

Module Title:	Dissertation
Credits:	10
NFQ Level:	8
Module Delivered In	1 programme(s)
Teaching & Learning Strategies:	Independent student learning Lectures
Module Aim:	The dissertation provides students with the opportunity to carry out a substantial piece of individual research on a Civil Engineering topic. The dissertation challenges students to review relevant literature on their chosen topic, devise and implement a research plan to accomplish project objectives, and to effectively demonstrate and communicate their understanding of the subject matter. The aims of this module are to provide students with the opportunity: 1. to apply knowledge and skills learned on the course to the solution of a civil engineering problem; 2. to extend their knowledge, expertise and skills in their chosen topic; 3. to gain experience at managing a dissertation; 4. to develop written and verbal communication skills; 5. to demonstrate their ability to carry out an independent piece of research and development work.

Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Define, plan and complete a substantial individual research project.
LO2	Apply theory and techniques learned on the programme to the in-depth study of a civil engineering topic
LO3	Demonstrate evidence of independent investigation, initiative, understanding of the chosen subject matter and the principles being applied.
LO4	Effectively communicate the main elements of their research in a logical, precise and coherent manner both written and orally.

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

Dissertation Topic

Within the first four weeks of Semester 1 students will decide, in consultation with course lecturers, on a topic for their dissertation. Each student will be assigned a supervisor based on the topic. The topic of research must be in line with course content and topics arising from student work placement will be considered. Whatever form it takes, a dissertation will normally include all of the following elements: • A literature review • Use of internal and external resources; • Research element; • Theoretical analysis; • Validation of new and emerging techniques researched • Interpretation of results. The balance of elements in each dissertation will depend on the exact topic. While it is expected that each dissertation will contain a literature review, a dissertation based entirely on a literature review will not be acceptable but should include some element of analysis, whether technical, financial or both. Equally an analytical dissertation must contain elements of validation and interpretation.

Research Plan

Before the end of week 6 of Semester 1 it is expected that, in consultation with their supervisor, students will prepare a detailed research plan. This will include: • A statement of the objectives to be achieved; • An outline list of the publications of be reviewed; • Suggestions on contacts to be made with external bodies; • An outline of the research methodology to be applied; • An outline on any relevant analysis to be carried out; • A project timeline; • Suggestions on how the outcome of the work could be tested or validated; • A statement identifying risks that could prevent the successful completion of the project and what mitigation measures will be put in place.

First Presentation

Towards the end of the first semester students will be make presentations to staff and students on their chosen dissertation topic, giving an outline of their chosen topic, research plan and work to date.

Final Presentation

Towards the end of the second semester students make their final presentations which will describe the context, objectives, methodologies, results and conclusions of their research.

Written Report

At the end of the second semester students will be expected to submit to their supervisor their final written report. The report will be limited to 50 pages long and contain no more than 16,000 words, inclusive of the preliminary pages, the references, bibliography and appendices.

Dissertation Supervision

Each student will be assigned a designated supervisor engage who will will coordinate overall dissertation work and will distribute an agreed Dissertation Briefing Document to each student.

Assessment Breakdown	%
Project	100.00%

No Continuous Assessment

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Preliminary presentation: 5%. Final presentation: 15%. Dissertation report: 80%.	1,2,3,4	100.00	n/a

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>
Estimated Learner Hours	24 Weeks per Stage	10.42
Total Hours		250.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_CMHCE_B	Bachelor of Engineering (Honours) in Civil Engineering	8	Mandatory