

#### MODULE DESCRIPTOR **Module Title** MEng Group Project Reference EN5601 Version 5 Created April 2023 SCQF Level SCQF 11 March 2004 SCQF Points Approved 30 Amended **ECTS Points** 15 August 2023

#### **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.
- 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
- Demonstrate mature individual skills in the five learning areas as the foundation for lifelong learning and continuing professional development (CPD).
- 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), feasiblity, 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.

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### **Module Delivery**

Delivery is by means of formal group meetings with the supervisor(s) and other staff as appropriate. Group members will be required to liaise with their supervisor(s), so that progress can be monitored, with particular emphasis on the transferable skills and technical skills related to the project. The student will be required to undertake risk assessments related to project activites and where appropriate attend presentations/workshops from Academic staff and Industrial speakers on project related topics.

Indicative Student Workload	Full Time	Part Time
Contact Hours	25	25
Non-Contact Hours	275	275
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	300
Actual Placement hours for professional, statutory or regulatory body		

#### **ASSESSMENT PLAN**

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

## **Component 1**

2 Type: Coursework Weighting: 50% Outcomes Assessed:

Description: Group project report and presentation.

**Component 2** 

Type: Coursework Weighting: 50% Outcomes Assessed: 1, 3, 4

Description: Individual logbook, portfolio, review and reflective statement.

#### MODULE PERFORMANCE DESCRIPTOR

## **Explanatory Text**

The module has 2 components and to gain an overall pass a minimum D grade must be achieved in each component. The component weighting is as follows: C1 is worth 50% and C2 is worth 50%.									
		Coursework:							
		Α	В	С	D	E	F	NS	
Coursework:	Α	Α	Α	В	В	Е	Е		
	В	Α	В	В	С	Е	Е		
	С	В	В	С	С	Е	Е		
	D	В	С	С	D	Е	Е		
	E	Е	Е	Е	Е	Е	F		
	F	Е	Е	Е	Е	F	F		
	NS	Non-submission of work by published deadline or non-attendance for examination							

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# **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.