MODULE SPECIFICATION

Part 1: Information			
Module Title	BIM in Construction Operations		
Module Code	UBLMHF-15-M	Level	Level 7
For implementation from	2018-19		
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		
Contributes towards	BIM in Design, Construction and Operation [Sep][FT][Frenchay][1yr] MSc 2018-19 Construction Project Management [Jan][FT][Frenchay][1yr] MSc 2018-19 BIM in Design, Construction and Operation [Jan][FT][Frenchay][1yr] MSc 2018-19 Construction Project Management [Sep][FT][Frenchay][1yr] MSc 2018-19		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
Educational Aims: See Learning Outcomes **Outline Syllabus:** BIM for construction operations; Construction schedules and logistics using BIM to communicate and evaluate project activities; Predicting, identifying and solving constructability issues; BIM for scenario forecasting;

BIM for construction system design;

BIM for site utilisation planning;

BIM for phase planning;

New directions and developments in BIM enabled construction operations.

Teaching and Learning Methods: The module is delivered by way of five study days for face to face teaching. Recorded lectures and the use of email discussion groups of virtual learning environments (VLEs) and other technology-aided means are also employed.

The module will be delivered by means of a series of lectures, seminars and tutorials.

Lectures and seminars will be used to enable students to support their own independent learning by exploring deeper issues pertaining to the use of BIM for construction operations, and receiving formative feedback. Occasional speakers will be used to provide up to date material and context to the applications of the subject area.

A series of tutorials are designed to provide knowledge and practical skills in the use of BIM processes and technology for construction operations.

Presentations by and to the group 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.

Directed reading examining the key principles and relevant criteria relating to a number of topics of importance to BIM in construction operations. Their implications on construction safety, constructability and operations are also examined.

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 for construction operations.

The practical skills assessments are designed to evaluate students' practical skills in planning and applying BIM processes and technology for construction processes. State of the art technology, including hardware and software, is used to support students in their learning process. Students are expected to work on real-life case study to provide a real-life experience of using BIM for construction processes.

Students are expected to prepare a report requiring a detailed knowledge of the application of BIM for construction operations. It is important for the student to appreciate the depth of detail required in which BIM operate at the construction stages, 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 stages. The Report is a 2500 word report suitable for dissemination to senior management.

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

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

Part 4: Teaching and Learning Methods

Learning Outcomes

On successful completion of this module students will be able to:

	Module Learning Outcomes
MO1	Critically evaluate current practice in the use of BIM for construction operations
MO2	Simulate construction schedules and logistics using BIM to communicate and evaluate project activities
MO3	Apply BIM for buildability scenario forecasting, including interference management and clash detection
MO4	Use BIM for construction system design
MO5	Evaluate the role of BIM for site utilisation planning
MO6	Critically analyse BIM for phase planning
MO7	Assess collaborative practices in a multidisciplinary team
MO8	Work as part of a team

Contact Hours

Contact Hours	
Independent Study Hours:	
Independent study/self-guided study	113
Total Independent Study Hours:	113
Scheduled Learning and Teaching Hours:	
Face-to-face learning	37
Total Scheduled Learning and Teaching Hours:	37
Hours to be allocated	150
Allocated Hours	150

Reading List

The reading list for this module can be accessed via the following link:

https://uwe.rl.talis.com/modules/ublmhf-15-m.html