



Title:	AI Research Project APPROVED	
Long Title:	AI Research Project	
Module Code:	COMP9068	
Duration:	1 Semester	
Credits:	15	
NFQ Level:	Expert	
Field of Study:	Computer Science	
Valid From:	Semester 1 - 2018/19 (September 2018)	
Module Delivered in	1 programme(s)	
Module Coordinator:	Sean McSweeney	
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Module Description:	In this module the learner is expected to undertake independent study. As part of this self-directed learning the student will employ various research methods and will develop and implement their proposed and approved project applied to the field of Artificial Intelligence (AI). The student will be expected to disseminate the research work and research outcomes through an oral presentation, poster presentation and submission of a dissertation.	
Learning Outcomes		
<i>On successful completion of this module the learner will be able to:</i>		
LO1	Plan and implement self directed learning to further knowledge and understanding of an unfamiliar and/or ill defined problem applied to the field of Artificial Intelligence (AI).	
LO2	Establish a contribution to the development of knowledge in the specific discipline.	
LO3	Apply appropriate written and oral communication skills and synthesise the research work in the form of presentation, abstracts, executive summaries, technical papers and a dissertation.	
LO4	Prepare a dissertation that details and evaluates the work undertaken and justifies the conclusions reached.	
Pre-requisite learning		
Module Recommendations		
<i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named CIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i>		
13405	COMP9011	Research Practice & Ethics
Incompatible Modules		
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.</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. You may not enrol on this module if you have not acquired the learning specified in this section.</i>		
No requirements listed		
Co-requisites		
No Co Requisites listed		

Module Content & Assessment

Indicative Content

Content

A mandatory requirement of the programme is the development of a research project in an area that complements the student's continuing professional development. Prior to taking this module, the student will have selected their research question which will be further developed, investigated and implemented as part of this module. Considerable latitude, will be given to the student in the choice of subject material and medium for the project, thereby allowing assessment of selectivity and creativity. The project is used to assess: the learner's initiative; ability to learn autonomously and to conduct research; range of know-how and skill; the judgement exercised by the learner in approaching the brief; level of analysis and synthesis leading to conclusions. Creative competences and the ability to organise material are tested in the oral presentation and report.

General

Supervised self directed learning that addresses the learning outcomes, draws on the overall curriculum content and critically evaluates a specific research problem.

Oral and poster presentation

Disseminate the research work and outcomes and communicate effectively, through oral and poster presentations. This will include an in-depth question and answer session.

Dissertation

Present a dissertation which communicates and disseminates the research work undertaken and the research outcomes developed. The dissertation should include the analysis undertaken, results of the work and how this work contributes to furthering knowledge in the specific field of research. The learner must demonstrate a deep and fundamental understanding of the specific research problem addressed.

Assessment Breakdown

	%
Course Work	100.00%

Course Work

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Written Report	Submit a mid term report and present their work summarising the workplan with the aim of demonstrating project progress and deliverables achieved and intended scientific contribution to the field of study (attendance at interview may be required).	1,2,3	20.0	Week 6
Written Report	Dissertation submission outlining the topic, research question and methodology, project, findings and plan. The student will also be expected to demonstrate their project through a presentation and/or demonstration.	1,2,3,4	80.0	Sem End

No End of Module Formal Examination

Reassessment Requirement

Coursework Only

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

The institute reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecturer-Supervised Learning (Contact)	Weekly meeting with project supervisor.	0.5	Every Week	0.50
Tutorial	Research Project - Class Workshop.	0.5	Every Week	0.50
Independent & Directed Learning (Non-contact)	Project work and independent learning.	20.0	Every Week	20.00
Total Hours				21.00
Total Weekly Learner Workload				21.00
Total Weekly Contact Hours				1.00

Workload: Part Time				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecturer-Supervised Learning (Contact)	Weekly meeting with project supervisor.	0.5	Every Week	0.50
Tutorial	Research Project - Class Workshop.	0.5	Every Week	0.50
Independent & Directed Learning (Non-contact)	Project work and independent learning	20.0	Every Week	20.00
Total Hours				21.00
Total Weekly Learner Workload				21.00
Total Weekly Contact Hours				1.00

Module Resources

Recommended Book Resources

- Martyn Denscombe 2010, *The Good Research Guide*, 4 Ed., Open University Press [ISBN: 978-0335241385]
- J.A. Sharp, K. Howard 2002, *The Management of a Student Research Project*, 3 Ed., Gower Publishing [ISBN: 0-566-08490-2]
- W. Strunk Jr., E. White, R. Angell 2000, *The Elements of Style*, 4 Ed., Pearson Higher Education [ISBN: 0-205-30902-X]

Supplementary Book Resources

- Robert K. Yin (Editor) 2013, *Case Study Research: Design and Methods*, 5th Ed., Sage Publications
- Turabian, K. 2013, *manual for writers of research papers, theses, and dissertations: Chicago style for students and researchers*, University of Chicago Press
- Levin, P. 2011, *Excellent Dissertations, Student Friendly Guides*, Open University Press [ISBN: 0335238610]
- Dennis Lock 2007, *Project management*, Gower Aldershot [ISBN: 978-0566087721]
- J. Henry 2003, *Software Project Management: A Real-World Guide to Success*, Addison-Wesley [ISBN: 0-201-75865-2]

Recommended Article/Paper Resources

- Halpern, J. W. 1998, *Getting in deep: Using qualitative research in business and technical communication*, 2(2)
- Rude, C. D. *Mapping the Research Questions in Technical Communication*, Journal of Business and Technical Communication, Jan 2009

Other Resources

- Website: *Developing a Thesis*
<http://writingcenter.fas.harvard.edu/pages/developing-thesis>

Module Delivered in

Programme Code	Programme	Semester	Delivery
CR_KARIN_9	Master of Science in Artificial Intelligence	2	Mandatory