# 2 Year Course Study Plan – Commencing Semester 1

Level 4 and 5 prerequisites apply to all students.

The Level 1, 2 and 3 prerequisites listed below apply to students undertaking preparatory units in the 2 – 3 year MPE. You must complete any undergraduate pathway units in the first 48 points of the MPE.

Students enrolling in the 2-year MPE with 48 points block credit or relevant Engineering Science pathway have already satisfied the Level 1, 2 and 3 prerequisites.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year 1** | | | | |
| *It is recommended students undertake some practical work experience during this summer break to satisfy the GENG5010 Professional Engineering Portfolio* | | | | |
| Semester 1 | CITS4401  Software Requirements  and Design  Prereq: Unit on Python programming | GENG5505  Project Management and Engineering Practice | OPTION | OPTION |
| Semester 2 | GENG5507  Risk, Reliability and Safety | CITS5501  Software Testing and  Quality Assurance  Prereq: 12 points of programming units | OPTION | OPTION |
| *It is recommended students undertake some practical work experience during this summer break to satisfy the GENG5010 Professional Engineering Portfolio* | | | | |
| **Year 2** | | | | |
| Semester 1 | CITS5551  Software Engineering  Design Project 1  Prereq: 24 points of L4/L5 units | GENG5511  Engineering Research Project Part 1  Prereq: 24 points of L4/L5 units | OPTION | OPTION |
| Semester 2 | CITS5552  Software Engineering  Design Project 2  Prereq: CITS5551 | GENG5512  Engineering Research Project Part 2  Prereq: GENG5511  [taken in semester after GENG5511] | CITS5507  High Performance  Computing  Prereq: 12 points of programming units | CITS5503  Cloud Computing  Prereq: 12 points of programming units |
| *Students must complete all credit bearing units and GENG5010 Professional Engineering Portfolio to be eligible to graduate* | | | | |

*unit is available in Semester 1 and Semester 2;* N/A = unit not available for 2024*;* NS = unit is delivered during a non-standard teaching period.

Refer to Table of Options overleaf

|  |  |
| --- | --- |
| **Group A Options**  Take unit(s) to the value of 36 points | |
| AUTO4508 Mobile Robots (S1)  Prereq: unit on programming | CITS5506 The Internet of Things (S1, S2)  Prereq: unit on programming |
| CITS4009 Computational Data Analysis (S2) | CITS5508 Machine Learning (S1)  Prereq: unit on programming |
| CITS4012 Natural Language Processing (S1)  Prereq: unit on programming | ELEC4406 Digital System Design (S2)  Prereq: ENSC3020 Digital Embedded Systems |
| CITS4402 Computer Vision (S1)  Prereq: unit on programming | GENG4402 Control Engineering (S2) |
| CITS4403 Computational Modelling (S2)  Prereq: unit on programming | GENG4405 Numerical Methods and Modelling (S2)  Prereq: unit on programming |
| CITS4404 Artificial Intelligence and Adaptive Systems (S1)  Prereq: unit on programming | SVLG5003 Wicked Problems (N/A) |
| CITS4419 Mobile and Wireless Computing (S1)  Prereq: CITS3002 Computer Networks | BUSN5100 Applied Professional Business Communications (S1, S2)  Note: only to be taken in first 48 points |

*unit is available in Semester 1 and Semester 2;* N/A = unit not available for 2024*;* NS = unit is delivered during a non-standard teaching period.

NOTE: Programming-based units are: [CITS2005](https://handbooks.uwa.edu.au/unitdetails?code=CITS2005) Object Oriented Programming; [CITS1401](https://handbooks.uwa.edu.au/unitdetails?code=CITS1401) Computational Thinking with Python; [CITS2002](https://handbooks.uwa.edu.au/unitdetails?code=CITS2002) Systems Programming; [CITS2200](https://handbooks.uwa.edu.au/unitdetails?code=CITS2200) Data Structures and Algorithms; [CITS2401](https://handbooks.uwa.edu.au/unitdetails?code=CITS2401) Computer Analysis and Visualisation; [CITS2402](https://handbooks.uwa.edu.au/unitdetails?code=CITS2402) Introduction to Data Science; and [CITS4009](https://handbooks.uwa.edu.au/unitdetails?code=CITS4009) Computational Data Analysis.

The Rules for the 62550 Master of Professional Engineering can be found at: <https://handbooks.uwa.edu.au/coursedetails?code=62550#rules>

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](http://www.timetable.uwa.edu.au/) or [Handbooks.](https://handbooks.uwa.edu.au/)

Further Help!

Refer to the UniStart website for your step-by-step guide on planning your enrolment: [uwa.edu.au/unistart.](https://www.uwa.edu.au/unistart) If you need to discuss your study plan further, please contact the EMS Student Service and Engagement Office via AskUWA.