

Module Title:	CAD and IT
Language of Instruction:	English
Credits:	10
NFQ Level:	6
Module Delivered In	1 programme(s)
Teaching & Learning Strategies:	Lectures Practicals Private study
Module Aim:	The aims of the module are to; (1) Teach the students how to produce construction drawings using computer software (2) To introduce students to information and communication technology (3) To develop and improve written communication.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	produce considered drawings from given studio briefs.
LO2	to create, edit and print a variety of technical drawings using a CAD system
LO3	to describe the main features of a computer system and the use of computer software as engineering and communication tools and to communicate effectively in a modern technical environment
LO4	to create, edit and print a variety of word processing, database and spreadsheet documents and to prepare a PowerPoint slide presentation & to search the Internet and extract relevant data.
Pre-requisite learning	
Module Recommendations	
<i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements	
<i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

Module Content & Assessment
Indicative Content
(1) Computer Aided Drafting (20 hours lectures, 40 hours practicals)

(a) Introduction to basic CAD concepts using AutoCAD. (b) Basic editing and drawing commands. (c) Enhancing CAD drawings with text, symbols and blocks. (d) Transferring data using the Design Centre. (e) Using Paper Space to print a variety of drawing layouts. (f) Adding and editing dimensions with different dimensioning styles (g) Studio Projects. Students are given studio briefs and sketch designs and are required to produce considered drawings under the direction of a studio master. Plan, Section and Elevation of small single storey domestic dwelling. Section through foundations, external wall and roof. Plan, Section and Elevations of 2 Storey house.

(5) Communication Skills (8 hours lectures, 12 hours practicals)

(a) Elements of communication. (b) Oral communication (interviews, meetings, verbal reporting). (c) Written communication (letters, memos, reports and graphical presentations)

(6) Computers (2 hours lectures, 2 hours practicals)

(a) Overview of the main components in a computer system. (b) Understanding a computer specification.

(7) Document Production (8 hours lectures, 22 hours practicals)

(a) Introduction to word processing, spreadsheet and database concepts and slide presentation using Microsoft Applications. (b) Creation of tables and charts with simple function control. (c) Importing graphics, digital data and clip art into Microsoft applications.

(8) The Internet (2 hours lectures, 4 hours practicals)

(a) The World Wide Web, URLs, Links and Web browsers. (b) Finding information on the Web. Email and Referencing

Assessment Breakdown	%
Continuous Assessment	15.00%
Project	50.00%
Practical	35.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Other	No Description	1,2,3,4	15.00	n/a

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	No Description	1,2,3,4	50.00	Sem 1 End

Practical

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	No Description	1,2,3,4	35.00	Sem 1 End

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		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	30 Weeks per Stage	1.33
Practicals	30 Weeks per Stage	2.67
Estimated Learner Hours	30 Weeks per Stage	1.50
Total Hours		165.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_CMBSE_D	Bachelor of Science in Construction Management with Buildings Services	1	Mandatory