

## MODULE DESCRIPTOR

### Module Title

Design Exercise

Reference	EN2601	Version	4
Created	May 2017	SCQF Level	SCQF 8
Approved	March 2004	SCQF Points	15
Amended	May 2017	ECTS Points	7.5

### Aims of Module

To provide the student with the ability to solve engineering problems and produce solutions as a member of a team.

### Learning Outcomes for Module

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

- 1 Apply creative, analytical and design skills to achieve a specified requirement.
- 2 Carry out directed information searches.
- 3 Contribute to the production of technical documentation.
- 4 Operate as a member of an engineering team.
- 5 Participate in a technical presentation.

### Indicative Module Content

There is no formal syllabus for this module which is research and development project based. The topic for investigation depends on the degree course and mode of attendance with the general aim being the design and development a solution which meets a specification. The module operates in two phases. In the first phase an examination of possible solutions to the problem is made and a feasibility study is produced. In the second phase, the solution is developed and technical documentation is produced. When working as a member of one of several student teams, a competitive element may be introduced. When working individually, an industrial or research work-based element may be appropriate with tutors or work colleagues fulfilling the role of team members.

### Module Delivery

The module is largely student-centred and can be undertaken as a member of a group or as an individual. A member of staff acts as mentor and client. The project is defined by a specification with the specific requirements being presented at the start of the exercise along with other background material. Students research the topic by means of directed reading and carry out design and development work that culminates in the production of specified deliverables.

**Indicative Student Workload**

	Full Time	Part Time
Contact Hours	36	36
Non-Contact Hours	114	114
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	150
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

**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: A portfolio including a technical report and supporting verbal corroborating evidence.

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

To pass the module, you must achieve a 40% average mark from the coursework.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	=>70%
<b>B</b>	60-69%
<b>C</b>	50-59%
<b>D</b>	40-49%
<b>E</b>	35-39%
<b>F</b>	0-34%
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module Successful completion of SCQF 7 level study, or equivalent.

Corequisites for module None.

Precluded Modules None.

**INDICATIVE BIBLIOGRAPHY**

- 1 Required reading is defined by the project supervisor.