

APPROVED**ARCH6067: 3D Visualization 1****Module Details**

Module Code:	ARCH6067
Title:	3D Visualization 1 APPROVED
Long Title:	3D Visualization 1
NFQ Level:	Fundamental
Valid From:	Semester 1 - 2014/15 (September 2014)
Duration:	1 Semester
Credits:	5
Field of Study:	5810 - Architecture & Urban Environment
Module Delivered in:	4 programme(s)
Module Description:	This module encompasses creative digital technology with the emphasis on 3D design and virtual modelling. It provides an understanding of system and software capabilities and the instruction and exploration of creative digital software as used in the architecture/games/product design industries. This module is designed to develop the student's ability to express architectural design concepts in the preproduction phase through previsualisation.

Learning Outcomes	
On successful completion of this module the learner will be able to:	
#	Learning Outcome Description
LO1	Create complex virtual models in a 3D environment.
LO2	Illustrate the fundamentals of the 3D design process, planning, modelling, use of cameras, lighting, texturing, rendering, resolution, file types and image formats.
LO3	Integrate architectural 3D design applications in an architectural project.
LO4	Render still images for use in previz concept boards and presentations.
Dependencies	
Module Recommendations	
Incompatible Modules	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements	
Fundamental skills in AutoCAD and 3-D	

Indicative Content
3D Software Programmes 3D software tools (Autodesk 3D Max)
Integration Importing/Exporting files to and from the program mimicking the 'pipeline' or workflow that exists in a real world architectural project.
Commands 3D modelling and rendering to express architectural design concepts.

Module Content & Assessment

Assessment Breakdown	%
Coursework	100.00%

Assessments

Coursework			
Assessment Type	Project	% of Total Mark	50
Timing	Week 6	Learning Outcomes	1,2
Assessment Description Upload images on a weekly basis to an online blog of choice, documenting the following: Planning, modelling.			
Assessment Type	Project	% of Total Mark	50
Timing	Sem End	Learning Outcomes	3,4
Assessment Description Finalisation of model design using lighting and rendering of an existing building.			
No End of Module Formal Examination			
Reassessment Requirement			
Coursework Only This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.			

Module Workload

Workload: Full Time					
Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours
Lab	Contact	Software instruction	Every Week	3.00	3
Independent & Directed Learning (Non-contact)	Non Contact	Software application assignments	Every Week	4.00	4
Total Hours					7.00
Total Weekly Learner Workload					7.00

Workload: Part Time					
<i>Workload Type</i>	<i>Contact Type</i>	<i>Workload Description</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>	<i>Hours</i>
Lab	Contact	Software instruction	Every Week	3.00	3
Independent & Directed Learning (Non-contact)	Non Contact	Software application assignments	Every Week	4.00	4
Total Hours					7.00
Total Weekly Learner Workload					7.00
Total Weekly Contact Hours					3.00

Module Resources

<i>Recommended Book Resources</i>
Dariush Derakhshani, Randi L. Derakhshani,. (2010), Introducing Autodesk 3ds Max 2011, 1st. [ISBN: 978-0470916155].
<i>This module does not have any article/paper resources</i>
<i>Other Resources</i>
http://students.autodesk.com/ . http://www.youtube.com/user/3dsMaxHowTos . http://www.mrmaterials.com/ .

Module Delivered in

Programme Code	Programme	Semester	Delivery
CR_CARCT_8	<u>Bachelor of Science (Honours) in Architectural Technology</u>	-1	Elective
CR_CARCT_8	<u>Bachelor of Science (Honours) in Architectural Technology</u>	-1	Elective
CR_TARCH_7	<u>Bachelor of Science in Architectural Technology</u>	-1	Elective
CR_TARCH_7	<u>Bachelor of Science in Architectural Technology</u>	-1	Elective