

# FMT317 SMART and Emerging Technologies for Facilities Management

**Level:** 3

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JULY

## Synopsis:

Smart FM refers to the integration of systems, processes, technologies and personnel to enhance facilities management. FMT317 SMART and Emerging Technologies for FM will provide students with the concepts on advanced and integrated technologies used in buildings, as well as an overview on different SMART systems that are incorporated in the building automation systems, user systems and facilities management systems.

## Topics:

- What is a SMART Building?
- Benefits of SMART Buildings
- Adoption of Sensors in SMART Buildings
- Heating, Ventilating, and Air Conditioning Systems
- Lighting Control Systems
- Electric Power Management Systems
- Access Control Systems
- Surveillance Systems
- Data Networks, Voice Network and Distributed Antenna Systems
- Facilities Management Systems
- Network Integration for SMART Technologies
- Energy and Sustainability

## Learning Outcome:

- At the end of the course, students should be able to:
  - A. Knowledge and Understanding (Theory Component)
    - 1. Discuss the concepts of a SMART Building
    - 2. Evaluate the costs and benefits of SMART Buildings
    - 3. Describe the technological systems that form the foundation of a SMART Building
  - B. Key Skills (Practical Component)
    - 1. Appraise the different systems within the building that are able to adopt SMART Technologies
    - 2. Analyze the different software modules that can be integrated with the FM system
    - 3. Demonstrate understanding of the approaches and value propositions for SMART network integration

## Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
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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	ECA	70
<b>Total</b>		<b>100</b>