

Course Plan – Commencement Semester 1, 2021

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

[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

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

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

[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

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

[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