# INFO C1504: Revit, CAD and Information Technology 2

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| **Module Title:** | Revit, CAD and Information Technology 2 |
| **Language of Instruction:** | English |

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| **Credits:** | 5 |

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| **NFQ Level:** | 6 |

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| **Module Delivered In** | 2 programme(s) |

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| **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. |

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| **Module Aim:** | The aims of this module is: to integrate Revit Architecture (BIM) into Studio Projects. To introduce students to BIM and Revit Architecture software, information and communication technologies in order to communicate effectively in a modern technical environment, to be able create a wide range of working drawings in Revit Architecture. |

| **Learning Outcomes** | |
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| *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 of domestic buildings in Revit. • Create and modify walls,roofs,floors foundations, dimensions, text, draw accurately, layouts, print, and share drawings with others. |
| LO2 | REVIT • Create sheets: plans, elevations, sections, 3D sections, 2d details, 3D details, 3D views and live callout detail views from Revit models. (b) Produce fully detailed working drawings generally following a set of architectural drawing conventions. |
| LO3 | REVIT • Import a coordinate 3d dwg files into Revit and create a terrain a model, generating contours, levels, and sections. • Create good quality working drawings of a site plan and longitudinal section of a private site layout, using your domestic building. • Create, edit and print a wide variety of construction drawings generally following a set of architectural 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 • To use web browsing effectively to extract relevant information. Prepare good quality drawings, reports, letters and graphical presentations for various stages of architectural projects. |

| **Pre-requisite learning** |
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| ***Module Recommendations***<br>*This is prior learning (or a practical skill) that is recommended before enrolment in this module.* |
| No recommendations listed |
| ***Incompatible Modules***<br>*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***<br>*This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.* |
| No requirements listed |

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## Module Content & Assessment

| Indicative Content |
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| **REVIT**<br>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)**<br>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 horlzontal details live callout detail views annotated and dimensioned through the use of Revit Architecture. |
| **INFORMATION TECHNOLOGY**<br>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 |

| Assessment Breakdown | % |
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| 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**

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## 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_CMARC_B | Bachelor of Science (Honours) in Architectural Technology | 2 | Mandatory |
| CW_CMART_D | Bachelor of Science in Architectural Technology | 2 | Mandatory |