

Bachelor of Engineering (Electrical and Electronic) (Honours)

Mapping to Course Learning Outcomes

Listed below is the award's Program of Study and significant sequences/alternatives. Electives, including 4th year electives, are generally not listed as students cannot be guaranteed to take specific topics. The "Worst Case" row indicates the pathological worst case in terms of sequences and electives.

			COURSE LEARNING OUTCOMES										
			A. proficiently use professional skills and knowledge in the systematic development of complex electrical and electronic engineering systems	B. demonstrate a broad understanding of the electrical and electronic engineering discipline and a deeper understanding of some areas of electrical and electronic engineering	C. apply their skills and knowledge in a professionally responsible manner	D. communicate effectively with other engineers and the wider global community using a wide range of communication technologies	E. work professionally as an individual and in a team	F. understand and describe the processes through which current knowledge was developed	G. develop engineering solutions appropriate to the social, political, international, economic and environmental contexts in which they are applied	H. engage in the process of continuing learning needed to retain the necessary level of professional skills and knowledge in the area of electrical and electronic engineering	I. contribute successfully to project management	J. plan and execute a research project, applying relevant methodologies and knowledge	K. apply skills adopted through the thesis and advanced discipline topics to postgraduate level research or advanced industrial investigation.
BLOOM'S REVISED TAXONOMY R = Remembering (Knowledge) U = Understanding (Comprehension) A = Applying N = Analysing E = Evaluating C = Creating (Synthesis)													
Year	Core Topic Code and Name	Sequence											
1	ENGR1201 Electronics (4.5 units)	Core	RUA	RUA				R					
1	ENGR1401 Professional Skills (4.5 units)	Core	RUA				RUANE	RUA					
1	ENGR1711 Engineering Design (4.5 units)	Core	RUA			RUN			RU	RUA	RUA	RUA	RU
1	ENGR1721 Engineering Programming (4.5 units)	Core	RUA	RUA					RU	RUA	RUNE	RUNE	RU
1	ENGR1722 Engineering Physics and Materials (4.5 units)	Core	RUA	RUAN									
1	ENGR1732 Engineering Mechanics (4.5 units)	Core	RUA	RUAN									
1	MATH1121 Mathematics 1A (4.5 units)	Core	RUN		RUA							RUA	
1	MATH1122 Mathematics 1B (4.5 units)	Core	RUAN		RUAC			RU	RUAC			RUAC	
2	COMP2711 Computer Programming 2 (4.5 units)	Core	RUAN	RUAN									
2	ENGR2702 Electrical Circuits and Machines (4.5 units)	Core	RUA	RUA		RUA	RUA			RUA			
2	ENGR2711 Engineering Mathematics (4.5 units)	Core	RUA										
2	ENGR2712 Automation and Industrial Control (4.5 units)	Core	RUN	RUN					RU		RU	RU	RU
2	ENGR2722 Analysis of Engineering Systems (4.5 units)	Core	RUA	RU									
2	ENGR2731 Electronic Circuits (4.5 units)	Core	RUANC	RUAC			RUNE			RUNE			
2	ENGR2772 Sensors and Actuators (4.5 units)	Core	RUA	RUA									
