# **Liverpool** John Moores University

Title: MANAGING INTELLIGENT BUILDINGS

Status: Definitive

Code: **7076BEPG** (119152)

Version Start Date: 01-01-2016

Owning School/Faculty: Built Environment

Teaching School/Faculty: Technology & Environment

Team	Leader
Andy Shaw	Υ
Alex Mason	

Academic Credit Total

Level: FHEQ7 Value: 20.00 Delivered 28.00

Hours:

Total Private

Learning 200 Study: 172

**Hours:** 

**Delivery Options** 

Course typically offered: Semester 2

Component	Contact Hours	
Online	27.000	
Workshop	1.000	

**Grading Basis:** 40 %

#### **Assessment Details**

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Critical essay on theoretical concepts of intelligent buildings	50.0	
Report	AS2	Report on real world scenario	50.0	

## **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 a buildings functionality and sophistication.

### **Learning Outcomes**

After completing the module the student should be able to:

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

# **Learning Outcomes of Assessments**

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

Essay 1 2
Report 3 4

# **Outline Syllabus**

Knowledge and awareness of facilities managers in relation to facilities management Appreciation of building life cycles and the role of facilities management The use of Building information systems

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

Radio frequency identification (RFID) and application to facilities management Remote sensors and application to facilities management Microwave technology and its impact in buildings

Computer aided facilities management systems and their application Energy management and efficiency and the utilisation of information technology Healthy and productive buildings – e.g. privacy, space, personalisation, interior planting

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 key-note lectures which are archived in the Wimba classroom, live on line seminars and a portfolio of project-based tasks. The learner will have an induction session where the approach will be introduced; typically a series of archived "lectures" will be followed by a live seminar. A workshop will be held at the University to act as a summative discussion on the learner's assessment of their organisation.

## **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 student with managerial awareness of some of the common aspects and issues of intelligent buildings.