FMT506 Managing SMART and Autonomous Buildings

Level: 5

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JULY

Synopsis:

In Smart FM, we integrate the systems, processes, technologies and personnel to enhance the management of a building's facilities. The course aims to equip learners with an overview of the Smart FM infrastructure, deployment of the IoT, procurement of the Smart FM systems and also the integration of the Smart FM system as part of the digital delivery in the facilities management of the building. Sensors, meters, and various devices are networked in the building to form an intelligent Smart FM and Energy Management System. The learners will also be introduced to the key modules in CMMS and the usage of IT in predictive maintenance of the building systems.

Topics:

- Smart FM Framework and Infrastructure
- IoT System Architecture
- IoT usage in a building
- Integration and central interfacing of IoT sensors
- Procurement contract in Smart FM system
- Smart FM System in a building
- The 5 step SMART process
- Using IT in predictive maintenance
- Building Management System
- Programming & coding in Facilities Management
- Computerised Maintenance and Management System
- Case Studies

Learning Outcome:

- Discuss the concept of smart FM framework
- Distinguish the smart FM systems
- Discuss the usage of IoT in Facilities Management
- Examine the procurement process of the smart FM systems
- Setup the smart FM system in the building
- Appraise the understanding of using IT in Predictive Facilities Management.
- Propose programming and coding in facilities management
- Recommend the usage of Computerised Maintenance Management System (CMMS)

Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	QUIZ 1	10

Overall Continuous Assessment	TUTOR-MARKED ASSIGNMENT 1	20
	GROUP BASED ASSIGNMENT 1	20
Overall Examinable Components	Written Exam	50
Total		**100**