

Module Specification

Module Summary Information

1	Module Title	Engineering Electronic Systems
2	Module Credits	20
3	Module Level	5
4	Module Code	ENG5094

5	Module Overview
<p>The MEng Electronic Engineering programme is designed to produce graduates with highly developed skills both in theory and practice.</p> <p>This module will focus on contextualising the theory gained in Analogue and Digital electronics as well introducing embedded systems for both electronic engineering and biomedical applications.</p>	

6	Indicative Content
<p>Voltage, current and resistance measurements using meters and oscilloscope.</p> <p>Design, prototyping and analysis of basic analogue and digital circuits.</p> <p>Operational amplifier circuits and configurations.</p> <p>Architecture of microprocessor/microcontroller, introduction to 'C' programming language and IDE environment.</p> <p>Interfacing peripherals to microcontroller.</p>	

7	Module Learning Outcomes	
On successful completion of the module, students will be able to:		
	1	Use electronic test equipment to make voltage, current and impedance measurements on circuits.
	2	Implement and analyse combinational and sequential logic designs using traditional methods.
	3.	Introduce embedded systems programming language and IDE.
	4.	Develop simple embedded applications using embedded platform provided.

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	48
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	152
Total Study Hours:	200