

Module Title:	BIM Management Process
Language of Instruction:	English
Credits:	5
NFQ Level:	7
Module Delivered In	1 programme(s)
Teaching & Learning Strategies:	Lectures Practical's Private study Lecture format utilised to provide theoretical instruction in BIM software tools.
Module Aim:	It is the aim of this module to equip practitioners with the requisite knowledge and tools to ensure that information is organized and controlled during the construction procurement process and throughout the lifecycle of the building, in a manner that is as efficient and supportive as possible, based on the exploitation and use of BIM models and tools.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Evaluation of Model - Interact with, evaluate & interrogate BIM models to derive relevant 4D/5D/6D outputs using appropriate software tools. Insight into how BIM tools can be used throughout the building life cycle, beyond the design and documentation. Use BIM models to support construction techniques, construction planning, cost and quantity feedback, fabrication, and facilities management
LO2	Process/Collaboration - Learn and evaluate the interaction processes involved in designing, constructing and managing a building through use of BIM models and data sets, including the importance of collaborative working between disciplines nationally and internationally and influence/apply techniques and competencies to working collaboratively through BIM.
LO3	Management - Critically analyse and select BIM management techniques to achieve the desired deliverables/handover and performance outcomes, through project, facilities and operations management, taking into account their social and economic global impacts.
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

Module Content & Assessment

Indicative Content

REVIT / BIM Technical

• The concept of through - 3D models, 3D validation models, 3D model take-off, 3D digital survey models, BIM models maintenance, 2D CAD drafting, 2D CAD drawing from a 3D BIM model, 4D/5D modelling plan drawings, Schedules, Room numbering diagrams, Colour filled diagrams, Bracing diagrams, Isometric building plans, Spool drawings, Employers Information Requirements (EIR), Project Information Requirements (PIR), Clash prevention, Clash detection reports, Visualisations: renders and animations, Virtual tours: walkthroughs, fly-throughs, BIM Execution plan (BEP), BS (PAS) 1192 — Parts 1 to 5 or BS ISO 19650, Classifications, Digital Plan of Work (describing level of detail — LoD/CIC Work Stages), Intelligent 3D libraries, Asset performance optimisation, COBie (Construction Operations Building Information Exchange)

BIM Implementation

• Building industry challenges and opportunities • The business value of BIM and integrated design • BIM deployment strategies • Design collaboration • Barriers to adoption • BIM for Contractors • BIM for Facilities Management • Lessons from early adoption

Assessment Breakdown

%

Project

100.00%

No Continuous Assessment

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	• Formative assessment given through one-to-one reviews/tutorials and group/class 'crits' & reviews • Structured marking of projects as continuous assessment, involving allocation of marks for: - Final drawings, details, specifications, schedules, reports, presentations and posters 100%	1,2,3	100.00	End-of-Semester

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	12 Weeks per Stage	4.00
Estimated Learner Hours	12 Weeks per Stage	6.50
Total Hours		126.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_CMOPB	Bachelor of Science (Honours) in Construction Management	7	Mandatory