

# **Module Specification**

# Examination and Evaluation of Existing Buildings

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# **Part 1: Information**

Module title: Examination and Evaluation of Existing Buildings

Module code: UBLMUB-30-2

Level: Level 5

For implementation from: 2021-22

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Environment & Technology

Department: FET Dept of Architecture & Built Environ

Partner institutions: None

Delivery locations: Frenchay Campus

Field: Architecture and the Built Environment

Module type: Standard

**Pre-requisites:** Introduction to Building Construction 2021-22

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

# Part 2: Description

**Overview:** In this module you will cover a wide range of aspects that relate to buildings in the context of a general practice surveyor. These include the recognition and identification of building defects, as well as the construction and technology relating to non residential buildings and methods approaches and principles for adapting, extending and refurbishing buildings.

Features: Not applicable

Educational aims: See Learning Outcomes

**Outline syllabus:** The following presents an indicative list of content but does not represent the order of delivery, nor will each be equally weighted.

Foundation Failure - typical signs, features, potential damage from trees, differential movement. Significance and appropriate action when valuing property.

Structural Defects - cracks to walls, structural frames -evidence of movement, distortion measurement and assessment of risk.

Defects in Building Fabric - cracks, failure of cladding, brickwork, roof coverings and structural forms, external finishes, both primary and secondary elements. Security issues.

Dampness in Buildings - types, risks, recognition of features associated with various forms.

Establishment of severity and likely risk to property.

Defects in Services - Electrical safety, age issues, defects with water supply, space heating systems, above and below ground drainage defects.

Fire Hazards - Party walls, separating floors, surface spread of flame, inadequate means of escape. Typical fire risks. Links with change of use.

Health and Safety - Asbestos, identification, Radon 222. Presence and impact of hazardous materials. Recognition of appropriate course of action relating to building valuation. Lone working policy, confined spaces, risk of flood.

Appraisal of Buildings for Adaptation and Future Use - loose fit consideration, storey height, accommodation and integration of services, demountable partitions, suspended ceilings, platform floor arrangements. Suitability for adaptation, change of

Page 3 of 7 02 September 2021 use, CDM - Health and Safety file.

Energy Efficiency - BREEAM, energy performance certificates, suitability for upgrade in thermal efficiency. Sustainability issues, Effect on valuation. Management and monitoring of energy use.

Technological Advancements associated with Post Occupancy, long term use and maintenance management, cost models, cost in use, life cycle cost considerations. Building Information Modelling, Building Management Systems.

Commercial Buildings and their Construction - solid, framed/skeletal/portal systems. Cladding, glazing, roof coverings. Steel, concrete both insitu and precast forms.

# Part 3: Teaching and learning methods

**Teaching and learning methods:** Lectures are used primarily to introduce key aspects, concepts and critical areas within the syllabus - emphasising their significance and relationship accordingly - but also create a group identity via exercises and interaction between slides and handouts.

Tutorials require the students to undertake practical tasks, consider realistic problems and typical circumstances that they will encounter in the working environment when undertaking property valuations. Tutorials enable closer contact between the staff and students within smaller teaching cohorts promoting a deeper and thorough appreciation of the subject matter via dialogue, debate and evaluation, based on the critical areas examined in lectures.

#### Module Learning outcomes:

**MO1** Identify and describe a range of construction defects that occur in both residential, commercial and industrial building forms and their services

**MO2** Appraise the significance, severity and the subsequent impact on the valuation of a building of typical symptoms, features and conditions associated with a range of building defects

Page 4 of 7 02 September 2021 **MO3** Justify and recommend the appropriate course of action to be taken as part of the valuation of a property to contend with a range of building defects

**MO4** Appraise a range of factors and features that impact on a valuation of a building with respect to the future potential, adaptability, suitability for change of use and sustainability

**MO5** Recommend the appropriate course of action to be undertaken for a range of health and safety risks that may be present in a building

**MO6** Analyse the significance of energy efficiency performance of a building with regards to its valuation and management

**MO7** Demonstrate an appreciation of the use, benefits and potential for modern technology advancements such as Building Information Modelling (BIM), Building Management Systems (BMS) with regards to post occupancy evaluation, energy management, sustainability and valuation of buildings

#### Hours to be allocated: 300

#### **Contact hours:**

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

Total = 300

Reading list: The reading list for this module can be accessed at

readinglists.uwe.ac.uk via the following link <u>https://uwe.rl.talis.com/modules/ublmub-</u> <u>30-2.html</u>

# Part 4: Assessment

**Assessment strategy:** This is made up of a project (Component B) which uses typical real life scenarios and situations that general practice surveyors are likely to encounter in practice supporting the needs of the profession and programme accordingly. Component A, an individual presentation, provides an opportunity to assess material covered later in the delivery schedule.

The project coursework is based around a real project and is used to integrate the strands of knowledge presented as separated topics to enable students to use reasoned judgement, analysis and problem solving skills in relation to identification and analysis of building defects and their impact in typical property valuation situations.

The presentation is used to concentrate students' attention on assimilating the factual content, evaluating and recommending appropriate procedures accordingly to a range of situations and scenarios.

Plagiarism is designed out requiring an individual response within the project that demonstrates the students' understanding, appreciation and ability to apply themselves to specific problems that are presented. Additionally, formative drafts of each individual's work are viewed beforehand to gain an early appreciation of each individual's progress, engagement and writing ability.

Formative feedback will be given on draft work on a progressive basis via tutorial session activities. Similarly there will be a formative hand-in opportunity for students to receive feedback on an individual basis.

The resit strategy mirrors the initial assessment approach and affords the students an opportunity via a resit project opportunity (Component B) as well as an individual presentation (Component A).

### Assessment components:

Presentation - Component A (First Sit) Description: 20 minute individual presentation Weighting: 50 % Final assessment: Yes Group work: No Learning outcomes tested: MO3, MO4, MO5, MO6, MO7

Project - Component B (First Sit)

Description: Project (2500 words) Weighting: 50 % Final assessment: No Group work: No Learning outcomes tested: MO1, MO2, MO3

### Presentation - Component A (Resit)

Description: Individual Presentation (20 minutes) Weighting: 50 % Final assessment: Yes Group work: No Learning outcomes tested: MO3, MO4, MO5, MO6, MO7

## Project - Component B (Resit)

Description: Project (2500 words) Weighting: 50 % Final assessment: No Group work: No Learning outcomes tested: MO1, MO2, MO3

# Part 5: Contributes towards

This module contributes towards the following programmes of study: Real Estate [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21 Real Estate [Sep][FT][Frenchay][3yrs] BSc (Hons) 2020-21 Real Estate {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2019-20 Real Estate {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20