

Liverpool John Moores University

Title: SMART FACILITIES MANAGEMENT
Status: Definitive
Code: **7418BEPGDL** (123522)
Version Start Date: 01-08-2020

Owning School/Faculty: Civil Engineering and Built Environment
Teaching School/Faculty: Civil Engineering and Built Environment

Team	Leader
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Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 22
Total Learning Hours: 200 **Private Study:** 178

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Online	22

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Critical 2,500 word essay on theoretical concepts of intelligent buildings	50	
Report	AS2	Report of approx. 3,000 words on real world scenario	50	

Aims

This module aims to enable students to understand the role and utilisation of the physical asset within facilities management and the changing nature of smart building functionality and sophistication.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically appraise the key components of smart buildings and have an appreciation of the potential for technological efficiencies in facilities management.
- 2 Critically appraise the change management implications of moves towards more smart buildings on the role and utilisation of facilities managers
- 3 Carry out critical appraisals of smart building functionality that optimise the role and utilisation of facilities managers
- 4 Critically evaluate the technological and functional issues associated with managing and operating smart buildings.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Essay	1	2
Report	3	4

Outline Syllabus

Context of smart cities in relation to facilities management

Appreciation of building life cycles and the role of facilities management

The use of Building information systems and computer aided facilities management

The use and effectiveness of Building information modelling and its application to facilities management

Application of smart technologies to facilities management such as Radio frequency identification (RFID) and remote sensors

Energy management and efficiency and the utilisation of information technology

Healthy and productive buildings – e.g. privacy, space, personalisation, interior planting

Smart buildings as workplaces – e.g. workplace management, space utilisation, work trends and impact on building use

Learning Activities

The module will be delivered via a series of pre-recorded lectures which are archived in the virtual learning environment supported by live on-line seminars and formative learning tasks.

Notes

Increasingly facilities managers are facing challenges in coping with the rapidly growing sophistication and technology associated with the management of buildings. This module aims to bridge this gap and equip with the student with managerial awareness of some of the common aspects and issues of smart buildings.

