailing of components.

MC2 - Certificate In Elementary Measurement

BE0604 Measurement

Gives students an understanding of, and the ability to measure, in accordance with standard rules set out in CP 97, simple structural and architectural works, including concrete foundations, super-structure frame, brickwork, floor, wall and ceiling finishes, doors & windows and roof construction & coverings.

BE0605 Structure & Fabric 2

Gives students an understanding of the construction of more complex building structures. It covers superstructure components such as steel frames, steel roofs and girders, precast and prefabricated work, special doors and windows, curtain walling, piling, basement construction.

BE0606 Building Services 1

Equips students with the knowledge of mechanical and electrical engineering systems in small residential buildings, including water supply, sanitary plumbing and drainage, gas installation, refuse disposal, electrical distribution and lightning protection.

MC3 - Certificate in Contracts Administration

BE0607 Contract Procurement & Documentation

Gives students an understanding of the preparation of tender documents and the ability to write simple specifications for building work. It also covers the different procurement methods including traditional lump sum, re-measurement, cost reimbursement and term contracts, the design & Build system, management contracting & the associated tendering procedures.

BE0608 Contract Administration

Gives students an understanding of the standard forms of building contracts (SIA & PSSCOC) and subcontracts, and the roles and relationship of the contracting parties. Provides a simple understanding of contract administration procedures including procedures for payment, security of payment, communications, quality control, variations, extension of time, liquidated damages, final accounts, subcontracting and insurance.

BE0609 Accounts & Finance

Gives students an understanding of the basic concepts and principles of accounting. Types of business organisations, preparation and interpretation of balance sheet and profit & loss statement, basic financial ratio analysis, sources of finance, mathematics of finance, cash flow analysis and budget & variance will also be taught.

MC4 - Certificate in Advanced Measurement

BE0610 Environmental Sustainability Management

Introduces issues related to the environment including global warming concerns such as pollution, waste management, recycling efforts, etc. Describe sustainability and its role in the overall business strategy of an organisation. This module covers utilities management, energy savings initiatives and techniques, building automation, developing sustainable buildings, green building technologies, waste control and reduction.

BE0611 Building Services 2

Equips students with the understanding of mechanical & electrical engineering systems in larger buildings including lighting, ventilation, air conditioning, fire fighting, lifts and escalators. An understanding of energy conservation in buildings will also be covered.

BE0612 Advanced Measurement

Gives students an understanding of, and the ability to measure, in accordance with standard rules set out in CP 97, advanced construction works including earthworks, structural steel

frames, metalwork, external works, plumbing & drainage. An appreciation of measurement of M & E systems will also be covered.

MC5 - Certificate in Building Economics & IT

BE0613 Estimating & Costing

Gives students an understanding of estimating and the ability to work as an estimator. It covers the procedures involved in estimating, analyzing and building up of rates for different items of work in the traditional building trades. It also gives an understanding of preliminary costing and approximate estimating.

BE0614 Building Economics

Using the knowledge developed in the measurement and pricing subjects, introduces students to concepts of cost planning from project inception to end of contract. This subject will cover various types of conceptual estimating, including elemental costing and analysis, feasible studies and other economic analyses such as yield analysis and life cycle costing.

BE0615 IT Applications & BIM for Quantity Surveying

Gives students the ability to draft and present drawings using proprietary application software, to interpret and comprehend construction drawings and details. Students are introduced to Computer Aided Design (CAD) standards and drafting. Provides students an understanding of Building Information Modelling (BIM) and how BIM can be integrated with Cost Management Systems to optimize on construction drawings and information input by Architects, Structural Engineers and Mechanical & Electrical Engineers. Gives students the ability to utilise the tools available for integrating both logical and graphical BIM data and to realise the potential of BIM to support cost management.