

Module Title Digital Design Keywords Parametric Modelling, Interoperability, Design Team Collaboration, , Building Information Modelling (BIM), Project Data Modelling	Reference	SU217
	SCQF	SCQF
	Level	11
	SCQF Points	15
	ECTS Points	7.5
	Created	September 2004
	Approved	September 2004
	Amended	August 2009
	Version No.	3

This Version is No Longer Current

The latest version of this module is available [here](#)

Prerequisites for Module

None, in addition to course entry requirements.

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To provide the student with the ability to identify and appropriately apply best practice with regard to new and emerging working practices at the conceptual and detailing stages of a digital design based project.

Mode of Delivery

This module is delivered in 2 modes:

Distance learning mode (ODL).

The delivery is based upon self-directed learning from web-based materials. The delivery of this module will be backed by online support in the form of online topical workshops, case studies, moderated discussion forums and live chat sessions.

Taught Mode (T). The module is delivered in taught mode by lectures, interactive workshops, case study seminars and directed self-study.

Assessment Plan

Learning Outcomes for Module

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

- 1.Appraise new and emerging working practices in conceptual and detailed project design in Architecture based upon the digital paradigm.
- 2.Apply current working practices and understand how such practices are likely to develop in the near future.
- 3.Explore and evaluate innovative methods of procurement, specification and manufacturing using digital modelling.

Indicative Module Content

New and emerging trends in digital conceptual design, theory and practice; architectural conceptual design, including an historical and philosophical background; exploration of digital tools available at the conceptual and detail design stages; parametric modelling at the detail design stage; interoperability; design team collaboration, including a consideration of collaborative and interactive virtual design environments; building information modelling (BIM); project data modelling.

Indicative Student Workload

	Learning Outcomes Assessed
Coursework	1,2,3

Component 1: Delegates are required to submit two pieces of coursework.

Coursework one will comprise of personal research and an essay into a relevant topic identified during the presentation of the module relating to learning outcome 2.

Coursework two will comprise of a report based upon a delegate centred problem related to learning outcomes one and three.

Indicative Bibliography

- 1.Eastman, C.M., 1999. Building product Models: Computer Environments Supporting Design and Construction. CRC Press LLC.
- 2.Kolarevic, B., 2003. Architecture in the Digital Age: Design and Manufacturing. Spon Press.
- 3.Peng, C., 2003. Design through Digital Interaction. Intellect Books.
- 4.Lawson, B. (1997). How Designers Think. Architecture Press. Oxford.
- 5.BRAWNE, M. (1992). From Idea to Building, Oxford: Butterworth-Heinemann Publishers.
- 6.Krygiel, E.; Demchak, G. and

	Full	Distance	
<i>Contact Hours</i>	Time	Learning	
Assessment	10	10	Dzambazova, T (2007). Introducing Revit Architecture 2008: BIM for Beginners, John Wiley & Sons Publishers. (ISBN-10: 0470126523)
Lectures/ Seminars	24	0	7.Szalapaj, P. 2005. Contemporary architecture and the digital design process, Architectural Press. (ISBN- 0750657162)
<i>Directed Study</i>			
Directed Study	66	100	
<i>Private Study</i>			
Private Study	50	40	