

MODULE DESCRIPTOR

Module Title

MEng Group Project

Reference	EN5601	Version	5
Created	April 2023	SCQF Level	SCQF 11
Approved	March 2004	SCQF Points	30
Amended	August 2023	ECTS Points	15

Aims of Module

To provide the student with experience of working as part of a team on a group project, and the opportunity to demonstrate and apply the knowledge and transferable skills acquired in their degree studies including individual and group project work. To demonstrate application of project management techniques including planning, risk assessment, resource allocation, cost estimation, project monitoring and reporting.

Learning Outcomes for Module

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

- 1 Critically evaluate, as a team, technical information and literature to formulate complex engineering problems.
- 2 Apply, in a team environment, the engineering and management theories, models, concepts and principles learned in their academic studies in the solution of complex engineering problems
- 3 Demonstrate mature individual skills in the five learning areas as the foundation for lifelong learning and continuing professional development (CPD).
- 4 Appraise the holistic nature of, and personal contribution to, the group project, their own strengths and weaknesses as a potential Chartered Engineer/Engineering Manager

Indicative Module Content

The content of the group project will vary. However, it will be closely aligned to the research and development activities within the University and its industrial partners where appropriate. The format will allow an individual to gain experience of working within a team environment. Exposure to the full engineering design cycle, where possible, will be incorporated into the group project activity or as many of the major elements as is practical. For example group projects will include a range of the following elements: design specification (including costing), feasibility, design alternatives, ethical issue evaluation, intellectual property (IP) considerations, optimisation, simulation, detailed design(s), sourcing of standardised components and equipment, risk assessment, matching, manufacturing, construction, implementation, performance testing, verification, evaluation. The student will produce an agreed learning contract with the University supervisor(s) and other team members and devise a programme which will enable the learning outcomes specified above to be achieved.

Module Requirements

Prerequisites for Module	Successful completion of SCQF 10 level of the MEng programme.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 MEng Group Project Guidelines.
- 2 Any other material relevant to the project.