H9RPROJ: Research Project

Module Code:	H9RPROJ
Long Title	Research Project SUPERSEDED
Title	Research Project
Module Level:	LEVEL 9
EQF Level:	7
EHEA Level:	Second Cycle
Credits:	25
Module Coordinator:	Christos Grecos
Module Author:	Christos Grecos
Departments:	School of Computing
Specifications of the qualifications and experience required of staff	PhD/Master's degree in a computing or cognate discipline.

Learning Outcomes	
On successful completion of this module the learner will be able to:	
#	**Learning Outcome Description**
LO1	Analyse, select and implement appropriate research methods and techniques
LO2	Research and critically analyse the state of the art of a problem domain
LO3	Propose, architect and implement an ICT solution related to the programme area
LO4	Evaluate the solution based on identified measures
LO5	Investigate potential future research possibilities
LO6	Present and defend the research findings through a viva, artefact/product demo and research paper style report.

Dependencies	
Module Recommendations	
No recommendations listed	
Co-requisite Modules	
No Co-requisite modules listed	
Entry requirements	A level 8 degree or its equivalent in any discipline

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Module Content & Assessment

Indicative Content

Literature Review
The literature review should demonstrate evidence of independent research critically analysing the potential of an application / idea and provide insights into how it can be implemented and evaluated. This is built upon the work conducted in Semester 2 as part of Research in Computing module and may have to be updated and revised based on feedback from supervisors and based on the final developed product.

Project Specifications
The project specifications describe the research background that includes the research question and definition of research variables.

Solution Development
Learners develop a solution that addresses the research question. This may involve the development of an application prototype, the design of an algorithm, the implementation of an innovative service or component of a system.

Evaluation and Analysis
A comprehensive evaluation must be conducted by each learner using multiple strategies, example; an algorithm may be benchmarked by performance specific metrics whilst an internet application or mobile application may be evaluated using suitable usability testing techniques. Statistical tools should be used to critically evaluate, assess and analyse the experimental research outputs and levels of significance.

Conclusion and Future Work
Learners must arrive at a conclusion from their research question as defined within the position paper. A detailed future work section must be included showing the learners understanding of their own research conducted

Viva
The viva shall involve a presentation of the research work carried out and a demonstration of the final results to at least two academic examiners. A demo of the developed artefact/product will be required during the Viva.

Assessment Breakdown	%
Coursework	100.00%

Assessments

Full Time

Coursework

Assessment Type:	Written Report	**% of total:**	90
Assessment Date:	n/a	**Outcome addressed:**	1,2,3,4,5
Non-Marked:	No		

Assessment Description:
The research paper style report shall comprise 4,000 to 6,000 words, up to 20 pages, and describes the individual research and production of an ICT solution. All students are marked based on the written report for the research project using the following schema: Literature review 10%, Project specification 10%, Artefact/ Project Development 30%, Artefact/Product Evaluation and Analysis 25%, Document Presentation, Structure and Referencing 10%, User configuration manual 5%, Viva 10%

Assessment Type:	Project	**% of total:**	10
Assessment Date:	n/a	**Outcome addressed:**	6
Non-Marked:	No		

Assessment Description:
Learners will have to defend their individual research in front of examiners. A demo of the artefact/product developed will be rquired to be presented in the viva. The learner must attend the viva.

No End of Module Assessment

No Workplace Assessment

Reassessment Requirement

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

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Module Workload				
Module Target Workload Hours 0 Hours				
Workload: Full Time				
Workload Type	*Workload Description*	*Hours*	*Frequency*	*Average Weekly Learner Workload*
Lecturer Supervised Learning	circa 1 hour per week	1	Every Week	1.00
Independent Learning Time	No Description	51	Every Week	51.00
			Total Weekly Contact Hours	1.00
Workload: Part Time				
Workload Type	*Workload Description*	*Hours*	*Frequency*	*Average Weekly Learner Workload*
Lecturer Supervised Learning	circa 1 hour per week	1	Once per semester	0.08
Independent Learning Time	No Description	49	Once per semester	4.08
			Total Weekly Contact Hours	0.08

Module Resources

Recommended Book Resources

Zobel, J.. (2004), Writing for computer science, 2nd Edition. Springer, Berlin.

Berndtsson, M.. (2008), Thesis projects: a guide for learners in computer science and information systems, Springer, London.

This module does not have any article/paper resources

Other Resources

[journal], IEEE Transactions on Communications, IEEE,
http://host.comsoc.org/transcom/home.htm l

[journal], IEEE Transactions on Mobile Computing,
http://ieeexplore.ieee.org/xpl/Recentlss ue.jsp?punumber=7755

[website], Prof Alan Bundy, University of Edinburgh. How to Write an Informatics Paper,
http://homepages.inf.ed.ac.uk/bundy/how- tos/writingGuide.html

Discussion Note: