

<b>Module Title:</b>	Project (Digital Innovation / Emerging Technology)
<b>Language of Instruction:</b>	English
<b>Credits:</b>	20
<b>NFQ Level:</b>	8
<b>Module Delivered In</b>	No Programmes
<b>Teaching &amp; Learning Strategies:</b>	Learners are expected to devote about 10 hours per week to their project work. Staff time is allocated to each project.
<b>Module Aim:</b>	The project is a capstone module providing learners with the opportunity to integrate accumulated learning and apply a range of techniques to deliver a computing artefact. The project will involve the analysis of a substantive issue or opportunity and the production of an innovation solution. It is also envisaged that the learner has the option to produce a useful artefact which incorporates an emerging technology that will enhance the learners' future job prospects.

Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Prepare a project proposal by identifying a set of requirements and defining the scope of the project.
LO2	Develop a detailed project plan and manage the project to successful completion by delivering an artefact or system.
LO3	Demonstrate independent and self-motivated learning.
LO4	Critically evaluate the work undertaken and to place it in the context of digital innovation.
LO5	Produce a project report with a corresponding presentation and demonstration.

Pre-requisite learning	
<b>Module Recommendations</b> <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
<b>Incompatible Modules</b> <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
<b>Co-requisite Modules</b>	
No Co-requisite modules listed	
<b>Requirements</b> <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

#### Project Scope

It is ideally anticipated that learners will have generated their own ideas from Work Placement in the previous stage (or personal experiences, interests etc.) However, learners will also be provided over the duration of the first 4-6 weeks with seminars, workshops or guest lectures on relevant (and emerging) topics. Current research and state of the art will be discussed with learners. Sample topics include (but not limited to) IoT, Data Analytics, Artificial Intelligence, Machine Learning, AR/VR/MR, Blockchain and Cryptocurrencies, Smart Devices, Wireless Sensor Networks, GIS and GPS systems, Autonomous Systems, FinTech and InsureTech.

#### Project Work

Students are required to complete a substantial project culminating in the production of an operational computing artefact (or an equivalent research orientated artefact) along with a project report, presentation and demonstration. All projects should contain, at least, the following four elements: research, design, implementation and evaluation. The selection of the project will be ideally informed by work placement or industry partners so as to enhance the relevance of the project. Staff will be assigned to support the learners.

#### Assessment

Assessment will be carried out by the project supervisor and a second reader. The assessment will be based on a critical review of the artefact produced and the quality of the reports. The written reports will contain learners reflective assessment of their own progress, lessons learned and a consideration of the decisions made. Assessment will also be made of the learners' individual presentation skills and demonstration of their artefact.

Assessment Breakdown	%
Continuous Assessment	100.00%

### Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Oral Examination/Interview	Elevator Pitch style Project Proposal	1,2	10.00	Week 8
Written Report	Interim Report	1,2,3	10.00	Week 20
Project	Evaluation of artefact and/or system deliverable.	2,3,4	50.00	Sem 2 End
Written Report	Final Project Report	4,5	20.00	Week 28
Presentation	Presentation and Demonstration	3,4,5	10.00	Sem 2 End

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		
Workload Type	Frequency	Average Weekly Learner Workload
Estimated Learner Hours	Every Week	10.00
Laboratory	Every Week	1.00
Total Hours		11.00

