

# FMT201 Building Technology

**Level:** 2

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JULY

## Synopsis:

FMT201 Building Technology provides an overview to building components, construction methods and construction material properties for the training and preparation of facilities management professionals. Topics include structural systems, architectural components and finishes, construction sequence and building erection. Students will also be exposed to evaluating each material that may make up a component, and sub-systems that may make up a system to serve a function within a building. Students will learn to appreciate how a building is put together or erected, and how material selection and installation are considered and their impacts to future maintenance and operations.

## Topics:

- Function, Performance and Environmental Impact of Buildings
- Structural Systems (Substructure and Superstructure)
- Site Analysis and Set-up
- Groundwork and Foundations
- Construction Methods
- Buildings Components and Technologies
- Properties of Major Classes of Materials and Performance of Materials
- Classifications of Building Materials
- Main Considerations in Material Selection
- Understanding Building Failures
- Material Selection in a Tender Process
- Handing Over Protocol

## Learning Outcome:

- At the end of the course, students should be able to:
  - A. Knowledge and Understanding (Theory Component)
    - 1. State the purpose, function and performance expected of buildings
    - 2. Describe the structural behaviours of different structural elements and components of buildings
    - 3. Explain the major classes of materials for structural and architectural materials
  - B. Key Skills (Practical Component)
    - 1. List the different criteria in the procurement and selection of materials in a project
    - 2. Demonstrate an ability to recommend construction methods and materials selection for a built environment project
    - 3. Discuss how the material selection and construction of different building elements influence the maintenance and operations of the buildings

## Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
------------	-------------	--------------------------

Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-CLASS QUIZ 3	2
	TUTOR-MARKED ASSIGNMENT 1	10
	TUTOR-MARKED ASSIGNMENT 2	14
Overall Examinable Components	Written Exam	70
<b>Total</b>		<b>100</b>