

Title:	Revit and BIM	APPROVED
Long Title:	Revit and BIM in Architecture	
Module Code:	ARCH8027	
Credits:	5	
NFQ Level:	Advanced	
Field of Study:	Architecture & Urban Environment	
Valid From:	Semester 1 - 2015/16 (September 2015)	
Module Delivered in	2 programme(s)	
Module Coordinator:	KATHERINE KEANE	
Module Author:	KATHERINE KEANE	
Module Description:	This module will provide comprehensive investigations into graphic representation and communication with REVIT for Architecture including the skills, procedures and commands required to produce 2D/3D virtual building models using building modelling software to professional standards, presentation in 2D formats and fully rendered photorealistic 3D images, BIM as a design and production information tool in developing parametric models and collaborative BIM drawing information coordination and integration within the design team	
Learning Outcomes		
On successful completion of this module the learner will be able to:		
LO1	Apply computer commands in the production of a virtual model.	
LO2	Produce annotated 2D drawings.	
LO3	Produce a 3D virtual building model to professional standards.	
LO4	Develop photo realistic images of virtual models.	
LO5	Develop production information for project specific schedules and legends.	
LO6	Utilise the digital model to extract and elaborate construction information for project delivery.	
LO7	Integrate various parametric models and co-ordinate information.	
Pre-requisite learning		
Module Recommendations		
This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named CIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).		
No recommendations listed		
Incompatible Modules		
These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.		
10634	ARCH6050	REVIT Architecture
Co-requisite Modules		
No Co-requisite modules listed		
Requirements		
This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed. You may not enrol on this module if you have not acquired the learning specified in this section.		
No requirements listed		
Co-requisites		

No Co Requisites listed

Module Content & Assessment

Indicative Content
Overview REVIT Architecture and Building Information Modelling.
REVIT Interface Working with Revit Interface, commands, terminology.
Modelling Modelling commands, placing system family elements e.g. walls, curtain walls, floors, roofs, stairs, component families etc.
Modify Modifying commands - delete, trim, rotate, editing families, light and shadow, material application, etc.
Properties Working with properties, parameters, constraints, etc.
2D Representing virtual models in 2D architectural formats.
Sheet Layout Working with scales, visibility graphics, hatches, line weights, printing commands.
Export Exporting Revit drawings into other computer programmes, overlays with AutoCAD for 2D detailing.
Production Information Production information drawings.
3D 3D views for presentation, analysis, inter discipline coordination.
Legends, Schedules Creating project specific legends and schedules.
Interoperability Design development, coordination of drawings within the design team, construction drawing development, coordination within the building construction process.

Assessment Breakdown	%
Course Work	100.00%

Course Work				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Virtual model, 2D annotated drawing	1,2	20.0	Week 4
Project	3D virtual building model, photo realistic images.	3,4	30.0	Week 8
Project	Production information, project specific schedules and legends, parametric models, information coordination.	5,6,7	50.0	Sem End

No End of Module Formal Examination

Reassessment Requirement
Coursework Only <i>This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.</i>

The institute reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time

<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Directed Learning	Software instruction	4.0	Every Week	4.00
Independent & Directed Learning (Non-contact)	Completion of assignments	3.0	Every Week	3.00
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				0.00

Workload: Part Time

<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Tutorial	Software instruction	4.0	Every Week	4.00
Independent & Directed Learning (Non-contact)	Completion of assignments	3.0	Every Week	3.00
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				4.00

Module Resources
<i>Recommended Book Resources</i>
<ul style="list-style-type: none"> • James Vandezande, Phil Read, Eddy Krygiel 2012, <i>Mastering Autodesk Revit Architecture 2012</i>, Sybex [ISBN: 9780470937495] • Chuck Eastman, Paul Teicholz, Rafael Sacks, Kathleen Liston 2011, <i>BIM Handbook</i>, 2nd Ed., Wiley [ISBN: 9780470541371]
<i>This module does not have any article/paper resources</i>
<i>Other Resources</i>
<ul style="list-style-type: none"> • Website:: Autodesk 2014, <i>Autodesk Revit</i> http://www.autodesk.co.uk • Website/licence: National Building Specification (NBS) 2015, <i>NBS Create BIM tool</i>, NBS, London • Software licence: Autodesk <i>AUTODESK REVIT ARCHITECTURE VERSION R15</i>, Autodesk

Module Delivered in			
Programme Code	Programme	Semester	Delivery
CR_CARCT_9	<u>Master of Science in Architectural Technical Design</u>	1	Elective
CR_DINAR_9	<u>Master of Science in Interior Architecture</u>	1	Elective