



## **Module Specification**

### **Building Services 3**

Version: 2023-24, v2.0, 01 Aug 2023

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## Part 1: Information

**Module title:** Building Services 3

**Module code:** UBPMRG-5-3

**Level:** Level 6

**For implementation from:** 2023-24

**UWE credit rating:** 5

**ECTS credit rating:** 2.5

**College:** Faculty of Environment & Technology

**School:** FET Dept of Architecture & Built Environ

**Partner institutions:** None

**Field:** Planning and Architecture

**Module type:** Module

**Pre-requisites:** None

**Excluded combinations:** None

**Co-requisites:** None

**Continuing professional development:** No

**Professional, statutory or regulatory body requirements:** None

## Part 2: Description

**Overview:** Transferable Skills:

Collect, analyse and manage data from a wide variety of sources.

Understanding creative interpretation of taught subject in design

Work with limited or contradictory information

Communicate effectively in a variety of formats

Work independently and in groups.

**Features:** Not applicable

**Educational aims:** This Module will enable students to be introduced to the advanced building services of multi-level low rise residential and commercial buildings – Ground + 3 / 4 floors and to the concepts of supplying and distributing basic and advanced building services to a complex of inter-related buildings taking into consideration the point of supply, zoning for distribution of services, isolation for maintenance, storage etc.

**Outline syllabus:** MAIN TOPIC 1

ADVANCED BUILDING SERVICES : GROUND + 3 / 4 FLOORS MULTI – LEVEL  
LOW RISE BUILDINGS

SECURITY SYSTEMS (Term 1)

Security Systems for ground + 3 / 4 storey multi-level low rise residential and commercial buildings

Principles and systems used within property/main factors to be considered in the design/estimation/methods of communicating with specialist consultant and vendors to obtain design proposals and vendor information/safety devices/testing on completion/accessories and special needs.

MECHANICAL CONVEYANCES (Term 1)

Mechanical Conveyors for ground + 3/ 4 storey multi-level low rise residential and commercial buildings

Principles and systems used/main factors to be considered in the design/estimation/methods of communicating with specialist consultant and vendors to obtain design proposals and vendor information/safety devices/testing on completion/accessories and special needs.

FIRE FIGHTING SYSTEMS (Term 1)

Fire Fighting Systems for ground + 3 / 4 storey multi-level low rise residential and commercial buildings

Principles and systems used within property/main factors to be considered in the design/estimation/methods of communicating with specialist consultant and vendors

to obtain design proposals and vendor information/safety devices/testing on completion/accessories and special needs.

#### SOLID WASTE DISPOSAL (Term 1)

Solid waste disposal for ground + 3 / 4 storey multi-level low rise residential and commercial buildings

Principles and systems used for solid waste disposal within property/separation and re-cycling of waste, main factors to be considered in estimation/approvals from authorities/accessories and special needs.

#### BUILDING MANAGEMENT SYSTEMS (Term 1)

Building Management Systems for ground + 3/ 4 storey multi-level low rise residential and commercial buildings

Principles and systems used for building management.

#### MAIN TOPIC 2

##### BUILDING SERVICES FOR A COMPLEX OF BUILDINGS (Term 2)

Introduce the basic and advanced building services (water supply, drainage, rain water disposal, electrical supply, air conditioning, fire safety and prevention) required for different usages in a complex of buildings looking at case studies of residential complexes, commercial complexes, administrative complexes; arts, leisure, entertainment, recreational/sports facilities; and the Integration of services with the architectural design.

the concepts used to service a complex of buildings – linear system, grid system, ring system etc.

the principles used for obtaining the services at the point of supply

the principles used for distribution of services/zoning for different usages

the principles used for isolation of areas to carry out maintenance works

the principles used for storage of services

Understanding of the related regulations

### **Part 3: Teaching and learning methods**

**Teaching and learning methods:** The delivery of this Module will be through: Lectures, Visual Presentations, Individual/Group Projects, Seminars, Tutorials, Field Visits.

#### **CONTACT HOURS**

Lectures: 32

Practicals (Guest Lectures): none

Seminars: none

Tutorials: 4

Independent Learning: 10

Assessment: 4

Directed Learning: none

Notional Student Effort: 40 contact hours

**Module Learning outcomes:** On successful completion of this module students will achieve the following learning outcomes.

**MO1** Awareness of the different types of building services required for different usages of multi-level low rise buildings.

**MO2** Knowledge of the principles used for the supply and distribution of basic and advanced building services for multi-level low rise buildings.

**MO3** Knowledge of the basic and advanced building services required for different usages of a complex of buildings – eg: residential complexes, commercial complexes, administrative complexes: arts, leisure, entertainment and recreational/sports complexes.

**MO4** Understanding of the Co-ordination and Integration of the supply and distribution of basic and advanced building services for multi-level low rise residential and commercial buildings of ground + 3 /4 floors.

**MO5** Understanding of the concepts used for the supply and distribution of basic and advanced building services to a complex of buildings.

**MO6** Ability to Co-ordinate and Integrate the supply and distribution of basic and advanced building services and related technical aspects to the design of a complex of buildings.

**Hours to be allocated:** 50

**Contact hours:**

Independent study/self-guided study = 10 hours

Face-to-face learning = 40 hours

Total = 50

**Reading list:** The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://uwe.rl.talis.com/modules/ubpmrg-5-3.html) via the following link <https://uwe.rl.talis.com/modules/ubpmrg-5-3.html>

## **Part 4: Assessment**

**Assessment strategy:** Week 1 Week 10

Type: Group Seminar 1

Advanced Building Services

Instructions / Descriptions: Reviews

Power Point Presentation and Written Submission

Hours:04 Contact Hours

Weighting: 30 % of total 40%

Week 5 Week 5

Type: Field Visit 1 Building Services – G + 3/4 storey building

Instructions / Descriptions: Discussion

Written Submission & Photographic Record

Hours: 02 Contact Hours

Weighting: 2.5 % of total 40%

Week 10 Week 10

Type: Tutorial 1

Advanced Building Services

Instructions / Descriptions: Written Submission

Hours: 02 Contact Hours

Weighting: 2.5 % of total 40%

Week 15 Week 15

Type: Field Visit 2

Services to Building Complexes

Instructions / Descriptions: Discussion

Written Submission and Photographic Record

Hours: 02 Contact Hours

Weighting: 2.5 % of total 40%

Week 20 Week 20

Type: Tutorial 2

Services to Building Complexes

Instructions / Descriptions: Written Submission

Hours: 02 Contact Hours

Weighting: 2.5 % of total 40%

July

Type: Year-end written examination

Instructions / Descriptions: Building Services Paper

4 Questions to be answered from a choice of 6 Questions.

Descriptive Questions, Questions based on Principles, Questions based on

Application of Principles in Design

Weighting: 60%

**Assessment tasks:**

**Examination (First Sit)**

Description: Written Examination

Weighting: 60 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6

**Set Exercise (First Sit)**

Description: Tutorials/ Assignments

Weighting: 40 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6

**Examination (Resit)**

Description: Written Examination

Weighting: 60 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6

**Set Exercise (Resit)**

Description: Tutorials/ Assignments

Weighting: 40 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6

**Part 5: Contributes towards**



This module contributes towards the following programmes of study:

Architecture [Oct][FT][SriLanka][3yrs] BArch (Hons) 2021-22