MODULE SPECIFICATION

Part 1: Information			
Module Title	BIM in Business and Practice		
Module Code	UBLMM4-30-M	Level	Level 7
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	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description

Overview: The BIM in Practice (Integrating Project) module will offer an opportunity to pursue a case study, closely related to a company's interests, and level of development in using BIM approach.

Educational Aims: See Learning Outcomes

Outline Syllabus: Within the BIM planning implementation procedure, common BIM Planning Elements exist that should be addressed. These BIM Planning Elements are classified into six categories including:

Strategy: The mission, vision, goals, and objectives, along with management support, and BIM champions/managers.

Uses: The specific strategies of implementing BIM, including those BIM uses for generating, processing, communicating, executing, and managing facility information.

Process: The means and methods by which the BIM uses are accomplished, including understanding current processes, designing new BIM processes and developing transition processes.

Information: The facility informational needs of the organization, including the model element breakdown, level of development, and facility data.

Infrastructure: The resources needed to support BIM implementation, including software, hardware, and workspaces.

Personnel: The effects of BIM on the personnel, including the roles and responsibilities of a BIM Champion/Manager, the structure or hierarchy, the education and training programs, and change readiness.

The module will introduce the case study approach and the key issues surrounding BIM in practice in general, and begin to explore the ways in which an integrated BIM approach in particular is undertaken. Each student will develop a rationale for their case study. This will then be used as the basis for the development of a rigorous case study that is informed by a deep understanding of best practice, as well as existing and emerging trends in Building Information Modelling implementation.

The outputs of the case study may be in a form of a BIM model, as well as a reflective piece of work about the case study. Each student's reflective report should be able to communicate the aim and objectives of the case study, processes and reflective thinking.

Teaching and Learning Methods: This is a project module, and students are expected to work unsupervised for some part of the study hours allocated for this module. There are however some contact hours which form a vital part of the study.

The module will be delivered by means of a series of lectures and seminars, supporting technical workshops, and tutorials in BIM.

Recorded lectures, tutorials, and the use of email discussion groups of virtual learning environments (VLEs) and other technology-aided means are also employed. It can also take place in a work-based setting.

Students' time will be allocated (as a guide) as follows:

Lectures: 12 hours

Tutorials/seminars, supporting technical workshops, tutorials, and directed learning: 70 hours

Self-Directed Learning and summative assessment: 218 hours

Total hours: 300 hours

Scheduled Learning
Typically the teaching will involve a combination of information delivered through lectures, followed by seminars, tutorials, and discussion around key syllabus themes. Published case studies and research will be critically analysed, to understand different approaches to the implementation of an integrated BIM approach in a work based setting. In addition there will be opportunities for students to develop and discuss their selected case studies within the seminar sessions, as well as the virtual learning environments.

Formative work for the module will consist of students proposing a rationale for the selection of the case study, and developing a BIM case study that is closely aligned with the company's needs and requirements. This could include some research into the context of the area under exploration and reflection into research already undertaken by others. This includes a critical analysis and reflects upon innovative collaborative business arrangements required to gain advantage from BIM. It also requires the examination of BIM processes, and the effective management and communication of BIM information.

The seminars and tutorials will be a combination of specialist tutorials in BIM that relate to the focus of the case study. The individual student will initiate, plan and carry out the work with guidance from the tutor throughout the module. As part of the critical thinking and reflective

working demanded by the module, seminars will be held, face to face as well as in VLEs, at which a student will present their work for discussion with their peers.

Part 3: Assessment

There are two components to the assessment, to encourage students to engage with the case study process at an early stage. This also allows for formal points of engagement to enable tutors to monitor individual student's progress.

Students produce a BIM organisational strategic plan to assess existing organisational conditions, align BIM goals and vision, and develop a transition plan to implement BIM. The findings will be presented to tutors and fellow students, in the early stages of the module. This short presentation will be formally assessed.

Students will develop a BIM implementation strategy in conjunction with a company, ideally in a work-based setting. This case study includes the development of an Employer Information Requirements, and the production of a BIM project execution planning. Students are required to produce a report to discuss the learning process, as well as a reflection on the strengths and limitations of the adopted approach. The report must be suitable for dissemination to senior management of the company.

Component A: Students are also expected to conduct a progress seminar, where they will present their findings and discuss their progress with tutors and fellow students. The primary function of this is to provide strong formative feedback and a platform for discussion with tutors and fellow students. They are expected to assess the company's BIM readiness and competency, and, based on the evaluation, they are required to produce a BIM organisational strategic plan to ensure that BIM is aligned with the company's business strategy. They are required to critically analyse and reflect upon innovative collaborative business arrangements required to gain advantage from BIM. They are also expected to analyse processes of BIM, and the effective management and communication and coordination of BIM information.

Component B: Students will complete a reflective report of 2500 words. They are expected to create a BIM organisational execution planning to implement BIM in accordance with detailed business operations. The BIM organisational execution planning is expected to be implemented in accordance with detailed business operations.

Formative feedback is an ongoing part of this module. This may take a variety of forms:

Feedback and guidance in small group sessions with students investigating similar topics

Feedback and discussion in one to one sessions, either face to face or through some other medium such as VLE, email, telephone or the internet.

First Sit Components	**Final Assessment**	**Element weighting**	**Description**
Written Assignment - Component B	✓	50 %	BIM implementation strategy (approximately 2500 words)
Presentation - Component A		50 %	Presentation (approximately 10 min followed by Q and A)
Resit Components	**Final Assessment**	**Element weighting**	**Description**
Written Assignment - Component B	✓	50 %	BIM implementation strategy (approximately 2500 words)
Presentation - Component A		50 %	Presentation (approximately 10 min followed by Q and A)

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
Produce a BIM organisational strategic plan to ensure that BIM is aligned with a business strategy	MO1
Create a BIM organisational execution plan to implement BIM in accordance with detailed business operations	MO2
Analyse processes of BIM, and the effective management, communication, and coordination of BIM information	MO3
Critically analyse and reflect upon innovative collaborative business arrangements required to gain advantage from BIM	MO4
Identify the various BIM processes and tools to make informed decisions	MO5
Critically appraise work of others and own work	MO6

Contact Hours

Independent Study Hours:	
Independent study/self-guided study	218
Total Independent Study Hours:	218
Scheduled Learning and Teaching Hours:	
Face-to-face learning	82
Total Scheduled Learning and Teaching Hours:	82
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/ublmm4-30-m.html

Part 5: Contributes Towards

This module contributes towards the following programmes of study: