

Course Plan – Commencement Semester 2, 2020

M1193 Master of Engineering

48pts

Martina Calais

Major: Electrical Power Engineering and Minor: Industrial Control Systems Engineering Or Major: Industrial Control Systems Engineering and Minor: Electrical Power Engineering				
Semester 1		Semester 2		
Year 1			ENG100 Engineering Professional Practice	0 pts
			ENG556 Power System Modelling and Analysis	3 pts
			ENG670 Measurement and Uncertainty Analysis	3 pts
			ENG523 Control Systems	3 pts
			Specified Elective	3 pts
			12pts	
Year 2	ENG100 Engineering Professional Practice	0 pts	ENG100 Engineering Professional Practice	0 pts
	ENG558 Advanced Power Electronics	3 pts	ENG682 Advanced Power Systems Protection and Control	3 pts
	ENG691 Hazard, Risk and Project Management	3 pts	ENG609 SCADA and Industrial Control Systems	3pts
	ENG501 PLC Applications	3 pts	ENG610 Engineering Design Project (3pts) and Specified Elective (3 pts)	6 pts
	Specified Elective	3 pts	or	
			ENG615 Engineering Masters Project (6pts)	
	12 pts		12 pts	
Year 3	ENG100 Engineering Professional Practice	0 pts		
	ENG608 Communications, Measurement and Control	3 pts		
	ENG557 Distributed Energy Resources and Demand Response	3 pts		
	ENG610 Engineering Design Project (3pts) and Specified Elective (3 pts)	6pts		
	or			
	ENG615 Engineering Masters Project (6pts)			
	12 pts			

Specified Electives

[TLC501](#) Communication Skills for Postgraduate Study - 3 points
MURDOCH: S1-internal, S2-internal

[ICT616](#) Data Resources Management - 3 points
MURDOCH: S1-internal, S2-internal

[ICT615](#) Information Technology Research Methods - 3 points
MURDOCH: S1-internal

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](#) . This course plan will vary depending on chosen minors and your academic progression.

Students should note that due to unit prerequisites, commencing study in Semester 2 may extend the duration of the course. Page 1

[PEN504](#) Greenhouse Gas Reporting and Life Cycle Assessment - 3 points

MURDOCH: S2-internal, S2-external

[PEN590](#) Energy Systems - 3 points

MURDOCH: S2-internal, S2-external

[PEN634](#) Solar Thermal and Biomass Energy - 3 points

MURDOCH: S2-internal, S2-external

[MBS538](#) Organisational Behaviour and Management - 3 points

MURDOCH: S1-internal, S1-external, S2-internal, S2-external, SUM-internal, SUM-external

[MBS673](#) Entrepreneurship and Innovation Management - 3 points

MURDOCH: S1-internal, S1-external, SUM-internal, SUM-external

Course Plan – Commencement Semester 2, 2020

M1193 Master of Engineering

48pts

Martina Calais

Major: Electrical Power Engineering and Minor: Renewable Energy Technologies				
	Semester 1		Semester 2	
Year 1			ENG100 Engineering Professional Practice	0 pts
			ENG556 Power System Modelling and Analysis	3 pts
			ENG670 Measurement and Uncertainty Analysis	3 pts
			PEN637 Applied Solar PV	3 pts
			PEN639 Wind and Hydroelectricity	3 pts
				12pts
Year 2	ENG100 Engineering Professional Practice	0 pts	ENG100 Engineering Professional Practice	0 pts
	ENG558 Advanced Power Electronics	3 pts	ENG682 Advanced Power Systems Protection and Control	3 pts
	ENG691 Hazard, Risk and Project Management	3 pts	Specified Elective (e.g. PEN634 Solar Thermal and Biomass Energy)	3pts
	PEN594 Energy Auditing and Management	3 pts	ENG610 Engineering Design Project (3pts) and Specified Elective (3 pts)	6 pts
	Specified Elective	3 pts	or	
			ENG615 Engineering Masters Project (6pts)	
	12 pts		12 pts	
Year 3	ENG100 Engineering Professional Practice	0 pts		
	ENG557 Distributed Energy Resources and Demand Response	3 pts		
	PEN623 Renewable Energy Systems Design	3 pts		
	ENG610 Engineering Design Project (3pts) and Specified Elective (3 pts)	6pts		
	or			
	ENG615 Engineering Masters Project (6pts)			
	12 pts			

