

Module Title: Individual Project	Level: 6	Credit Value: 40
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Module code: AUR614	Cost Centre: GABE	JACS3 code: H200
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Trimester(s) in which to be offered: 1&2	With effect from: September 2016
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Office use only: To be completed by AQSU:	Date approved: August 2016 Date revised: Version no: 1
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New: New	Title of module being replaced (if any):
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Originating Academic School: Applied Science, Computing & Engineering	Module Leader: Louise Duff
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Module duration (total hours): 400 Scheduled learning & teaching hours: 48 Independent study hours: 352 Placement hours: 0	Status: Core
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Programme(s) in which to be offered: BSc Civil Engineering Studies	Pre-requisites per programme (between levels): None
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<p>Module Aims</p> <p>This module aims to provide an opportunity for learners to demonstrate an in-depth understanding of the design and implementation process required for project delivery.</p> <p>The module aims to give the learner a simulation of the professional and technical work environment where they are capable of bringing all the appropriate research, analytical and critical resources applied to a civil engineering problem.</p> <p>Learners will be provided with an opportunity to write, present and justify a professional technical report, based on a complex design project in which appropriate design solutions are</p>

be developed and presented.

This module will provide students with skills required for further study and also help them enhance the skills they need for creating technical reports and preparing and submitting membership review documentation to Professional Bodies.

Intended Learning Outcomes			
Key skills for employability			
KS1	Written, oral and media communication skills		
KS2	Leadership, team working and networking skills		
KS3	Opportunity, creativity and problem solving skills		
KS4	Information technology skills and digital literacy		
KS5	Information management skills		
KS6	Research skills		
KS7	Intercultural and sustainability skills		
KS8	Career management skills		
KS9	Learning to learn (managing personal and professional development, self-management)		
KS10	Numeracy		
At the end of this module, students will be able to			Key Skills
1	Define a problem and identify constraints, research and formulate a project.	KS1	KS3
		KS4	KS5
		KS6	KS10
2	Design and implement the project within agreed procedures, guidance and specification, synthesising data and concepts to produce innovative solutions to civil engineering problems	KS1	KS2
		KS3	KS4
		KS5	KS10
3	Review and evaluate limited / contradictory information and the project outcomes	KS1	KS3
		KS5	
4	Justify and present project outcomes and be able to communicate designs to technical and non- technical audiences.	KS1	KS2
		KS4	KS5
Transferable/key skills and other attributes			
Analytical competence Problem solving Report Writing Independent learning Presentation skills			

Derogations
None

Assessment: Please give details of indicative assessment tasks below.

Assessment 1 the production of a technical report.
Assessment 2 the presentation and justification of project outcomes.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	Word count (or equivalent if appropriate)
1	1,2,3	Report	70%		7000
2	4	Presentation	30%	20mins	

Learning and Teaching Strategies:

The module will be driven by a project agreed with the module tutor who will deliver a series of key lectures on the common elements of projects. Proposals will be considered in the context of structural, water, highways, geotechnical, waste or energy engineering. These will be supplemented by individual or group tutorials that will support the student's development of their project report and presentation.

Syllabus outline:

Reviewing and researching areas of interest.
Factors that affect project selection and inception.
The differences between qualitative and quantitative research are outlined together with the range of methodologies - laboratory experimental, case studies, surveys etc.
The objectives of the report will be examined and the criteria by which the significance of findings will be outlined, for example safety, cost, utility, sustainability etc.
Structure of the final report, the citation methods used and the suggested sequence of tasks.
Evaluation and review of projects.
Presentation techniques, use of appropriate media.

Bibliography:

Essential reading

Emden, J.V., Becker, L., (2010) *Presentation skills for students*. London, Palgrave MacMillan.

Fewings, P. (2012) *Construction Project Management: an integrated approach*. London: Taylor & Francis.

Leady, P.D., (2004), *Practical Research: planning and design*, London, Pearson Collier.

Mitchell, M., (2009), *Research Design Explained*, London, Wadsworth Oppenheim

Sides CH., (1999) *How to Write and Present Technical Information*, Cambridge, Cambridge UP.

Wang,G.T., Park,K., (2016) *Student Research and Report Writing*, Chichester, Wiley Blackwell.

Other indicative reading

www.ice.org.uk

www.istructe.org.uk

www.theihe.org.uk

www.ciht.org.uk

www.ihsti.com

Other indicative reading will be made available via the VLE.