

## Liverpool John Moores University

Title: BUILDING SERVICES III  
Status: Definitive  
Code: **5504ICBTBS** (126989)  
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment  
Teaching School/Faculty: ICBT, Colombo

Team	Leader
Alison Cotgrave	Y

**Academic Level:** FHEQ5  
**Credit Value:** 15  
**Total Delivered Hours:** 72  
**Total Learning Hours:** 150  
**Private Study:** 78

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	45
Tutorial	15
Workshop	10

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Assignment (1500 words)	30	
Exam	AS2	Examination	70	2

### Aims

*Aim(s) of the module is to develop the students' knowledge and skills on building ancillary services and building commissioning.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Identify the basic elements of a building fire protection system and to describe their basic operation.
- 2 Identify the basic elements of a building related data transmission, communication and Lifts & Escalator system and to describe their basic operation.
- 3 Describe basic principles of acoustics, use terms & definitions effectively.
- 4 Identify the integration of building services and commissioning to ensure functionality of building.

## Learning Outcomes of Assessments

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

Assignment	3		
Examination	1	2	4

## Outline Syllabus

*Introduction to ancillary services in buildings*

*Describe the ancillary services in buildings covering all the modern developments and technology*

*Building Fire Protection*

*Origin of fire in buildings; Types of fire detection systems - Smoke detectors, Heat detectors; Control panels; Codes & Standards employed, Fire rating of equipment and auxiliaries, special installations,*

*Automatic suppression systems, Applications – linkage to building HVAC system*

*Data, Security, Master Antenna Television (MATV), Basics of Data Transmission, Cabling Options (Fibre Optic, Multi-pair, etc.); Patch Panels and Switchgear, Types of Systems, Structured Cabling Systems; CCTV & Security Systems, Building Access Control; Types of applications*

*Communication System*

*Types of Communication/ Telephone Systems & Applications, PABXs, Phones, other Equipment & Switchgear, Broad Band Access, Satellite Communications, MATV Systems,*

*Lifts & Escalators*

*Lifts & Escalators, Working & Sequencing, Related Control Systems, Basic of equipment selection*

*Building service integration and commissioning*

*Overview on building service integration and commissioning, integration methods, commissioning requirements*

## **Learning Activities**

Students will be supported in their learning, to achieve the above learning outcomes, in the following ways:

By a series of lectures and practical approach

A recommended resource list - indicating key reading, virtual and physical learning assistance, is provided to help enable students to undertake self-directed study.

## **Notes**

.