MODULE SPECIFICATION

Part 1: Information			
Module Title	Construction Technology and Services		
Module Code	UBLMYS-30-1	Level	Level 4
For implementation from	2020-21		
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	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description

Educational Aims: See Learning Outcomes.

In addition, the educational experience may explore, develop, and practise but not formally discretely assess the following:

Reading and interpretation of current building regulation documents and the application of these towards the development of proposed
construction methods.

Research and investigation techniques, including use of the print and online resources made available from UWE Library

Outline Syllabus: The following list is indicative of the subject areas chosen. These may vary slightly to meet Programme needs or changes to contemporary practice and are necessarily given equal weighting:

Structures and Load Distribution:
-Basic structural terminology, including classification of forces, loads, structural elements and forms.

-Application of basic structural principles for both load bearing domestic buildings and simple framed structures.

The common construction techniques used for the major components of domestic dwellings, including analysis of related design criteria / conditions and resulting construction choice from common methods.
-Foundations
-Ground floors,
-Building Enclosure (overview)
-Exterior walls
-Roof structure
-Roof coverings and enclosure
-Interior construction (partitions, stairs, second-fix)
-Domestic building services.

Although mainly based on current construction methods, examples from the recent past will also be used in order to illustrate the evolution of current techniques and complement key principles as appropriate.
Environmentally responsible design and low-carbon methods of construction are also a consistent theme. Integrated, passive design methods incorporating construction fabric and form with building services

Introduction to technical drawing as a means of communication for construction;
-Technical drawing as a language
-Basic technical sketching techniques
-Drawing interpretation

Teaching and Learning Methods: This module will be formally presented through a series of introductory lectures and supporting films. Student-centred learning will take place in less formal and smaller seminar / tutorial sessions where students will have the opportunity to interpret and discuss a range of problems and issues related to construction technology and the provision of building services.

Formative work will be centred around exercises carried out within and in preparation for, the regular tutorial sessions. These exercises are outlined in the tutorial work booklets. In addition, a series of the tutorials will place a specific focus on the development of technical drawing, sketching and interpretation skills. The output from the tutorials, together with a series of short web-based self-assessment quizzes will enable students to monitor their on-going progress and will form the portfolio Component A summative assessment.

In addition to the Scheduled Learning sessions for the modules, individual students should expect to commit the following activities based on the hours outlined above:

Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work-based learning; supervised time in studio/workshop.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.

Part 3: Assessment
This module will be assessed by a portfolio of work completed across the year (Component A- 60%) AND a Final project (Component B - 40%). The Portfolio of work (Component A) consists of a collection of 8 completed tutorial tasks together with 8 regular online quizzes/tests, both of which are aimed at offering students formative feedback throughout the year, whilst also encouraging consistent engagement with lectures and tutorial sessions.

Tutorial work booklets issued to students will contain a series of formative exercises and assigned tasks that reinforce concepts delivered throughout the lecture series. This coursework element is an assembled collection of these tasks which is intended to reinforce the student's understanding of each major building component as it is introduced.

There will be 10 online tests and the students will take their 8 best results (50% of the component) and there will be approximately 10 tutorial tasks, of which 8 must be included (50% of the component).

Some of the questions in the tests will be multiple choice and others will require students to provide their own descriptions, explanations and analysis of construction solutions. These tests will encourage students to review and revise the taught material, reinforcing the material from lectures and offering some means of assessment throughout the programme of topics introduced. Students will also be assessed on key aspects from assigned essential reading.

These tests are also intended to provide:
An opportunity to measure engagement;
An opportunity for students to consolidate their learning;
An opportunity to gauge weaknesses and an agenda for in-seminar discussion;

The Technical Building Proposal (Component B) involves a short report and written technical proposal that requires the student to review a given building construction scenario and propose and defend methods of construction that are appropriate to that situation. The proposal shall be further supported through the provision of technical details that graphically represent the proposed solution.