Specified Electives

[TLC501](#) Communication Skills for Postgraduate Study - 3 points

MURDOCH: S1-internal, S2-internal

[ICT616](#) Data Resources Management - 3 points

MURDOCH: S1-internal, S2-internal

[ICT615](#) Information Technology Research Methods - 3 points

MURDOCH: S1-internal

[PEN504](#) Greenhouse Gas Reporting and Life Cycle Assessment - 3 points

MURDOCH: S2-internal, S2-external

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Students should note that due to unit prerequisites, commencing study in Semester 2 may extend the duration of the course.

[PEN590](#) Energy Systems - 3 points

MURDOCH: S2-internal, S2-external

[PEN634](#) Solar Thermal and Biomass Energy - 3 points

MURDOCH: S2-internal, S2-external

[MBS538](#) Organisational Behaviour and Management - 3 points

MURDOCH: S1-internal, S1-external, S2-internal, S2-external, SUM-internal, SUM-external

[MBS673](#) Entrepreneurship and Innovation Management - 3 points

MURDOCH: S1-internal, S1-external, SUM-internal, SUM-external

Course Plan – Commencement Semester 2, 2020

M1193 Master of Engineering

48pts

Martina Calais

Major: Industrial Control Systems Engineering and Minor: Renewable Energy Technologies			
Semester 1		Semester 2	
Year 1			ENG100 Engineering Professional Practice 0 pts
			ENG523 Control Systems 3 pts
			ENG670 Measurement and Uncertainty Analysis 3 pts
			PEN637 Applied Solar PV 3 pts
			PEN639 Wind and Hydroelectricity 3 pts
			12pts
Year 2	ENG100 Engineering Professional Practice	0 pts	ENG100 Engineering Professional Practice 0 pts
	ENG501 PLC Applications	3 pts	ENG609 SCADA and Industrial Control Systems 3 pts
	ENG691 Hazard, Risk and Project Management	3 pts	Specified Elective (e.g. PEN634 Solar Thermal and Biomass Energy) 3pts
	PEN594 Energy Auditing and Management	3 pts	6 pts
	Specified Elective	3 pts	
			ENG610 Engineering Design Project (3pts) and Specified Elective (3 pts) or ENG615 Engineering Masters Project (6pts)
	12 pts		12 pts
Year 3	ENG100 Engineering Professional Practice	0 pts	
	ENG608 Communications, Measurement and Control	3 pts	
	PEN623 Renewable Energy Systems Design	3 pts	
	ENG610 Engineering Design Project (3pts) and Specified Elective (3 pts)	6pts	
	or		
	ENG615 Engineering Masters Project (6pts)		
	12 pts		

Specified Electives

[TLC501](#) Communication Skills for Postgraduate Study - 3 points
MURDOCH: S1-internal, S2-internal

[ICT616](#) Data Resources Management - 3 points
MURDOCH: S1-internal, S2-internal

[ICT615](#) Information Technology Research Methods - 3 points
MURDOCH: S1-internal

[PEN504](#) Greenhouse Gas Reporting and Life Cycle Assessment - 3 points
MURDOCH: S2-internal, S2-external

[PEN590](#) Energy Systems - 3 points
MURDOCH: S2-internal, S2-external

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[PEN634](#) Solar Thermal and Biomass Energy - 3 points

MURDOCH: S2-internal, S2-external

[MBS538](#) Organisational Behaviour and Management - 3 points

MURDOCH: S1-internal, S1-external, S2-internal, S2-external, SUM-internal, SUM-external

[MBS673](#) Entrepreneurship and Innovation Management - 3 points

MURDOCH: S1-internal, S1-external, SUM-internal, SUM-external