Module Title:	Design Software and Information Technology 1
Language of Instruction:	English

Credits:	5

NFQ Level:	6

Module Delivered In	2 programme(s)

Teaching & Learning Strategies:	Studio-based project & problem-based learning to develop the learners' problem- solving methodology to an advanced level, in an architectural technology context, with one-to-one reviews/tutorials and group/class 'crits' to provide student feedback • Group/teamwork utilised as appropriate • Lecture format utilised to provide theoretical instruction in Revit/Cad/Word/Excel/PowerPoint software tools.

Module Aim:	The aims of this module is. To introduce students to BIM and Revit Architecture software, information and communication technologies in order to communicate effectively in a modern technical environment.

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	REVIT • Introduction to Revit Architecture as a digital design programme to produce a variety of architectural drawings generally following a set of architectural drawing conventions. Learn the process of preparing good quality working drawings through Revit.
LO2	PHOTOSHOP: Photoshop getting started with Photoshop, exploring the Interface Layout of Photoshop and exploring the main features of Photoshop.
LO3	SketchUp • Introduction to SketchUp as a digital design programme to produce a variety of drawings generally following a set of design drawing conventions.
LO4	INFORMATION TECHNOLOGY • To describe the main features of a computer system and the use of computer software as an architectural and communication tool. Printing, scanning, create PDF and dwg drawings, emails word and excel.
LO5	INFORMATION TECHNOLOGY • To create, edit and print a variety of word processing, database and spreadsheet documents and to prepare PowerPoint slide presentations.

Pre-requisite learning		
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*		
6675	TECH H1507	Information Technology & CAD
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*		
No incompatible modules listed		
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.*		
No requirements listed		

Module Content & Assessment

Indicative Content

REVIT
Learn and organise the Revit user interface, learn keyboard and mouse control functions, Create new drawing file from template ,Learn and customise the right mouse button ,Learn to create floors, walls ceilings and roofs. Learn to use annotation dimensions filled regions. Control how the different views are to display by understanding the visibility graphics of a drawing, Control the use of views and sheets Control the Revit display and plotting environments, Share data working with other applications Word and Excel Extract a coordinate list from a survey. Import the dwg coordinate list into Revit, generate a model and export the information in AutoCAD maintaining a real- world scale. Scan an ordnance survey map or dwg file and scale reference it to real life size using the OS scale bar as reference. Produce good quality working drawings of residential projects fully annotated and dimensioned, using A4, A3, A2 and A1 sheet with multiple views on sheets. Create good quality working drawings of a site plan and longitudinal section of a residential project showing services, drainage, access, and landscaping fully annotated and dimensioned.

REVIT (BIM)
Produce a variety of architectural drawings generally following a set of architectural drawing conventions to produce good quality working drawings plans sections elevations, vertical and horIzontal details live callout detail views annotated and dimensioned through the use of Revit Architecture.

INFORMATION TECHNOLOGY
MS Word 2013: • The Word window: Basics • Formatting Paragraphs and Working with Styles • Report writing :Adding Bullets and Numbers, using References, Setting Page Layouts and Printing Documents MS Excel 2013: • Entering Text and Numbers • Entering Excel Formulas and Formatting Data • Creating Excel Functions, Filling Cells, and Printing • Creating charts MS PowerPoint 2013: • The PowerPoint Window: Basics • Creating PowerPoint Presentations: Create a Title Slide ,Create New Slides ,Make Changes to ,Apply a Theme ,Run PowerPoint Slide Show • Animations, Transitions, Spell Check, Outline Tab, Slides Tabs, Sorter View, and Printing

Photoshop Essentials
(a) Differentiate between vector and raster file formats (b) organise image using named layers and layer groups (c) using strokes, fills and gradients (d) using transformation tools (e) using layer masks (f) importing and cleaning images, creating shadows and textures (g) using transparencies to create atmosphere and provide realism

Sketchup Essentials
Learn how to build basic geometry, apply materials, and import models from SketchUp's 3D warehouse. Learn the SketchUp interface and learn selection tools such as select, rectangle, scale, materials, Pan, line, move, view, eraser, zoom, circle, paint, orbit, push/pull and offset. Learn navigation tools like orbit pan zoom rotate etc. Learn the modelling window, Menu bar dialog boxes status bar context menus and toolbars for ease of modelling. Learn saving and importing and exporting files.

Assessment Breakdown	%
Project	100.00%

No Continuous Assessment

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	• Formative assessment given through one-to-one reviews/tutorials and group/class 'crits' & reviews • Structured marking of projects as continuous assessment, involving allocation of marks for: - Final drawings, details, specifications, schedules, reports, presentations and posters 100%	1,2,3,4,5	100.00	End-of-Semester

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Lecture	12 Weeks per Stage	4.00
Estimated Learner Hours	12 Weeks per Stage	6.50
	Total Hours	126.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_CGSDC_B	Bachelor of Science (Honours) in Set Design and Construction	1	Mandatory
CW_CGSDC_D	Bachelor of Science in Set Design and Construction	1	Mandatory

	Bachelor of Science (Honours) in Set Design and Construction	1	Mandatory
	Bachelor of Science in Set Design and Construction	1	Mandatory