First Sit Components	**Final Assessment**	**Element weighting**	**Description**
Portfolio - Component A		60 %	Portfolio of tutorial tasks and online quizzes
Final Project - Component B	✓	40 %	Technical building proposal (750 words plus drawings)
Resit Components	**Final Assessment**	**Element weighting**	**Description**
Portfolio - Component A		60 %	Portfolio of online quizzes and 50% of the tutorial tasks with written reflection
Final Project - Component B	✓	40 %	Technical building proposal (750 words plus drawings)

Part 4: Teaching and Learning Methods

Learning Outcomes

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

Module Learning Outcomes	**Reference**
Describe and explain common materials, methods and approaches used in the construction of load-bearing domestic housing and simple framed structures.	MO1
Explain and discuss the basic structural and load distribution principles associated with the construction of load-bearing domestic housing and simple framed structures.	MO2
Describe and explain the common options and operating principles for building services typically provided for both domestic housing and smaller industrial and commercial buildings.	MO3
Analyse site and design related characteristics for proposed housing and simple frame building projects; and suggest appropriate materials, construction methods and building services that address these observed conditions.	MO4

	Read and interpret drawings and produce technical sketches and details related to common construction methods and building services provision for load-bearing domestic housing and simple framed structures.	MO5
	Discuss and explain how current methods of construction for load-bearing domestic houses and simple framed structures have evolved from past solutions and the important influential factors involved.	MO6
	List and describe the range of production resources and operations associated with the construction of load-bearing domestic houses and simple framed structures, including required temporary works and considerations of health and safety.	MO7
	Describe and explain aspects of sustainable building practice associated with load-bearing domestic housing and simple framed structures, including integrated, passive design methods.	MO8

Contact Hours	**Independent Study Hours:**	
	Independent study/self-guided study	228
	Total Independent Study Hours:	228
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	72
	Total Scheduled Learning and Teaching Hours:	72
	Hours to be allocated	300
	Allocated Hours	300
Reading List	*The reading list for this module can be accessed via the following link:* https://uwe.rl.talis.com/modules/ublmys-30-1.html	

Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Quantity Surveying and Commercial Management [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Quantity Surveying and Commercial Management [Sep][FT][Frenchay][3yrs] BSc (Hons) 2020-21

Quantity Surveying and Commercial Management [Sep][PT][Frenchay][5yrs] BSc (Hons) 2020-21

Quantity Surveying and Commercial Management {Apprenticeship} [Sep][PT][Frenchay][5yrs] BSc (Hons) 2020-21

Quantity Surveying and Commercial Management {Apprenticeship} [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Building Surveying [Sep][FT][Frenchay][3yrs] BSc (Hons) 2020-21

Building Surveying [Sep][PT][Frenchay][5yrs] BSc (Hons) 2020-21

Building Surveying [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21
Building Surveying {Apprenticeship} [Sep][PT][Frenchay][5yrs] BSc (Hons) 2020-21
Construction Project Management [Sep][PT][Frenchay][5yrs] BSc (Hons) 2020-21
Construction Project Management [Feb][FT][AustonSingapore][3yrs] BSc (Hons) 2020-21
Construction Project Management [Feb][PT][AustonSingapore][5yrs] BSc (Hons) 2020-21
Construction Project Management [May][FT][AustonSingapore][3yrs] BSc (Hons) 2020-21
Construction Project Management [May][PT][AustonSingapore][5yrs] BSc (Hons) 2020-21
Construction Project Management [Sep][FT][AustonSingapore][3yrs] BSc (Hons) 2020-21
Construction Project Management [Sep][FT][Frenchay][3yrs] BSc (Hons) 2020-21
Construction Project Management [Sep][PT][AustonSingapore][5yrs] BSc (Hons) 2020-21
Construction Project Management [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21
Building Surveying {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2019-20
Building Surveying {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20
Quantity Surveying and Commercial Management {Foundation}[Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20
Quantity Surveying and Commercial Management {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2019-20