

Bachelor of Engineering (Environmental) (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 environmental engineering systems	B. demonstrate a broad understanding of the environmental engineering discipline and a deeper understanding of some areas of environmental 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 environmental 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	EASC1101 Earth and Environmental Sciences (4.5 units)	Core		RU	RUANC				RUANC			RUANC	
1	ENGR1401 Professional Skills (4.5 units)	Core	RUA		RUN	RUNE	RUANE		RU				RU
1	ENGR1711 Engineering Design (4.5 units)	Core	RUA		RUN			RUAN	RU	RUA	RUA	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			RUA	
1	MATH1122 Mathematics 1B (4.5 units)	Core	RUAN		RUAC				RUAC			RUAC	
1	STEM1002 Introduction to Geographical Information Systems (4.5 units)	Core	RUA	RUA									
2	ENGR1201 Electronics (4.5 units)	Core	RUA	RUA				R					
2	ENGR1721 Engineering Programming (4.5 units)	Core	RUA	RUA									
2	ENGR2711 Engineering Mathematics (4.5 units)	Core	RUA										
2	ENGR2741 Mechanics and Structures (4.5 units)	Core	RUAN	RUAN									
2	ENGR2751 Fluid Mechanics (4.5 units)	Core	RUAN	RUAN									
2	ENGR2832 Engineering Geology and Geomechanics (4.5 units)	Core	RUA	RUA				RU		RUA			
2	ENGR2882 Waste Management (4.5 units)	Core	RUN	RUN			RU	RU	RUN	RU			RUN
2	ENVS2761 Hydrology (4.5 units)	Core	RUA	RUAN				RU					
3	ENGR3704 Project Management for Engineering and Science (4.5 units)	Aust			RUA	RUAC	RUA	RU		RUAN	RU	RU	
3	ENGR3750 Workplace Preparation (0 units)	Core			RU	RU	RUA			RUA			
3	ENGR3851 Hydraulics and Water Engineering (4.5 units)	Int	RUA	RU				RUNE	RU				RU
3	ENGR3901 Sustainable Engineering (4.5 units)	Core	RUAN	RUN			RUA	RUAN					
3	GEOG3040 Environmental Impact Assessment (4.5 units)	Core	RUA	RUA		RUA	RUA	RU		RUA			
3	STEM2001 Remote Sensing for all Disciplines (4.5 units)	Core	RUA	RUA			RUA		RUA				RUA
3	ENGR3700 Engineering Practicum (13.5 units)	Core	RUA		RUA	RUA	RUANE	RUANE	RUA	RUANE		RUA	
3	ENGR3710 International Engineering Practicum (13.5 units)	Core	RUA		RUA	RUA	RUANE	RUANE	RUA	RUANE		RUA	
4	ENGR7700 Honours Thesis (18 units)	Core	RUNE	RUNE	RUNE	RUAC	RUNE	RUANEC	RUANEC	RUANE	RUANEC	RUANEC	RUANEC
4	ENGR7872 Advanced Infrastructure Design: Geotechnical and Water Engi	Core	RUNE		RUA	RUA	RU	RUN		RU			RUN
4	ENGR7971 Advanced Environmental Engineering Design (4.5 units)	Core	RUNE	RUNE	RUNE		RUNE	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			23	16	11	8	12	15	11	11	4	9	7
			0	0	1	1	1	1	0	1	1	1	0
			1	1	0	0	0	1	1	0	0	0	1
Worst Case Coverage			23	16	11	8	12	16	11	11	4	9	7
			RUANE	RUANE	RUANEC	RUANEC	RUANE	RUANEC	RUANEC	RUANE	RUANEC	RUANEC	RUANEC