

Programme Matrix for Students Intake of AY2021-2022 until AY2024-2025

Programme Matrix	
Faculty	Engineering
Program	Electrical and Computer Engineering
Award	Bachelor of Engineering Electrical and Computer Engineering
Credit Unit/Hour	69 units/133 Credit Hours
Academic Year	2025-2026

Level	Semester 1						Semester 2					
	Course Code	Course Name	Pre-requisite	Core/Elective	Units	CHrs	Course Code	Course Name	Pre-requisite	Core/Elective	Units	CHrs
1	CHEM1020	General Chemistry	None	Core	2	4	ELEC1100	Principles of Electrical Circuits	None	Core	2	4
	COMP1500	Introduction to Programming	IC3M2	Core	2	4	ENGG1010	Applied Mechanics	None	Core	2	4
	ENGG1013	Engineering Drawing and Computer Drafting	None	Core	1	2	ENGG1023	Engineering Materials	None	Core	2	4
	MATH1000	Mathematical Foundations	SET3	Core	2	4	MATH1100	Calculus & Linear Algebra	MATH1000	Core	2	4
	UNIR1100	Communication Skills (1)	None	Core	2	3	UNIR1001	Oman and Islamic Culture	None	Core	1	2
2	COMP2130	Digital and Computer Systems	SET 3	Core	2	4	COMP2230	Data Structures and Algorithms	SET 3	Core	2	4
	ELEC2113	Instrumentation & Measurement	ELEC1100	Core	2	4	ELEC2013	Signals & Systems	SET 3	Core	2	4
	ELEC2200	Electrical and Electronic Circuit Analysis	ELEC1100	Core	2	4	ELEC2300	Electrical Energy Conversion & Utilization	ELEC1100	Core	2	4
	MATH2100	Calculus & Statistics	MATH1100	Core	2	4	UNIR2001	Entrepreneurship	None	Core	2	2
	UNIR1002	Arabic Language Skills	None	Core	1	2	UNIR2100	Communication Skills (2)	UNIR1100	Core	2	3
3	COMP3130	Computer Networks and Security	None	Core	2	4	COMP3230	Artificial Intelligence	None	Core	2	4

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	ELEC3000	Control Systems Engineering	None	Core	2	4	ELEC3100	Fundamentals of Electromagnetic Fields and Waves	None	Core	2	4
	ELEC3400	Electronic Circuits	ELEC2200	Core	2	4	ELEC3500	Power Electronics	None	Core	2	4
	ENGG3700	Numerical Analysis and Optimization	None	Core	2	4	UNIR3100	Communication Skills (3)	UNIR2100	Core	2	3
4	COMP4130	Computer Organization and Architecture	None	Core	2	4	COMP4230	Embedded System Design and Interfacing	None	Core	2	4
	COMP4500	Computer Vision & Image Processing	ELEC2013	Core	2	4	COMS4200	Communication Systems	None	Core	2	4
	ELEC4300	Power Systems Analysis	None	Core	2	4	ENGG4000	Renewable & Sustainable Energy	None	Core	2	4
	ENGG4801A	Final Year Project (A)	None	Core	2	4	ENGG4801B	Final Year Project (B)	ENGG4801A	Core	2	4