

Module Title:	Construction CAD Studio
Module Code:	BSCS09C
Level:	4
Credits:	15
Pre-Requisites:	None

Module Description:

This module is designed to develop the students' ability to manipulate and present data using two and three dimensional construction drafting and organisational software (Building Information Modelling – BIM). Students will also demonstrate an understanding of how software is being utilised and why it has become prevalent with the Construction Industry.

Indicative Content:

- Construction software overview
- Uses and application of two dimensional computer software to produce construction drawings
- Uses and application of three dimensional computer software to produce construction visualisation models and animations
- Use and application of construction based organisational computer software – BIM
- Evaluation of software

Learning and Teaching Methods:

The module will be delivered through theory based lectures and practical studio sessions. Practical sessions will be used to reinforce knowledge gained through theory. Students will work at their own pace to produce a series of two and three dimensional visualisations of construction plans, sections, elevations and details. Organisational software will be utilised by the students to produce relevant, usable four dimensional Building Information Modules.

Specific Learning Resources:

Use of CAD suite and Autocad, Sketch Up and BIM software

Bibliography

Highly Recommended

Brynes, D. (2009) AutoCAD 2010 for Dummies: Chichester: John Wiley & Sons

Recommended

Race, S. (2012) BIM Demystified. London: RIBA Publishing

Shrock, C.R. (2009) AutoCAD Pocket Reference: Fourth Edition. New York:

Module Specifications: *Schools of Construction & Engineering*

Industrial Press

Shrock, C.R. (2009) *Beginning AutoCAD 2010: Exercise Workbook*. New York: Industrial Press

Module Learning Outcomes

Subject Specific Learning Outcomes

On successful completion of this module you will be able to:

LO	Apply the basic principles and demonstrate competency in using two dimensional construction based CAD software.
LO	Apply the basic principles and demonstrate competency in using three dimensional construction based CAD software.
LO	Apply the basic principles and demonstrate competency in using organisational construction based ICT software – BIM.
LO	Evaluate relevant construction software.

Assessment Title or element	Weighting (%)
Initial drawing portfolio (By Christmas)	20%
Written assignment (Before Easter)	40%
Portfolio of drawings/models (End of academic year)	40%

Information correct at point of publication.