

Title	Computer Science Project
Long Title	Computer Science Project
Credits	10
NFQ Level	8
Module Author	Eoin O'Regan

Module Description:

This module develops within the learner the knowledge, know-how and skills, and competences required to successfully complete a computer science project in accordance with an approved plan. The module requires the learner either individually or as part of a team to develop, implement and critically assess a detailed methodology to address a defined problem within a prescribed time-frame. The learner is expected to be self motivated whilst working under direction of a project supervisor and to communicate the process and outcomes of their work in a style and manner appropriate for professional practitioners in the discipline.

Learning Outcomes

On successful completion of this module the learner will be able to:

- LO1** Undertake a comprehensive review of relevant and appropriate literature to determine current knowledge in the project area.
- LO2** Review suitable methodologies with the aim of selecting and adapting an appropriate methodology for a computer science project.
- LO3** Develop a project plan that will meet the needs of identified stakeholders.
- LO4** Systematically review and adapt the methodology in response to practical, real-world constraints.
- LO5** Use appropriate written and oral communication skills required of the professional practitioner to convey the underlying message of the project.
- LO6** Critically assess the project outcomes.

Indicative Content

Literature Review

Gather, critically analyze and reference research and other appropriate literature in the areas of computer science covered as part of the course.

Core Problem

Formulate the core research question(s) to be addressed by the project.

Development of Methodology

Formulate and assess viable methodologies and technologies to address the identified research question(s) with a view to identifying the most appropriate methodology and technology(ies).

Project Planning & Implementation

Supervised self-directed learning, utilizing the identified methodologies and technologies, that addresses the learning outcomes specified for the module and which draws on the curriculum content as a whole.

Written Report

Write a professional report in a manner appropriate to the discipline.

Oral Presentation

Making an oral presentation on the undertaken project and its research outcomes.

Course Work

<i>Assessment Type</i>	<i>Assessment Description</i>	<i>Outcome Addressed</i>	<i>% of Total</i>	<i>Assessment Date</i>
Written Report	Interim written report with project plan and outline of initial literature review and progress made towards the development of a methodology or analysis and design.	1, 2, 3	20.0	Week 5
Presentation	Oral and / or poster presentation on the project.	1,2,3,4,5,6	20.0	Sem End
Written Report	Comprehensive written report detailing and assessing research outcomes and / or analysis and design of the project.	1,2,3,4,5,6	30.0	Sem End
Other	Mark associated with initiative, decision making, application and demonstration / performance / implementation of project outcomes.	1,2,3,4,5,6	30.0	Sem End
No End of Module Formal Examination				

Assessment Breakdown

Coursework	%
	100

Re-Assessment Requirement

Coursework Only

This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.

Workload – Full Time

<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
<i>Lecturer-Supervised Learning (Contact)</i>	Supervision provided by regular meetings with project supervisor.	0.5	Every Week	0.50

<i>Independent & Directed Learning (Non-contact)</i>	Independent research and development.	13.5	Every Week	13.50
		<i>Total Hours</i>		14.00
		<i>Total Weekly Learner Workload</i>		14.00
		<i>Total Weekly Contact Hours</i>		0.50

Workload – Part Time

<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
<i>Lecturer-Supervised Learning (Contact)</i>	Supervision provided by regular meetings with project supervisor.	0.5	Every Week	0.50
<i>Independent & Directed Learning (Non-contact)</i>	Independent research and development.	13.5	Every Week	13.50
		<i>Total Hours</i>		14.00
		<i>Total Weekly Learner Workload</i>		14.00
		<i>Total Weekly Contact Hours</i>		0.50

Recommended Book Resources

- **Bryan Greetham 2014, *How to Write Your Undergraduate Dissertation*, 2nd ed. Ed., Palgrave Macmillan [ISBN: 9781137389763]**
- **Gary Thomas 2011, *Doing Research*, Palgrave Macmillan [ISBN: 9780230290167]**

Supplementary Book Resources

- **Kate Williams 2013, *Planning Your Dissertation*, Palgrave Macmillan [ISBN: 9781137327949]**

This module does not have any article/paper resources

Other Resources

- **Website: The Irish Centre for Cloud Computing & Commerce *Core Research Areas***
<http://www.ic4.ie/research>