



MODULE SPECIFICATION

Part 1: Information			
Module Title	Design Project		
Module Code	UBLLXE-30-3	Level	Level 6
For implementation from	2019-20		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Architecture and the Built Environment
Department	FET Dept of Architecture & Built Environ		
Module type:	Standard		
Pre-requisites	Building Services Applications 2019-20		
Excluded Combinations	None		
Co- requisites	Mechanical Services 2019-20		
Module Entry requirements	None		

Part 2: Description
<p>Educational Aims: See learning outcomes.</p> <p>Outline Syllabus: The following is indicative of the subject areas likely to be covered although not necessarily in this order or with equal weighting:</p> <p>Design Management: performance criteria, design for commissioning, design for maintenance, sketches and schematics, co-ordination, BIM.</p> <p>Environmental Evaluation: site analysis, microclimates, fabric analysis, dynamic analysis, load estimation, daylighting analysis.</p> <p>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.</p> <p>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</p>

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guest lecturers from industry, covering the latest in design theory.

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

Part 3: Assessment

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 controlled assessment will be a presentation of their project.

The Assessment

Component B – portfolio of work including site analysis, fabric analysis, design information management plans and design criteria, design drawings, specification and calculation dossier.

Component A - Presentation

A presentation of the final design proposal will be required to ensure good communication skills.

The students' fully worked design will be submitted at the end of the second semester, at which time students will also present their proposals orally to staff and peers. It is anticipated that panel will include independent external visiting members, drawn from the profession locally.

First Sit Components	Final Assessment	Element weighting	Description
Portfolio - Component B		37 %	Portfolio 1 (2000 words)
Portfolio - Component B		38 %	Portfolio 2 (2000 words)
Presentation - Component A	✓	25 %	Presentation (20 minutes)
Resit Components	Final Assessment	Element weighting	Description
Portfolio - Component B		75 %	Site Analysis, Fabric Analysis, Design Information Management Plan and Services Design Criteria., Design Drawings, Specification Report and Calculation Dossier
Presentation - Component A	✓	25 %	Presentation (20 minutes)

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Part 4: Teaching and Learning Methods																			
Learning Outcomes	<p>On successful completion of this module students will achieve the following learning outcomes:</p> <table border="1"> <thead> <tr> <th style="text-align: left;">Module Learning Outcomes</th> <th style="text-align: left;">Reference</th> </tr> </thead> <tbody> <tr> <td>Develop a Building Information Management execution plan for a services design of a commercial or industrial project</td> <td>MO1</td> </tr> <tr> <td>Undertake an environmental site analysis and present the environmental constraints and opportunities of the site</td> <td>MO2</td> </tr> <tr> <td>Propose construction materials and built form to achieve environmental objectives (thermal, visual, acoustic, air quality)</td> <td>MO3</td> </tr> <tr> <td>Select design criteria appropriate to a range of building services systems</td> <td>MO4</td> </tr> <tr> <td>Select building services systems to meet performance criteria and prove through evidence, reasoning and calculation that the chosen systems will satisfy those criteria</td> <td>MO5</td> </tr> <tr> <td>Represent mechanical or electrical systems in written and drawn form, using conventions accepted by the construction industry</td> <td>MO6</td> </tr> <tr> <td>Apply computer modelling techniques to the design of building services systems</td> <td>MO7</td> </tr> <tr> <td>Demonstrate the environmental performance and sustainability of the design using comparison to establish assessment mentors and benchmarks</td> <td>MO8</td> </tr> </tbody> </table>	Module Learning Outcomes	Reference	Develop a Building Information Management execution plan for a services design of a commercial or industrial project	MO1	Undertake an environmental site analysis and present the environmental constraints and opportunities of the site	MO2	Propose construction materials and built form to achieve environmental objectives (thermal, visual, acoustic, air quality)	MO3	Select design criteria appropriate to a range of building services systems	MO4	Select building services systems to meet performance criteria and prove through evidence, reasoning and calculation that the chosen systems will satisfy those criteria	MO5	Represent mechanical or electrical systems in written and drawn form, using conventions accepted by the construction industry	MO6	Apply computer modelling techniques to the design of building services systems	MO7	Demonstrate the environmental performance and sustainability of the design using comparison to establish assessment mentors and benchmarks	MO8
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Reading List	<p>The reading list for this module can be accessed via the following link: https://uwe.rl.talis.com/modules/ubllxe-30-3.html</p>																		

Part 5: Contributes Towards

This module contributes towards the following programmes of study: