

Module Title Professional Skills Keywords IT, Communication, Information Retrieval, Engineering Laboratory and Engineering Applications Skills, Product Design and Production, Teamwork.	Reference EN1600 SCQF SCQF Level 7 SCQF Points 15 ECTS Points 7.5 Created May 2002 Approved March 2004 Amended August 2011 Version No. 3
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This Version is No Longer Current

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

Prerequisites for Module

Laboratory safety passport,
basic keyboard skills,
familiarity with personal
computer network procedures.

Indicative Student Workload

	Full	Part
<i>Contact Hours</i>	Time	Time
Assessments	3	3
Lectures/seminars	22	22
Practical Exercises	45	45

Corequisite Modules

None.

Directed Study

Directed Study	40	40
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Precluded Modules

None.

Private Study

Private Study	40	40
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Aims of Module

To develop and apply skills in
Information Technology (IT),
written and oral
communication, information
retrieval, engineering laboratory
and workshop practice and
engineering applications.

Mode of Delivery

Communication and information
retrieval skills will be delivered by a
mixture of lectures, seminars and
directed study. The remainder of the
module will be student centred and
will be delivered almost exclusively
in the workshop or laboratory. It will
involve students tackling an

Learning Outcomes for Module

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

1. Use IT, communication and information retrieval skills in engineering laboratory and project work.
2. Demonstrate competence in the use of engineering laboratory instrumentation, techniques and procedures.
3. Design, manufacture and assemble an electro-mechanical product.

Indicative Module Content

IT skills: familiarity with word-processing, spreadsheet, database, presentation and web-browsing tools. Written communication skills: principles and practice of maintaining a laboratory logbook, report writing, essay writing, abstracting, referencing, drawing conclusions and making recommendations. Oral communication skills: principles and practice of presentations, style, use of visual aids, answering and asking questions. Information

individual project, in which they will design, manufacture and assemble an electro-mechanical product. The students will be given set objectives and will, in general, be expected to follow prescribed procedures. The activities in the workshops and laboratories will be supervised by engineering applications supervisors, supported by technical and academic staff. Lectures and tutorial support on particular aspects of technology will be delivered, as required, in the workplace.

Assessment Plan

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

Component 2 is an average of the marks awarded for the Communications Component and for completion of the Practical Project Work (70% weighting)

Component 1 is a logbook of Practical Activities (30% weighting)

Indicative Bibliography

1. British Standard BS 8888:2017 - Technical product documentation and specification.

retrieval skills: identification of primary sources of information, accessing library resources and electronic databases, citing reference sources. Engineering laboratory skills: use of laboratory instruments, principles of operation, sources of error, metrology, laboratory techniques and procedures. Engineering applications skills: Electronic/electrical - soldering, component assembly, inter-wiring, mains wiring; Mechanical engineering - drawing, sheet metal manufacture, fastening techniques. Project: design, manufacture and assembly of an electro-mechanical product.

2. Manuals and other technical literature will be made available on loan as appropriate.