

Module Specification

Module Summary Information

1	Module Title	Practical Skills 1
2	Module Credits	20
3	Module Level	3
4	Module Code	ENG3011

5	Module Overview
<p>This module aims to provide you with the practical and professional skills to enable you to progress to the next module in the practical theme, Practical Skills II, and then on to the first year of an engineering degree.</p> <p>The theoretical aspects of physical science and maths are delivered in another theme of the foundation year. The Practical Skills modules sit alongside these and concentrate on the practical aspects to support your learning.</p> <p>The subject material will be delivered in three coherent streams, one of which contains predominantly mechanical and electrical laboratory exercises, with a second PC-based stream including the use of software to support project planning, communication and analysis; and the third, a project space where you will have the opportunity to integrate your learning from across all elements of the semester.</p> <p>It is anticipated that the module will be delivered as three 2 hour sessions, and will include a very small group tutorial session where you will meet with your tutor in a group of 5 – 10 students.</p> <p>This module will interact with modules in the other two themes in the Foundation Year in that it will rely on knowledge of mathematical techniques and the theoretical underpinning of the science theme.</p> <p>Using "flipped learning", you will work both independently and in teams using practical skills to solve problems.</p>	

6	Indicative Content
<p>Professional Skills Health and Safety, Introduction to engineering project (CDIO), introduction to Project planning, research tools, writing of technical reports and referencing, Presentation skills and preparation.</p> <p>Mechanical and electronic labs Measuring Techniques, Ohms Law, Resistor networks and Kirchhoff's laws, Capacitors characteristics, DC motors, AC signals, Strain Gauges, Tension in a spring, Acceleration due to gravity, Coefficient of friction, Tensile testing, Bending stresses.</p>	

7	Module Learning Outcomes	
	On successful completion of the module, students will be able to:	
	1	Complete a range of practical labs supporting the learning in the foundation year semester 1 modules
	2	Develop and apply digital literacy skills for effective communication. Develop and apply digital literacy skills for effective communication.
	3	Construct basic project plans and work effectively in teams to successfully complete projects.

8	Module Assessment		
Learning Outcome			
	Coursework	Exam	In-Person
1-4	X		X

9	Breakdown Learning and Teaching Activities	
Learning Activities	Hours	
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	96	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	0	
Private Study (PS) includes preparation for exams	104	
Total Study Hours:	200	