

# M1330 – Master of Engineering Practice

Major: Environmental and Sustainable Systems Engineering

Minor: Engineering Design

Academic Chair: Martin Anda

m.anda@murdoch.edu.au

Year: 2023

Semester: 1

Semester 1			Semester 2			
Units	CP		Units	CP		
ENG570 - Circular Economy and Innovation	3	CP **  Wint:  **	ICT515 - Foundations of Data Science	3	CP **  Sum:  **	
ENG571 - Hydrology and Water Cycle Management	3		ENG544 - Engineering Sustainability	3		
ENG572 - Design of Water Treatment Unit Operations	3		ENG543 - Modelling and Systems Engineering	3		
ENG500 - Finance, Management, Ethics and Law	3		Specified Elective	3		
SEMESTER TOTAL			12	SEMESTER TOTAL		12
Year 1 - 2023	ENG573 - Integrated Waste Management for Resource Recovery	3	CP **  Wint:  **	ENG622 - Industrial Ecology (Symbiosis)	3	CP **  Sum:  **
	ENG621 - Land Use Planning and Green Infrastructure	3		ENG630 - Hydrogen Systems	3	
	GRD504 - Research Methods for Innovation	3		ENG605 Design Project	6	
	BUS354 - Leading Emerging Futures	3		ENG100 Engineering Professional Practice	0	
	SEMESTER TOTAL			12	SEMESTER TOTAL	
Year 2 - 2024	Total Credit Points					48

### Recommended Specified Electives:

ENG553 Control Systems and Process Dynamics  
 ENG552 Industrial Control Systems  
 ENG551 Microcontrollers and Data Communication  
 ENG570 Circular Economy and Innovation  
 ENV554 Land and Water Management  
 ENV556 Principles of Environmental Impact Assessment  
 ENV557 Environmental Assessment and Management  
 ENV616 Environmental Policy for the 21<sup>st</sup> Century  
 ICT606 Machine Learning  
 TLC501 Communication Skills for Postgraduate Study

Disclaimer: This course plan is a sample only and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as per the online Handbook (<https://handbook.murdoch.edu.au/>). Students should note that due to unit prerequisites, commencing study in semester 2 may extend the duration of the course. Correct as at 12/10/2022.

# M1330 – Master of Engineering Practice

Major: Environmental and Sustainable Systems Engineering

Minor: Engineering Research

Academic Chair: Martin Anda

m.anda@murdoch.edu.au

Year: 2023

Semester: 1

Semester 1			Semester 2					
	Units	CP		Units	CP			
Year 1 - 2023	ENG570 - Circular Economy and Innovation	3	CP **  Wint:  **	ICT515 - Foundations of Data Science	3	CP **  Sum:  **		
	ENG571 - Hydrology and Water Cycle Management	3		ENG544 - Engineering Sustainability	3			
	ENG572 - Design of Water Treatment Unit Operations	3		ENG543 - Modelling and Systems Engineering	3			
	ENG500 - Finance, Management, Ethics and Law			Specified Elective	3			
	SEMESTER TOTAL			9	SEMESTER TOTAL		12	
Year 2 - 2024	ENG573 - Integrated Waste Management for Resource Recovery	3	CP 3 **  Wint:ENG606 Thesis Project  **	ENG622 - Industrial Ecology (Symbiosis)	3	CP **  Sum:  **		
	ENG621 - Land Use Planning and Green Infrastructure	3		ENG630 - Hydrogen Systems	3			
	ENG606 Thesis Project	6		ENG606 Thesis Project	6			
				ENG100 Engineering Professional Practice	0			
	SEMESTER TOTAL			12	SEMESTER TOTAL		12	

Total Credit Points

48

### Recommended Specified Electives:

ENG553 Control Systems and Process Dynamics  
 ENG552 Industrial Control Systems  
 ENG551 Microcontrollers and Data Communication  
 ENG570 Circular Economy and Innovation  
 ENV554 Land and Water Management  
 ENV556 Principles of Environmental Impact Assessment  
 ENV557 Environmental Assessment and Management  
 ENV616 Environmental Policy for the 21<sup>st</sup> Century  
 ICT606 Machine Learning  
 TLC501 Communication Skills for Postgraduate Study

Disclaimer: This course plan is a sample only and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as per the online Handbook (<https://handbook.murdoch.edu.au/>). Students should note that due to unit prerequisites, commencing study in semester 2 may extend the duration of the course. Correct as at 12/10/2022.