

Module Title:	Project	Level:	5	Credit Value:	20
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Module code:	ENG544	Is this a new module?	No	Code of module being replaced:	
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Cost Centre:	GAME	JACS3 code:	H700
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Trimester(s) in which to be offered:	1, 2 & 3	With effect from:	September 16
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School:	Applied Science, Computing & Engineering	Module Leader:	Reg Holme
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Scheduled learning and teaching hours	30 hrs
Guided independent study	170 hrs
Placement	0 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered	Core	Option
FdEng Industrial Engineering	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Pre-requisites
None

Derogations
A derogation from regulations has been approved for this module which means compensation is not permitted for this module, therefore a minimum pass mark of 40% must be achieved.

Office use only

Initial approval June 16

APSC approval of modification *Enter date of approval*

Have any derogations received SQC approval?

Version 1

Yes No

Module Aims

To exercise the student in applying and extending the methods, skills, information, knowledge and understanding obtained during the various parts of the course to developing and evaluating an original design of an engineering product or system.

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

At the end of this module, students will be able to		Key Skills	
1	Implement the appropriate stages of a project (including: specification, task analysis, search of current information sources, consider options and plan and cost solutions, select and design a solution, construct/implement solution, test and evaluate the solution);	KS1	KS2
		KS4	KS5
		KS6	
2	Apply appropriate theoretical and practical methods to the analysis of an engineering problem and the development of an original solution to that problem, including the managing of the task;	KS2	KS3
		KS8	
3	Evaluate, through the development of testing strategies, the level of success in meeting the requirements of specifications	KS7	KS6
		KS9	KS10

Assessment:

Report – Addressing the purpose of project, research, analysis of technical content, evidence of work completed, testing, supporting documentation/software, evaluation and conclusions.

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	100%		4000

Learning and Teaching Strategies:

The project idea/purpose must be agreed by the student, employer, mentor and module leader through a Learning Agreement. Consideration should be given to whether the proposed project is achievable or not, in terms of student's particular capabilities, resources and time available, adequate supervision in workplace and its relevance towards the stated learning outcomes.

As with other work based learning modules, regular meetings between students, mentor and module leader, will take place in order to ensure satisfactory progress. It would be beneficial if meetings could coincide with key stages as listed above in syllabus outline, whereby planned work can be discussed and agreed.

Syllabus outline:

- Identify and negotiate project with employer, mentor and module leader;
- Produce project brief – stating aims, objectives, specification, outline;
- Develop method of time management and state agreed specific targets;
- Identify and source research material applicable to project;
- Interpret information to acquire an in depth knowledge of project subject;
- Analyses of project technical content, problem, system etc and where applicable computer simulation;
- Identify resources required to achieve project objectives;
- Development of project – construction, software, etc;
- Development of testing strategies – what criteria identifies accomplishment and how can this be evidenced and evaluated;
- Implementation and recording of 'testing';
- Produce documentation required by company to a professional standard;
- Evaluation and recommendations.

- Development of skills relating to software presentation tools;
- Organising and structuring project presentation material;
- Develop skills for verbally presenting project proposals or outcomes.

Bibliography:

Essential reading

Graham, N. (2009) *Project Techniques Toolbox; Inspirandum Project Publishing*

Other indicative reading

Lockyer, K. & Gordon, J. (2005) *Project Management and Project Planning, 7thEdn., Prentice Hall*

Silyn-Roberts, H. (2000) *Writing For Science and Engineering Papers, Presentations and Reports, Butterworth-Heinmann,*