Academic Chair: M.Calais@murdoch.edu.au Start Date: Semester 2 2023

Suggested Industrial Control & Automation Focus

Year 1 – 2023	Semester 1 Units	СР	Semester 2 Units	СР
			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 - 2024	Semester 1 Units	CP	Semester 2 Units	СР
	MAS182 Applied Mathematics	3	MAS161 Calculus and Matrix Algebra	3
	ENG103 Principles of Engineering	3	ENG336 Finance, Ethics and Law	3
	ENG109 Engineering Computing Systems	3	ENG214 Electrical and Electronic Circuits	3
	Engineering Elective	3	BUS368 Cultures of Innovation	3
	Total	12	Total	12
Year 3 – 2025	Semester 1 Units	CP	Semester 2 Units	СР
	ENG344 Electromechanical Energy Conversion	3	ENG231 Renewable Energy Systems	3
	ENG215 Systems Engineering	3	ENG381 Electrical Power Systems	3
	ENG216 Dynamic Systems and Control	3	ENG382 Power Electronics	3
	ENG251 PLC Systems (Engineering Elective)	3	ENG360 Engineering Design Project	3
	Total	12	Total	12
Year 4 - 2026	Semester 1 Units	CP	Semester 2 Units	СР
	ENG360 Engineering Design Project	3		
	MAS220 Mathematical Methods	3		
	ENG391 Process Control (Engineering Elective)	3		
	ENG392 SCADA and Instrumentation Systems (Engineering Elective)	3		
	ENG100 Engineering Professional Practice	0		
	Total	12	Total	

TOTAL CREDIT POINTS 72

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.



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.

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 28/05/23.

