Module Specification

Module Summary Information

1	**Module Title**	BIM for Existing Built Environment
2	**Module Credits**	20
3	**Module Level**	7
4	**Module Code**	BNV7134

5	**Module Overview**

This module aims to deliver knowledge and skills required to use BIM approach in managing existing built environment at a Post-graduate level. This module acts as a central platform where both latest construction technology and building management are inter-connected. The module aims to familiarise you with the BIM process through collaborating efficiently with different stakeholders, manage data and information and use of technology. This is in order to demonstrate the use of BIM to manage building facilities and assets after building completion. The module allows you to suggest multiple approaches to manage existing buildings through the use of BIM.

Against this backdrop, this module aims to: i) provide pragmatic guidance on how digital technologies are being utilised by stakeholders (e.g. Architects, Contractors, Clients and Facilities Management teams) during the whole life-cycle management of buildings and infrastructure; ii) present real life examples of digital technology applications in practice (achieved via on-site field study and published case study research); iii) discuss the problems that occur with practice (e.g. interoperability and clash detection) and how such can be mitigated using innovative solutions; and iv) reflect upon how data and information can be transformed into business knowledge (of building's operations) to generate concomitant business intelligence and improved performance. The overarching objective is simple – to deliver cutting knowledge and skills required to use digital technologies to better manage the built environment at a post-graduate level. Consequently, the module provides a central platform to demonstrate how interconnected digital technologies are revolutionizing the management of individual buildings and SMART city development.

6	**Indicative Content**

Each building surveyor will produce their own individual report but are required to work in groups in order to simulate a real-life multi-collaborative working platform; an approached fostered by contemporary digital technologies. It is therefore essential to ensure that knowledge is shared amongst group members (as part of a collegiate collaborative team) but that the write-up of the report is an individual item of work produced by each individual team member (refer to the need to avoid plagiarism below).

As a lead consultant to the client, you will be asked to consider a retrospective simulation of the Conservatoire development throughout its whole life-cycle development. The aim is to prepare a report to the client that will enable them to improve the management of data and information requirements about the building for any future developments – as a lessons learnt exercise.

An essential part of this portfolio coursework is the ability to develop an individual report in the context of your professional discipline.

7	Module Learning Outcomes On successful completion of the module, students will be able to:	
	1	Identify the roles and appraise individual requirements for key stakeholders (e.g. Architects, Contractors, Clients and members of the Facilities Management Team) within the process of digitizing the built environment.
	2	Appraise and manage an amorphous range of geometric and semantic data and information compiled and managed at the design, construction and operational phases of a building's development.
	3	Develop key digital built environment and building surveying competencies required to manage assets within a building or collection of buildings operating within a SMART city environment.
	4	Critically analyse technical data, operational requirements to augment decision support and strategic requirements that enhance a building's environmental performance using digital technologies.

8	Module Assessment		
Learning Outcome			
	Coursework	**Exam**	**In-Person**
1-4	**X**		

9	Breakdown Learning and Teaching Activities
Learning Activities	**Hours**
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	48
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	92
Private Study (PS) includes preparation for exams	60
Total Study Hours:	200