

MODULE DESCRIPTOR

Module Title

BIM and Design Management

Reference	SU2056	Version	1
Created	April 2023	SCQF Level	SCQF 8
Approved	June 2023	SCQF Points	30
Amended		ECTS Points	15

Aims of Module

To develop a broad professional working understanding of management issues relating to the design process relating to the built environment and how digitization and design management can enhance the delivery of small to medium sized projects.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Show understanding of how BIM impacts on the design process in comparison to existing work practices within the construction industry and/or the workplace.
- 2 Distinguish critically the current BIM processes both in terms of technological functionality and design management
- 3 Use a range of BIM related tools to support the design process (of existing / new build projects or small to medium sized projects)
- 4 Conclude the knowledge of industry standards around BIM and its application.
- 5 Undertake critical reflection on the core contents of the module and relate to their application within the work place.

Indicative Module Content

The current theories of design processes relating to the built environment. Contemporary applications and the stimulus for change. Relationships with procurement systems. Information and planning systems for the structuring and management of the design process in a range of situations including single discipline practice, multi-disciplinary consultancy and production organisations. Team dynamics and group working, the importance of communication in the design process; including dealing with customer and production interfaces, decision-making methods relating to groups. The management of resources in the design process. Students will apply learning to an existing building with moderate complexity to understand the application of BIM process and application. They will develop an understanding of how the various stakeholders share information and collaborate. An understanding of the various BIM levels of various stakeholders is understood.

Module Delivery

The module is delivered in Blended Learning mode using structured online learning materials/activities and directed study, facilitated by regular online tutor support. Workplace Mentor support and work-based learning activities will allow students to contextualise this learning to their own workplace. Face-to-face engagement occurs through annual induction sessions, employer work-site visits, and modular on-campus workshops.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	30	N/A
Placement/Work-Based Learning Experience [Notional] Hours	240	N/A
TOTAL	300	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>	300	

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4, 5
Description:	Project based coursework based on individual components of applied knowledge. Coursework submitted as a portfolio or report comprising scholarly activity, research and graphic content.				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The overall module grade is based on 100% weighting of Component 1 (portfolio). An overall minimum grade D is required to pass the module. Non-submission will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 Journal: Design Studies.
- 2 Journal: Architectural Engineering and Design Management.
- 3 Chen, S. 2018, The Design Imperative: The Art and Science of Design Management, The Design Imperative: The Art and Science of Design Management, Springer International Publishing.
- 4 Brown, T., Clayton M.C., Nooyi, I., Govindarajan, V. (2020), On Design Thinking, HBR's 10 must reads on Design Thinking, Harvard Business School Publishing Corporation.