

<b>Module Title</b> <b>Design Exercise</b>  <b>Keywords</b> Team Exercise, Feasibility Study, Problem-solving, Presentation.	Reference	EN2601
	SCQF Level	SCQF 8
	SCQF Points	15
	ECTS Points	7.5
	Created	May 2002
	Approved	March 2004
	Amended	August 2011
	Version No.	2

## This Version is No Longer Current

The latest version of this module is available [here](#)

### Prerequisites for Module

Successful completion of SCQF 7 level study, or equivalent.

### Corequisite Modules

None.

### Precluded Modules

None.

### 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

### Indicative Student Workload

	Full Time	Part Time
<i>Contact Hours</i>		
Assessments	2	2
Group work	18	18
Lectures	4	4
Project Supervision	12	12
<i>Directed Study</i>		
Directed reading	36	36
<i>Private Study</i>		
Private Study	78	78

### Mode of 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

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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

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.

### **Assessment Plan**

	Learning Outcomes Assessed
Component 1	1,2,3,4,5
Component 2	1,3,4,5

Component 2 is the Project implementation. (50% weighting)

Component 1 is a feasibility study. (50% weighting)

### **Indicative Bibliography**

1. Required reading is defined by the project supervisor.

role of team members.