



## MODULE SPECIFICATION

Part 1: Information			
Module Title	BIM in Construction Operations		
Module Code	UBLMHF-15-M	Level	Level 7
For implementation from	2020-21		
UWE Credit Rating	15	ECTS Credit Rating	7.5
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
<p><b>Educational Aims:</b> See Learning Outcomes</p> <p><b>Outline Syllabus:</b> BIM for construction operations;</p> <p>Construction schedules and logistics using BIM to communicate and evaluate project activities;</p> <p>Predicting, identifying and solving constructability issues;</p> <p>BIM for scenario forecasting;</p> <p>BIM for construction system design;</p> <p>BIM for site utilisation planning;</p> <p>BIM for phase planning;</p> <p>New directions and developments in BIM enabled construction operations.</p>

## STUDENT AND ACADEMIC SERVICES

**Teaching and Learning Methods:** The module is delivered by way of a blended learning approach using live time collaborate on-line lectures. Key lectures will be used to develop certain technical and conceptual aspects of the syllabus. Students will support their learning by tracking a live or recently completed project. Tutorials and workshops will be used to support the students' own research and to challenge their knowledge where it is too narrow. Students' work will also be exposed to peer critical evaluation through discussion. Use of university's virtual learning environment discussion facilities in Blackboard will be made to ensure that distance learning students are actively engaged in their learning.

- Face to face or on-line lectures will be used to enable students to support their own independent learning by exploring deeper issues pertaining to the use of BIM at the design stages, and receiving formative feedback.
- A series of face to face or on-line tutorials are designed to provide knowledge and practical skills in the use of BIM processes and technology at the design stages.
- Presentations by the students will also be used to enable students to develop the skills and capabilities to analyse problems, negotiate, make decisions and present solutions to problems. The formative work in the presentation will provide research material useful to the final report. Collaborative aspects of these presentations will be delivered online.
- Directed reading examining the key principles and relevant criteria relating to a number of topics of importance to BIM in design coordination. Their implications on design and construction professionals and other stakeholders are also examined by bringing together the BIM enabled design and collaborative aspects of the industry.

### Part 3: Assessment

- The assessment strategy adopted by this module involves a mix of practical skills assessment, and a report to reflect on BIM processes and technology applied at construction stage.
- The practical assessment is designed to evaluate students' practical skills in planning and applying BIM processes and technology throughout the construction stage. Software is used to support students in their learning process. Students are expected to work on a case study to provide a real-life experience of using BIM in the construction workflow in a group presentation.
- Students are expected to prepare a report requiring detailed knowledge of the application of BIM at construction stages and in practice. It is important for the student to appreciate the depth of detail required in which BIM operates at the construction stage, including prevailing and emerging collaborative practices. This report is also a reflective piece of work to examine the strengths and limitations of current and emerging BIM processes and technology at the construction stage. The report is 2500 words.

First Sit Components	Final Assessment	Element weighting	Description
Practical Skills Assessment - Component A	✓	50 %	BIM model in construction operations (Practical skills assessment) (Final element) (Sem 1)
Report - Component B		50 %	Report (2500 words/equivalent) (Sem 2)
Resit Components	Final Assessment	Element weighting	Description
Practical Skills Assessment - Component A	✓	50 %	BIM model in construction operations (Practical skills assessment)
Report - Component B		50 %	Report (2500 words/equivalent)

### Part 4: Teaching and Learning Methods

## STUDENT AND ACADEMIC SERVICES

Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:																
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Reading List	<p data-bbox="347 1406 1177 1438"><i>The reading list for this module can be accessed via the following link:</i></p> <p data-bbox="347 1469 938 1500"><a href="https://uwe.rl.talis.com/modules/ublmhf-15-m.html">https://uwe.rl.talis.com/modules/ublmhf-15-m.html</a></p>																

### Part 5: Contributes Towards

This module contributes towards the following programmes of study:

- Construction Project Management [Sep][DL][Frenchay][1yr] MSc 2020-21
- Construction Project Management [Jan][FT][Frenchay][1yr] MSc 2020-21
- Construction Project Management [Sep][FT][Frenchay][1yr] MSc 2020-21
- Construction Project Management [Jan][PT][Frenchay][2yrs] MSc 2019-20
- Construction Project Management [Sep][PT][Frenchay][2yrs] MSc 2019-20