

Academic Chair: [travis.woodward@murdoch.edu.au](mailto:travis.woodward@murdoch.edu.au)

Start Date: Semester 2 2024

**Minor: Engineering Design**

Year 1 – 2024	<b>Semester 1 Units</b>	<b>CP</b>	<b>Semester 2 Units</b>	<b>CP</b>
			ENG543 Modelling and Systems Engineering	3
			ENG544 Engineering Sustainability	3
			ICT515 Foundations of Data Science	3
			TLC501 Communication Skills for Postgraduate Study (Recommended Elective)	3
	<b>Total</b>		<b>Total</b>	12
Year 2 – 2025	<b>Semester 1 Units</b>	<b>CP</b>	<b>Semester 2 Units</b>	<b>CP</b>
	ENG551 Microcontrollers and Data Communication	3	ENG611 Intelligent Systems	3
	ENG552 Industrial Control Systems	3	ENG612 Autonomous Systems	3
	ENG553 Industrial Process Control	3	GRD503 Design Thinking Tools	3
	ENG500 Finance, Management, Ethics and Law	3	ENG605 Design Project (H option)	3
	<b>Total</b>	12	<b>Total</b>	12
Year 3 – 2026	<b>Semester 1 Units</b>	<b>CP</b>	<b>Semester 2 Units</b>	<b>CP</b>
	ENG613 Applied Robotics (Robotic Manipulation)	3		
	ICT606 Machine Learning	3		
	BUS354 Leading Emerging Futures	3		
	ENG605 Design Project (H option)	3		
	ENG100 Engineering Professional Practice	0		
	<b>Total</b>	12	<b>Total</b>	

**TOTAL CREDIT POINTS 48**
**Recommended Specified Electives**

TLC501 Communication Skills for Postgraduate Study (S1, S2)  
ENG536 Electrical Machines in the Smart Grid era (S2)  
ENG532 Renewable Energy Resources and Technologies (S1)  
ENG570 Circular Economy and Innovation (S1)  
ENG630 Hydrogen Systems (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](#). 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 01/07/2024.

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Start Date: Semester 2 2024

**Minor: Engineering Research**

(Only available to students with a GPA of  $\geq 70\%$  or with permission of the Academic Chair)

Year 1 – 2024	<b>Semester 1 Units</b>	<b>CP</b>	<b>Semester 2 Units</b>	<b>CP</b>
			ENG543 Modelling and Systems Engineering	3
			ENG544 Engineering Sustainability	3
			ICT515 Foundations of Data Science	3
			TLC501 Communication Skills for Postgraduate Study (Recommended Elective)	3
	<b>Total</b>		<b>Total</b>	12
Year 2 – 2025	<b>Semester 1 Units</b>	<b>CP</b>	<b>Semester 2 Units</b>	<b>CP</b>
	ENG551 Microcontrollers and Data Communication	3	ENG611 Intelligent Systems	3
	ENG552 Industrial Control Systems	3	ENG612 Autonomous Systems	3
	ENG553 Industrial Process Control	3	ENG606 Thesis Project (H option)	6
	ENG500 Finance, Management, Ethics and Law	3		
	<b>Total</b>	12	<b>Total</b>	12
Year 3 – 2026	<b>Semester 1 Units</b>	<b>CP</b>	<b>Semester 2 Units</b>	<b>CP</b>
	ENG613 Applied Robotics (Robotic Manipulation)	3		
	ICT606 Machine Learning	3		
	ENG606 Thesis Project (H option)	6		
	ENG100 Engineering Professional Practice	0		
	<b>Total</b>	12	<b>Total</b>	

**TOTAL CREDIT POINTS 48**
**Recommended Specified Electives**

TLC501 Communication Skills for Postgraduate Study (S1, S2)  
ENG536 Electrical Machines in the Smart Grid era (S2)  
ENG532 Renewable Energy Resources and Technologies (S1)  
ENG570 Circular Economy and Innovation (S1)  
ENG630 Hydrogen Systems (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](#). 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 01/07/2024.