MODULE DESCRIPTOR

Module Title

Workplace-Related Group Project

Reference	EN3103	Version	4
Created	April 2023	SCQF Level	SCQF 9
Approved	July 2018	SCQF Points	30
Amended	August 2023	ECTS Points	15

Aims of Module

To provide the student with the ability to plan and implement a professionally structured group engineering project relevant to the domain of their workplace.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Undertake project planning, incorporating appropriate strategic planning tools and techniques, to assess possible solutions to a problem.
2	Explain the characteristics and traits required for a successful project team, including group diversity and leaders/managers.
3	Demonstrate effective team working and planning as part of a project group.
4	Interpret an engineering design problem, considering appropriate economic analysis, environmental impacts and ethical concerns.
5	Assess the selected solution to a problem in a group setting.

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Indicative Module Content

Project management. Review of general management principles. Introduction to project planning, project control, project life cycle, systematic approach to planning, chart systems. Team working, role and responsibilities of project manager. Project documentation. Control techniques, manual and computer-based systems for estimation, planning, costing and decision making. Introduction to team-working, different types of team player, group dynamics, diversity. Leadership skills and other general and topical issues around the management of projects. Design methodologies including new product development, cost effectiveness and value analysis. Comparison with current methods. Product lifecycles. Environmental impact assessments. Product liability and IPR. Corporate ethics. Component analysis and testing. Quality processes. Digital materials. The project work is concerned with the development of an engineering solution to a realistic problem relevant to the domain of the student and their workplace. The balance of analysis, design and implementation will depend on the specific objectives of the problem topic. The group project involves task specification, system design, implementation, evaluation and project management. There is no formal syllabus for the group project in general but seminars are used to provide guidance with regard to project management and report writing.

Module Delivery

The module is delivered in Blended Learning mode using structured online learning materials/activities and directed study, facilitated by regular online tutor support. Workplace Mentor support and work-based learning activities will allow students to contextualise this learning to their own workplace. Face-to-face engagement occurs through annual induction sessions, employer work-site visits, and modular on-campus workshops.

Indicative Student Workload	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	30	N/A
Placement/Work-Based Learning Experience [Notional] Hours	240	N/A
TOTAL	300	N/A
Actual Placement hours for professional, statutory or regulatory body	240	

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4, 5
Description:	Group project report with corroborative evidence - competencies assessment.				

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MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

Component 1 comprises 100% of the module grade. To pass the module, a D grade is required.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	Completion of Stage 2, SCQF Level 8, or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

1	ULRICH, K. T. and EPPINGER, S.D., 2016. Product Design and Development. 6th ed. New York: McGraw-Hill.
2	DIETER, G, E. and SHHMIDT, L, C; 2009. Engineering Design. 4th ed. New York: McGraw-Hill.
3	CALLISTER W.D., RETHWISCH, D. G., 2014. Materials Science and Engineering. 9th Edition SI Version, New York: Wiley
4	BURKE, R., 2003. Project Management. 4th ed. Chichester: John Wiley.
5	Guidance Notes on Group Project Work
6	Required reading is specific to each project, therefore manuals and other literature will be made available as appropriate.