APPROVED

ARCH7030: SketchUp

Module Details

Module Code:	ARCH7030
Title:	SketchUp APPROVED
Long Title:	SketchUp
NFQ Level:	Intermediate
Valid From:	Semester 1 - 2014/15 (September 2014)
Duration:	1 Semester
Credits:	5
Field of Study:	5810 - Architecture & Urban Environment
Module Delivered in:	2 programme(s)
Module Description:	This module covers the commands needed for 3D modelling and rendering of buildings and landscape elements. Using SketchUp as a design tool professional architectural visuals will be created using rendering and image editing techniques. Layout and presentation techniques will also be explored in order to create 3D visualisations for documents and portfolios.

Learning Outcomes

On successful completion of this module the learner will be able to:

#	Learning Outcome Description
LO1	Apply the fundamentals of the 3D design process (modelling, rendering, resolution, creating & editing materials creating & managing styles, views and layout).
LO2	Create virtual models in a 3D environment.
LO3	Apply advanced 3D rendering techniques for buildings and site modelling.
LO4	Render still images for use in present boards, documents & portfolios.

Dependencies

Module Recommendations

Incompatible Modules

No incompatible modules listed

Co-requisite Modules

No Co-requisite modules listed

Requirements

No requirements listed

Indicative Content

Commands
Exercises aimed at becoming proficient at 3D modelling and rendering. Setting preferences, building scenes, pushing and pulling faces into 3D, creating 3D text, measuring and labelling models, creating, editing, and adjusting materials, projecting maps onto curved objects modelling with floor plans, rendering a scene, geolocating models with Google Maps, modelling in Photo Match, hiding objects dynamically, creating solids, exporting objects for rendering.

3D Software Programmes
Using SketchUp tools effectively and becoming confident at working in a 3d virtual environment. Understanding the process of exporting and importanting for different software packages.

Visualisation Techniques
Rendering, image editing and layout techniques will be explored to create professional 3D visuals for portfolio and document presentations.

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
Creation of a virtual 3D environment (building & site)

Assessment Type	Project	**% of Total Mark**	50
Timing	Sem End	**Learning Outcomes**	1,3,4

Assessment Description
Rendering of 3D model, layout and presentation techniques

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	Every Week	4.00	4
				Total Hours	7.00

Total Weekly Learner Workload	7.00
Total Weekly Contact Hours	3.00

Workload: Part 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	Every Week	4.00	4
				Total Hours	7.00
				Total Weekly Learner Workload	7.00
				Total Weekly Contact Hours	3.00

Module Resources

Recommended Book Resources

Aidan Chopra. (2011), Google SketchUp 8 For Dummies, 1st. John Wiley & Sons, New Jersey, [ISBN: 978-0470916827].

Supplementary Book Resources

Daniel Tal. (2009), Google SketchUp for Site Design, 1st. John Wiley & Sons, New Jersey, [ISBN: 978-0470345252].

Robin de Jongh. (2010), SketchUp 7.1 for Architectural Visualization, 1st. Packt Publishing, Birmingham, Uk, [ISBN: 978-1847199461].

This module does not have any article/paper resources

Other Resources

Website, SketchUp,
http://www.lynda.com/search?q=sketchup&a mp;x=36&y=5

Module Delivered in

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