2	ENGR2881 Computer Networks (4.5 units)	CNS Major	RUAN	RUAN									
2	ENGR2791 Electrical Engineering Principles (4.5 units)	Elec Major	RUA	RUA				RU					
2	ENGR2721 Microprocessors (4.5 units)	Electron Major	RUAC	RUAC					RUN				RUN
2	ENGR2861 Electromagnetics and Electromagnetic Waves (4.5 units)	ESS Major	RUA	RUA									
3	ENGR3700 Engineering Practicum (13.5 units)	Aust	RUA		RUA	RUA	RUANE	RUANE	RUA	RUANE		RUA	
3	ENGR3710 International Engineering Practicum (13.5 units)	Int	RUA		RUA	RUA	RUANE	RUANE	RUA	RUANE		RUA	
3	ENGR3704 Project Management for Engineering and Science (4.5 units)	Core			RUA	RUAC	RUA	RU		RUAN	RU	RU	
3	ENGR3750 Workplace Preparation (0 units)	Core			RU	RU	RUA			RUA			
3	COMP3781 Cybersecurity (4.5 units)	CNS Major	RUANE	RUANE	RUA								
3	ENGR3701 Computer Organisation and Design (4.5 units)	CNS Major	RUAC	RUA			RUA				RUN	RUN	R
3	ENGR3721 Signal Processing (4.5 units)	CNS Major	RUA	RUA					RUA				RUA
3	ENGR3731 Communication Systems (4.5 units)	CNS Major	RUAN	RUAN									
3	ENGR2861 Electromagnetics and Electromagnetic Waves (4.5 units)	Elec Major	RUA	RUA									
3	ENGR3711 Control Systems (4.5 units)	Elec Major	RUANC	RUANC					RUAN				RUAN
3	ENGR3861 Electrical Energy Systems (4.5 units)	Elec Major	RUAN	RUAN									
3	ENGR7821 Electrical Power Systems (4.5 units)	Elec Major	RUNE	RUAN									
3	ENGR3701 Computer Organisation and Design (4.5 units)	Electron Major	RUAC	RUA			RUA				RUNE	RUNE	
3	ENGR3711 Control Systems (4.5 units)	Electron Major	RUANC	RUANC					R		RUN		R
3	ENGR3721 Signal Processing (4.5 units)	Electron Major	RUA	RUA					RUAN				RUAN
3	ENGR3731 Communication Systems (4.5 units)	Electron Major	RUAN	RUAN					RUA				RUA
3	ENGR3721 Signal Processing (4.5 units)	ESS Major	RUA	RUA									
3	ENGR3731 Communication Systems (4.5 units)	ESS Major	RUAN	RUAN									
3	ENGR3891 Electromagnetic Technologies, Systems and Security (4.5 units)	ESS Major	RUAN	RUAN				RU					
4	ENGR7700 Honours Thesis (18 units)	Core	RUNE	RUNE		RUNE	RUAC	RUNE	RUANEC	RUANE	RUANEC	RUANEC	RUANEC
4	ENGR7762 Renewable Energy Systems (4.5 units)	Elec		RUN				RU					
4	ENGR3821 Network Engineering (4.5 units)	CNS Major	RUANEC	RUA									
4	ENGR7731 Computer Architecture (4.5 units)	CNS Major	RUAN	RUAN				RUA	RUANC				RUANC
4	ENGR7851 Advanced Electronic Design (4.5 units)	Electron Major	RUANEC					RUA		RUA			RUA
4	ENGR7782 Systems and Security in the Information Age (4.5 units)	ESS Major	RUAC	RUAC		RU		RUNE					
4	ENGR9742 Systems Engineering (4.5 units)	Core			RUAN	RUAN	RUA	RUANE	RUAN	RUA	RUN	RUAN	RUN
Count of Topics for which PE satisfied			16	11	8	6	7	7	7	8	6	8	5
	Core		7	7	1	0	2	1	2	0	1	1	3
	CNS Major		5	5	0	0	0	1	1	0	1	1	1
	Elec Major		6	5	0	0	2	0	5	0	1	1	5
	Electron Major		5	5	1	0	1	1	1	0	0	0	1
	ESS Major		1	0	1	1	1	1	1	1	0	1	0
	Aust		1	0	1	1	1	1	1	1	0	1	0
	Int		1	0	1	1	1	1	1	1	0	1	0
Worst Case Coverage			22	16	9	7	8	8	9	9	6	9	6
			RUANEC	RUANEC	RUANEC	RUANEC	RUANE	RUANEC	RUANEC	RUANE	RUANEC	RUANEC	RUANEC