

Module Title:	Surveying and Setting Out I
Language of Instruction:	English
Credits:	5
NFQ Level:	6
Module Delivered In	1 programme(s)
Teaching & Learning Strategies:	Lectures Practicals Private study Blackboard
Module Aim:	The aims of the module are: (1) to develop a knowledge of basic surveying techniques; (2) to train the student in field levelling procedures; (3) to introduce the student to surveying software packages. Students must participate in class work, practical work & project work and must achieve a minimum of 50% in these elements of continuous assessment in order to have satisfied the module learning outcomes listed above.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Demonstrate & use the engineering level competently in the area of construction & for collection of data for preparation of contour maps & longitudinal sections;
LO2	Apply surveying techniques for collecting surveying data in basic linear surveying of small sites;
LO3	Use manual drafting and surveying software packages to produce contour maps and longitudinal sections
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) Linear Surveying

(a) Field Procedures (b) Field Obstacles (c) Booking Procedures (d) Ordnance Survey Mapping

(2) Area Computation

(a) By triangulation (b) Simpsons Rule for Area Evaluation (c) Trapezoidal Rule for area evaluation

(3) Engineering Level

(a) Surveying For Height (b) Ordnance datum and Bench Marks (c) Optical Levels (d) Field Procedures (e) Permanent Adjustments (f) Longitudinal Sections (g) Contour Maps (h) Use of level for Building work, drainage and sewage

(4) Computer Application

(a) Introduction to software packages for production of Contour maps, sections and digitised maps

Assessment Breakdown

%

Continuous Assessment

100.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Other	Students will participate in and complete a number of surveying practical's and produce detailed write-ups on same.	1,2,3	100.00	n/a

No Project

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		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	12 Weeks per Stage	1.00
Practicals	12 Weeks per Stage	3.00
Estimated Learner Hours	12 Weeks per Stage	6.50
Total Hours		126.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_CMCIV_D	Bachelor of Engineering in Civil Engineering	2	Mandatory