H9IBRP: Industry Based Research Project

Module Code:	H9IBRP
Long Title	Industry Based Research Project APPROVED
Title	Copy Of Industry Based Research Project
Module Level:	LEVEL 9
EQF Level:	7
EHEA Level:	Second Cycle
Credits:	25
Module Coordinator:	Simon Caton
Module Author:	Simon Caton
Departments:	School of Computing
Specifications of the qualifications and experience required of staff	

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	

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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 may build upon the work conducted in Semester 2 as part of Research in Computing module, but will have to be updated and revised based on feedback from supervisors.

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
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 and assess 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 demonstration of the developed artefact/product will be required.

Industry Placement Report
In order to be able to monitor student progress in the FinTech related business environment, students have also to produce an industry placement report consisting of a qualitative description of the research designated environment and a description of their activities, as well as monthly progress reports. The completed report must be signed off by the industry supervisor.

Assessment Breakdown	%
Coursework	100.00%

Assessments

Full Time

Coursework

Assessment Type:	Project	**% of total:**	10
Assessment Date:	n/a	**Outcome addressed:**	1,2,3,4,5,6
Non-Marked:	No		

Assessment Description:
Research paper style report: Literature review

Assessment Type:	Project	**% of total:**	10
Assessment Date:	n/a	**Outcome addressed:**	1,2,3,4,5,6
Non-Marked:	No		

Assessment Description:
Research paper style report: Project specification

Assessment Type:	Project	**% of total:**	20
Assessment Date:	n/a	**Outcome addressed:**	1,2,3,4,5,6
Non-Marked:	No		

Assessment Description:
Research paper style report: Artefact/Product evaluation

Assessment Type:	Project	**% of total:**	10
Assessment Date:	n/a	**Outcome addressed:**	1,2,3,4,5,6
Non-Marked:	No		

Assessment Description:
Research paper style report: Conclusion and future work

Assessment Type:	Project	**% of total:**	5
Assessment Date:	n/a	**Outcome addressed:**	1,2,3,4,5,6
Non-Marked:	No		

Assessment Description:
Research paper style report: Referencing and references

Assessment Type:	Project	**% of total:**	30
Assessment Date:	n/a	**Outcome addressed:**	1,2,3,4,5,6
Non-Marked:	No		

Assessment Description:
Artefact/Project Development

Assessment Type:	Project	**% of total:**	5
Assessment Date:	n/a	**Outcome addressed:**	1,2,3,4,5,6
Non-Marked:	No		

Assessment Description:
User configuration manual

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

Assessment Description:
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	No Description	12	Per 15 week block	0.80
Independent Learning Time	No Description	488	Per 15 week block	32.53
			Total Weekly Contact Hours	0.80

Workload: Part Time

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecturer Supervised Learning	No Description	1	Per 15 week block	0.07
Independent Learning Time	No Description	49	Per 15 week block	3.27
			Total Weekly Contact Hours	0.07

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.

Chishti, Susanne and Janos Barberis. The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries, Wiley.

Webster, Jane and Richard T Watson. Analyzing the past to prepare for the future:Writing a Literature Review, MIS quarterly.

This module does not have any article/paper resources

Other Resources

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

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

[website], Journal of Electronic Markets: Special Issue on FinTech and the transformation of the Financial Industry.,
http://www.electronicmarkets.org/call-fo r-papers/single-view-for-cfp/datum/2016/ 01/27/cfp-special-issue-on-fintech-and-t he-transformation-of-the-financial-indus try/

Discussion Note: