

# Master of Engineering Practice M1330 (Environmental and Sustainable Systems Engineering)

Academic Chair: Dr Linda Li ([l.li@murdoch.edu.au](mailto:l.li@murdoch.edu.au))

Start Date: Semester 1 2025

Option: Engineering Design

Year 1 – 2025	Semester 1 Units	CP	Semester 2 Units	CP
	ENG526 Postgraduate Engineering Skills and Tools	3	ENG543 Modelling and Systems Engineering	3
	ENG500 Finance, Management, Ethics and Law	3	ENG544 Engineering Sustainability	3
	ENG571 Hydrology and Water Cycle Management	3	ICT515 Foundations of Data Science	3
	ENG570 Circular Economy and Innovation	3	ENG572 Design of Water Treatment Unit Operations	3
	Total	12	Total	12
Year 2 – 2026	Semester 1 Units	CP	Semester 2 Units	CP
	ENG573 Integrated Waste Management for Resource Recovery	3	ENG622 Industrial Ecology (Symbiosis)	3
	ENG621 Land Use Planning and Green Infrastructure	3	ENG630 Hydrogen Systems	3
	Specified Elective (S1)	3	ENG605 Design Project (S2)	6
	GRD503 Design Thinking Tools	3	ENG100 Engineering Professional Practice	0
	Total	12	Total	12

**TOTAL CREDIT POINTS 48**

## Specified Electives

### Recommended Specified Electives:

ENG526 Postgraduate Engineering Skills and Tools S1  
 ENG532 Renewable Energy Resources and Technologies S1  
 ENV554 Sustainable Land and Water Management S1  
 PEN598 Carbon Management S1  
 PEN597 Climate Change Science and Policy S1  
 ENV556 Principles of Environmental Impact Assessment S1  
 ENV557 Advanced Environmental Management S1  
 PEN594 Energy Auditing and Management S1  
 ENV680 Climate Change Adaptation: Ecosystems and Societies S2  
 PEN504 Greenhouse Gas Reporting and Life Cycle Assessment S2  
 ENV303 GIS for Environmental Management and Planning S2  
 ENV558 Environmental Monitoring S2  
 PEN601 Smart Low Carbon Cities S2  
 PEN600 Energy Storage S2

Or any other elective subject to Academic Chair approval

**Students should note that the selection of the specified elective in S2 will extend the duration 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 27/11/24.

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Start Date: Semester 1 2025

Option: Engineering Research

Students who wish to enrol in the Thesis Project must demonstrate an average 70% or greater WAM equivalent (2.8 GPA equivalent) during their first 24 cpts of study in the Master of Engineering Practice course, or alternatively can enrol with permission from the Academic Chair.

Year 1 – 2025	Semester 1 Units	CP	Semester 2 Units	CP
	ENG500 Finance, Management, Ethics and Law	3	ENG543 Modelling and Systems Engineering	3
	ENG570 Circular Economy and Innovation	3	ENG544 Engineering Sustainability	3
	ENG571 Hydrology and Water Cycle Management	3	ENG572 Design of Water Treatment Unit Operations	3
	ENG526 Postgraduate Engineering Skills and Tools (Specified Elective)	3	ICT515 Foundations of Data Science	3
	Total	12	Total	12
Year 2 - 2026	Semester 1 Units	CP	Semester 2 Units	CP
	ENG621 Land Use Planning and Green Infrastructure	3	ENG622 Industrial Ecology (Symbiosis)	3
	ENG573 Integrated Waste Management for Resource Recovery	3	ENG630 Hydrogen Systems	3
	ENG606 Thesis Project (Y)	6	ENG606 Thesis Project (Y)	6
	ENG100 Engineering Professional Practice (Y)	0	ENG100 Engineering Professional Practice (Y)	0
	Total	12	Total	12

**TOTAL CREDIT POINTS 48**

**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 27/11/24.