

Module Title:	Civil Engineering Economics & Management
Language of Instruction:	English
Credits:	5
NFQ Level:	7
Module Delivered In	1 programme(s)
Teaching & Learning Strategies:	Lectures Projects Private study Blackboard
Module Aim:	The aims of the module are: (1) to develop a knowledge of the measurement and economics of more advanced civil engineering work; (2) to develop a knowledge of the principles and practice of project management; (3) to teach measurement and estimating skills in relation to civil engineering work; (4) to teach project management skills and the use of appropriate software

Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	use standard methods for measurement and estimating of civil engineering work
LO2	select an appropriate project management technique for a given situation and to justify the selection;
LO3	measure and estimate costs of more advanced civil engineering projects manually and with the use of software;
LO4	prepare and analyse critical path programmes both manually and using appropriate computer software;
LO5	prepare a Health and Safety plan for Design Stage, Construction Stage and Post Construction stage.
LO6	demonstrate an understanding of the parties to a contract under the standard forms of contract

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) Measurement and Estimating Cost of Civil Engineering Work (15 hours lectures, 15 hours practicals)

(a) Measurement of work using current Civil Engineering Standard Method of Measurement and Method of Measurement of Road Works.
(b) Preparation of unit rates for civil engineering work (c) Use of measurement and estimating software including Buildsoft Driving Licence training

(2) Project Management (25 hours lectures, 20 hour practicals)

(a) Roles and responsibilities (b) Theory and process of project management (c) Critical Path techniques (d) Resource management techniques (e) Use of Microsoft Project and other software (f) Human resource management

(3) Safety Management (15 hours lectures)

(a) Health and Safety at Design Stage (b) Health and Safety at Construction Stage (c) Health and Safety at Post Construction Stage

Assessment Breakdown	%
Continuous Assessment	20.00%
Project	20.00%
End of Module Formal Examination	60.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Other	No Description	1,2,3,4,5,6	20.00	n/a

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Project 1 Critical path programme & analysis	2,4	7.00	Sem 1 End
Project	Project 2 Measurement / Estimating project	1,3	7.00	n/a
Project	Project 3 Safety management project	5,6	6.00	n/a

No Practical

End of Module Formal Examination

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	No Description	1,2,3,4,5,6	60.00	End-of-Semester

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	2.00
Practicals	30 Weeks per Stage	1.00
Estimated Learner Hours	30 Weeks per Stage	2.00
Total Hours		150.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_CMHCE_B	Bachelor of Engineering (Honours) in Civil Engineering - Ab Initio	3	Mandatory