

FMT101 Building Services

Level: 1

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY SEMESTER

Synopsis:

FMT101 Building Services provides students an insight into the principles and design of mechanical and electrical building services systems. Building services include air-conditioning and mechanical ventilation system, high and low tension system, standby system, plumbing (hot and cold water supply), sanitary and gas system, fire protection system, lifts and escalators. Relevant local standards and regulations will also be covered in this module.

Topics:

- Cold Water Supply
- Sanitary Drainage System
- Gas System
- Fire Hydrant, Riser and Hose Reel Systems
- Electrical Fire Alarm System and Automatic Fire Sprinkler System
- Basic Refrigeration Cycle
- Air-Conditioning Systems
- Fans and Measuring Instruments
- Lifts and Escalators
- Electrical Distribution and Electrical Power System – Standby Power System
- Security Systems
- Green and Energy Efficient Building Systems and Services

Learning Outcome:

- Name the design principles of the various M&E systems
- Describe the functions and components in the systems
- Demonstrate understanding of installation, testing and commissioning of the systems
- Identify the problem when there is a building services break down
- Review building services if they adhere to the relevant standards, regulations and safety requirements
- Determine action to take when there are faults or break downs

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

Overall Continuous Assessment	TUTOR-MARKED ASSIGNMENT 1	14
	GROUP BASED ASSIGNMENT 1	10
Overall Examinable Components	Written Exam	70
Total		100