

Module Specification

Module Summary Information

1	Module Title	Integrated Digital Design - Residential
2	Module Credits	20
3	Module Level	4
4	Module Code	BNV4104

5	Module Overview
<p>Digital construction is an integral component of contemporary design, development and maintenance of modern residential development. Building Information Modelling (BIM) technology is at the forefront of the progressive movement towards total digitalisation of the built environment.</p> <p>Against this backdrop, this module aims to provide a foundation for you to successfully execute the BIM process, facilitate its adoption and achieve interdisciplinary integration on a single project that simulates a residential project.</p> <p>Specifically, individual programme cohorts (i.e. those studying either <i>real estate, construction management, architectural technology, planning</i> or <i>building surveying</i> programmes) will execute multiple BIM data developments throughout the building's lifecycle simultaneously – these individual developments will then be amalgamated to produce a federated BIM model that contains all course work submitted for each group as a final bid report. Specifically, each of the disciplines will produce broadly the following.</p>	

6	Indicative Content
<p>An essential part of this portfolio coursework is the ability to collaboratively work within an integrated project management team that consists of members of the various professional disciplines (i.e. Quantity Surveyors, Building Surveyors, Real Estate Surveyors, Construction Managers, Planners and Architectural Technologists).</p> <p>The culmination of work conducted during the module will produce a group report and bid proposal for a client on a new residential scheme. The client will be a local architectural practice who will provide the BIM models, the design brief and site visit to assist students with producing the coursework.</p> <p>There are three interrelated aspects of the project coursework, namely: i) defining the coursework itself (and practitioner support available for such); ii) the site visit which will expand the student's knowledge of digital construction in practice; and iii) coursework assessment and feedback.</p>	

7	Module Learning Outcomes	
	On successful completion of the module, students will be able to:	
	1	Identify and apply current UK development standards on a residential BIM project.
	2	Establish an understanding of integrated digital project delivery for all discipline specific programmes.
	3	Employ key competencies for effective professional practice with clients.

8	Module Assessment		
Learning Outcome			
	Coursework	Exam	In-Person
1-3	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	