

Bachelor of Engineering Technology B1408 (Electrical and Renewable Energy Engineering)

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Start Date: Semester 2 2024

Suggested Industrial Control & Automation Focus

Year	Semester 1 Units		CP	Semester 2 Units		CP
	Units	CP		Units	CP	
Year 1 – 2024				MAS164 Fundamentals of Mathematics ¹	3	
				ENG102 Engineering Design for Sustainability	3	
				PEN120 General Physics ²	3	
				ENG101 Engineering Fundamentals	3	
				Total	12	
Year 2 - 2025				MAS161 Calculus and Matrix Algebra	3	
				ENG336 Finance, Ethics and Law	3	
				ENG214 Electrical and Electronic Circuits	3	
				BUS368 Cultures of Innovation	3	
				Total	12	
Year 3 – 2026				ENG231 Renewable Energy Systems	3	
				ENG381 Electrical Power Systems	3	
				ENG382 Power Electronics	3	
				ENG216 Dynamic Systems and Control	3	
				Total	12	
Year 4 - 2027						
				ENG360 Engineering Design Project (S1 option)	6	
				ENG391 Process Control (Engineering Elective)	3	
				ENG392 SCADA and Instrumentation Systems (Engineering Elective)	3	
				ENG100 Engineering Professional Practice	0	
			Total	12		

TOTAL CREDIT POINTS 72

¹ Students who have achieved a final scaled score of 55% or more in ATAR Mathematics Specialist, WACE Mathematics Specialist 3C/3D or TEE Calculus may not enrol in this unit and should consult their Academic Chair.

² Students who have achieved a final scaled score of 60% or more in ATAR Physics or WACE Physics 3A/3B may not enrol in this unit and should consult their Academic Chair.

Elective Units

KAC102 - Wandju Boodja (Welcome to Country)
CHE140 - Fundamentals of Chemistry
ENV102 - Foundations of the Environment
ENG300 - Environmental Technology for Sustainability
ENG221 - Pollution & its Control
ENG341 - Water Conservation & Auditing
ENV243 - Water and Earth Science
ENV242 - Atmospheric and Climate Science
ENV303 - GIS for Environmental Management and Planning
ENV331 - Environmental Management
ENG391 - Process Control
ENG251 - PLC Systems
ENG392 - SCADA and Instrumentation Systems
ENG252 - Embedded Systems
PEN152 - Principles of Physics
ICT158 - Introduction to Information Systems
MAS183 - Statistical Data Analysis

Spine - ENG100 Engineering Professional Practice (0 CP)

Bachelor of Engineering Technology students should complete 300 hours of approved work experience to complete the requirements of the course.

Please note: This course plan is a sample only and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as outlined in the [Handbook](#). Students should note that due to unit prerequisites, commencing study in Semester 2 may extend the duration of the course. This information is correct as at 13/06/24.