



Module Specification

Design Project

Version: 2023-24, v2.0, 29 Mar 2023

Contents

Module Specification	1
Part 1: Information	2
Part 2: Description	2
Part 3: Teaching and learning methods	3
Part 4: Assessment.....	4
Part 5: Contributes towards	6

Part 1: Information

Module title: Design Project

Module code: UBLLXE-30-3

Level: Level 6

For implementation from: 2023-24

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: Not in use for Modules

Field: Architecture and the Built Environment

Module type: Module

Pre-requisites: Building Services Applications 2023-24

Excluded combinations: None

Co-requisites: Mechanical Services 2023-24

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: See learning outcomes.

Outline syllabus: The following is indicative of the subject areas likely to be covered although not necessarily in this order or with equal weighting:

Design Management: performance criteria, design for commissioning, design for maintenance, sketches and schematics, co-ordination, BIM.

Environmental Evaluation: site analysis, microclimates, fabric analysis, dynamic analysis, load estimation, daylighting analysis.

Detailed Design: Review of calculation techniques, Heating system design, Hot and cold water, Comfort cooling and refrigeration systems, Control systems design and specification, Space standards, Feature lighting, Room acoustic design and noise control.

Part 3: Teaching and learning methods

Teaching and learning methods: Scheduled learning Students will spend 3 hours weekly in a design studio environment simulating the role of a lead building services engineer, managing a complete design package for the services under their responsibility and undertaking the detailed design of either the mechanical or electrical services. Academic lectures will be accompanied by guest lecturers from industry, covering the latest in design theory.

Independent learning includes hours engaged with essential reading, assignment preparation and completion etc.

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

MO1 Develop a Building Information Management execution plan for a services design of a commercial or industrial project

MO2 Undertake an environmental site analysis and present the environmental constraints and opportunities of the site

MO3 Propose construction materials and built form to achieve environmental objectives (thermal, visual, acoustic, air quality)

MO4 Select design criteria appropriate to a range of building services systems

MO5 Select building services systems to meet performance criteria and prove through evidence, reasoning and calculation that the chosen systems will satisfy those criteria

MO6 Represent mechanical or electrical systems in written and drawn form, using conventions accepted by the construction industry

MO7 Apply computer modelling techniques to the design of building services systems

MO8 Demonstrate the environmental performance and sustainability of the design using comparison to establish assessment mentors and benchmarks

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](https://uwe.rl.talis.com/modules/ubllxe-30-3.html) via the following link <https://uwe.rl.talis.com/modules/ubllxe-30-3.html>

Part 4: Assessment

Assessment strategy: The Strategy

This project module will require students to assume the role of professional engineers and undertake a wide range of activities associated with such a role. Given the studio based learning strategy, a portfolio submission in two parts is an appropriate assessment strategy.

The Assessment

Portfolio 1 and 2 - including site analysis, fabric analysis, design information management plans and design criteria, design drawings, specification and calculation dossier. Submission may include mid project reviews as part of the overall portfolio. There will be a mid-module submission and one at the end.

Presentation - A presentation of the final design proposal will be required to ensure good communication skills. It is anticipated that panel will include independent external visiting members, drawn from the profession locally.

Resit Portfolio 1 and 2 - a similar brief to that described above, which may include some topic changes.

Resit Presentation - a similar brief to that described above, which may include some topic changes.

Assessment components:

Presentation (First Sit)

Description: Presentation (20 minutes)

Weighting: 25 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO6, MO8

Portfolio (First Sit)

Description: Portfolio 1 (2000 words)

Weighting: 38 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Portfolio (First Sit)

Description: Portfolio 2 (2000 words)

Weighting: 37 %

Final assessment: No

Group work: No

Learning outcomes tested: MO5, MO7

Presentation (Resit)

Description: Presentation (20 minutes)

Weighting: 25 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO6, MO8

Portfolio (Resit)

Description: Portfolio 1 (2000 words)

Weighting: 38 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Portfolio (Resit)

Description: Portfolio 2 (2000 words)

Weighting: 37 %

Final assessment: No

Group work: No

Learning outcomes tested: MO5, MO7

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Building Services Engineering [SHAPE] BEng (Hons) 2023-24

Building Services Engineering [SHAPE] BEng (Hons) 2023-24

Building Services Engineering [Sep][FT][Frenchay][3yrs] BEng (Hons) 2021-22

Building Services Engineering {Foundation} [Oct][FT][GCET][4yrs] BEng (Hons)
2020-21

Building Services Engineering {Foundation} [Feb][FT][GCET][4yrs] BEng (Hons)
2020-21

Building Services Engineering {Apprenticeship-UWE} [Sep][FT][Frenchay][5yrs]
BEng (Hons) 2019-20

Building Services Engineering [Sep][PT][Frenchay][5yrs] BEng (Hons) 2019-20