

Master of Engineering Practice M1330 (Smart and Renewable Electrical Power Systems Engineering)

Academic Chair: Dr. Martina Calais (M.Calais@murdoch.edu.au)

Start Date:

Semester 1 2024

Minor: Engineering Design (recommended for international students)

Year 1 – 2024	Semester 1 Units	CP	Semester 2 Units	CP
		ENG532 Renewable Energy Resources and Technologies	3	ENG536 Electrical Machines in the Smart Grid era
	ENG500 Finance, Management, Ethics and Law	3	ENG544 Engineering Sustainability	3
	GRD503 Design Thinking Tools	3	ENG543 Modelling and Systems Engineering	3
	BUS354 Leading Emerging Futures	3	ICT515 Foundations of Data Science	3
	Total	12	Total	12
Year 2 - 2025	Semester 1 Units	CP	Semester 2 Units	CP
		ENG535 Power Electronics – Converters and Applications	3	ENG534 Power Systems Operation, Control and Protection
	ENG537 Power System Modelling and Analysis	3	ENG538 Future Electricity Networks	3
	ENG631 Distributed Power System and Microgrid Planning and Reliability	3	ENG605 Design Project	6
	Specified Elective	3	ENG100 Engineering Professional Practice	0
	Total	12	Total	12

TOTAL CREDIT POINTS 48

Recommended Specified Electives
<p>ENG553 Industrial Process Control (S1) ENG552 Industrial Control Systems (S1) ENG551 Microcontrollers and Data Communication (S1) ENG570 Circular Economy and Innovation (S1) ENG630 Hydrogen Systems (S2) ICT606 Machine Learning (S1) PEN504 Greenhouse Gas Reporting and Life Cycle Assessment (S2) TLC501 Communication Skills for Postgraduate Study (S1, S2)</p>

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 29/01/24.

Handbook entry: <https://handbook.murdoch.edu.au/aos/07/MJ-REPS>

Master of Engineering Practice M1330 (Smart and Renewable Electrical Power Systems Engineering)

Academic Chair: Dr. Martina Calais (M.Calais@murdoch.edu.au)

Start Date:

Semester 1 2024

Minor: Engineering Research (not recommended for international students or students studying full time)

Year 1 – 2024	Semester 1 Units	CP	Semester 2 Units	CP
	ENG532 Renewable Energy Resources and Technologies	3	ENG536 Electrical Machines in the Smart Grid era	3
ENG500 Finance, Management, Ethics and Law	3	ENG544 Engineering Sustainability	3	
Specified Elective	3	ENG543 Modelling and Systems Engineering	3	
		ICT515 Foundations of Data Science	3	
	Total	9	Total	12
Year 2 - 2025	Semester 1 Units	CP	Semester 2 Units	CP
	ENG535 Power Electronics – Converters and Applications	3	ENG534 Power Systems Operation, Control and Protection	3
ENG537 Power System Modelling and Analysis	3	ENG538 Future Electricity Networks	3	
ENG631 Distributed Power System and Microgrid Planning and Reliability	3	ENG606 Thesis Project (YT option – part 2)	6	
ENG606 Thesis Project (YT option – part 1)	6			
	Total	15	Total	12

TOTAL CREDIT POINTS 48

Recommended Specified Electives
ENG553 Industrial Process Control (S1) ENG552 Industrial Control Systems (S1) ENG551 Microcontrollers and Data Communication (S1) ENG570 Circular Economy and Innovation (S1) ENG630 Hydrogen Systems (S2) ICT606 Machine Learning (S1) PEN504 Greenhouse Gas Reporting and Life Cycle Assessment (S2) TLC501 Communication Skills for Postgraduate Study (S1, S2)

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](#). This information is correct as at 29/01/24.

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