62550 Master of Professional Engineering
Electrical & Electronic Engineering (SP-EELEC)

2 Year Course Study Plan – Commencing Semester 2, 2021

The Level 1, 2 and 3 prerequisites listed below apply to students undertaking preparatory units in the 2 – 3 year MPE.
Students enrolling in the 2-year MPE with 48 points block credit have already satisfied the Level 1, 2 and 3 prerequisites.
Level 4 and 5 prerequisites apply to all students.

Year 1				
Semester 2, 2021	ELEC4402 (NS) Communications Systems Prereq: ENSC3015 and MATH3023	ELEC4406 Digital System Design Prereq: ENSC3020	GENG4402 Control Engineering Prereq: MATH1001 and ENSC2001	GENG5505* Project Management and Engineering Practice *Prereq: ENSC1003*
It is recommended students undertake some practical work experience during the summer break to satisfy the GENG5010 Professional Engineering Portfolio				
Semester 1, 2022	ELEC4401 Circuits and Electronic Systems Prereq: ENSC3014, (ENSC3017 or ENSC3021) and MATH3023	ELEC4404 Signal Processing Prereq: CITS2401, ENSC3015 and MATH3023	ELEC5505 Power System Analysis Prereq: ENSC3016	ELEC5551 Electrical & Electronic Engineering Design Project 1 Prereq: Completion of 24 points of L4/L5 units Coreq: GENG5505
Year 2				
Semester 2, 2022	GENG5511* Engineering Research Project Part 1 *Prereq: 24 points of L4/L5 units*	OPTION	OPTION	ELEC5552 Electrical & Electronic Engineering Design Project 2 Prereq: ELEC5551
It is recommended students undertake some practical work experience during the summer break to satisfy the GENG5010 Professional Engineering Portfolio				
Semester 1, 2023	GENG5512* Engineering Research Project Part 2 *Prereq: GENG5511*	OPTION	OPTION	GENG5507* Risk, Reliability and Safety *Prereq: MATH1011 and MATH1012*

KEY: S1 = unit is available semester 1; S2 = unit is available semester 2; N/A = unit not available for 2021; NS = unit is delivered during a non-standard teaching period: ELEC4402: TS-L-4 = 26 Jul – 19 Sep 2021
* Unit is available in Semester 1 and Semester 2.

Refer to Table of Options overleaf.

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Students take units to a total value of 24 points from Group A or take units to a total value of 18 points from Group A and 6 points from Group B:	
GROUP A OPTIONS	**GROUP B OPTIONS**
ELEC5501 Advanced Communications (S2) Prereq: ELEC4402	BMEG4001 Biomedical Instrumentation (S2) Prereq: ENSC2003
ELEC5502 Analogue Electronics (N/A) Prereq: ELEC4401	BUSN5100 Applied Professional Business Communications (S1, S2)
ELEC5503 Digital Microelectronics System Design (S1) Prereq: ENSC3020	CITS4402 Computer Vision (S1) Prereq: CITS2401 and MATH1012 (Note: students must have the ability to program in a high-level programming language and the ability to reason in linear algebra and calculus)
ELEC5504 Power Electronics (S1) Prereq: ENSC3017	CITS4404 Artificial Intelligence and Adaptive Systems (N/A) Prereq: 12 points of programming-based units◆
ELEC5506 Process Instrumentation and Control (S1) Prereq: ENSC2003	CITS4419 Mobile and Wireless Computing (S2) Prereq: CITS1001, (CITS1002 or CITS2002) and CITS3002
ELEC5508 Semiconductor Nanoelectronics (S1) Prereq: ENSC3014	ELEC5509 Grid Integration of Renewable Energy (S2) Prereq: ENSC3016
GENG5503 Modern Control Systems (S2) Prereq: ENSC3015 and GENG4402	ELEC5510 Design and Analysis of Smart Grids and Microgrids (N/A) Prereq: ENSC3016
GENG5506 Renewable Energy (S2) Prereq: ENSC2002 or (ENSC2003 & ENSC2004), and MATH1012	GENG4405 Numerical Methods and Modelling (S2) Prereq: CITS2401
GENG5508 Robotics (S1) Prereq: CITS1001 or CITS1401 or CITS2002 or CITS2401	GENG5516 Energy Storage Systems (S1) Prereq: ENSC3006
	SCIE5516 Materials Characterisation for Bioengineering Applications (S1)
	SVLG5003 Wicked Problems (N/A) Enrolment in this unit is subject to approval by the unit coordinators.

◆ = Programming-based units include: - CITS1001 Software Engineering with Java; CITS1401 Computational Thinking with Python; CITS2002 Systems Programming; CITS2200 Data Structures and Algorithms; CITS2401 Computer Analysis and Visualisation; CITS2402 Introduction to Data Science; CITS4009 Computational Data Analysis; or equivalent.

KEY: S1 = unit is available semester 1; S2 = unit is available semester 2; N/A = unit not available for 2021; NS = unit is delivered during a non-standard teaching period.

The Rules for the 62550 Master of Professional Engineering can be found at: handbooks.uwa.edu.au/rules-62550-MPE

All units have a value of six points unless otherwise stated.

Information about unit availability should be checked at the beginning of each semester and can be found at: timetable.uwa.edu.au or Handbooks.

Further Help!

Refer to the UniStart website for your step-by-step guide on planning your enrolment: uwa.edu.au/unistart. If you need to discuss your study plan further, please contact the EMS Student Service and Engagement Office: enquiries-ems@uwa.edu.au