2 Year Course Study Plan – Commencing Semester 1

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| **Year 1** | | | | |
| *It is recommended students undertake some practical work experience during the summer break to satisfy the GENG5010 Professional Engineering Portfolio* | | | | |
| Semester 1 | MECH4428  Degradation of Materials  Prereq: ENSC1004 Engineering Materials | MECH4429  Applied Engineering Thermodynamics  Prereq: ENSC3024 Engineering Thermodynamics | MECH4426  Dynamics, Vibration and Sound  Prereq: ENSC2004 Engineering Mechanics | GENG5507  Risk, Reliability and Safety |
| Semester 2 | GENG4405  Numerical Methods and Modelling  Prereq: unit on programming | MECH4424  Measurement and Noise  Prereq: ENSC2004 Engineering Mechanics  & a unit on programming | GENG4402  Control Engineering | MECH5502  Analysis and Design of Machine Components  Prereq: ENSC3004 Solid Mechanics  & ENSC3002 Materials and Manufacturing |
| *It is recommended students undertake some practical work experience during this summer break to satisfy the GENG5010 Professional Engineering Portfolio* | | | | |
| **Year 2** | | | | |
| Semester 1 | GENG5511  Engineering Research Project Part 1  Prereq: 24 points of L4/L5 units | GENG5514  Finite Element Method  Prereq: GENG4405  & ENSC3004 Solid Mechanics  & ENSC3003 Fluid Mechanics | MECH5551  Mechanical Eng. Design Project 1  Prereq: MECH5502 | OPTION |
| Semester 2 | GENG5512  Engineering Research Project Part 2  Prereq: GENG5511  [taken in semester after GENG5511] | GENG5505  Project Management and Engineering Practice | MECH5552  Mechanical Eng. Design Project 2  Prereq: MECH5551 | OPTION |
| *Students must complete all credit bearing units and GENG5010 Professional Engineering Portfolio to be eligible to graduate* | | | | |

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.

*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.

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| **Group A Options**  Take unit(s) to the value of 12 points | |
| AUTO4508 Mobile Robots (S1)  Prereq: unit on programming | GENG5501 Coastal and Offshore Engineering (S1)  Prereq: ENSC3003 Fluid Mechanics |
| BMEG4002 Biomaterials (S1)  Prereq: ENSC1004 Engineering Materials | GENG5503 Modern Control Systems (S2) |
| BMEG4003 Biomechanics (S1)  Prereq: ENSC2004 Engineering Mechanics | GENG5504 Petroleum Engineering (N/A)  Prereq: ENSC3003 Fluid Mechanics |
| CHPR4405 Particle Technology (S1)  Prereq: ENSC3003 Fluid Mechanics | GENG5506 Renewable Energy (S2)  Prereq: ENSC2003 Electrical Engineering Fundamentals |
| CHPR4407 Transport Phenomena (S2)  Prereq: ENSC3003 Fluid Mechanics | MECH5501 Applied Acoustics (N/A) |
| CHPR5520 Combustion Science and Technology (NS)  Prereq: ENSC3024 Engineering Thermodynamics | MECH5504 Design and Failure Analysis of Materials (S2)  Prereq: ENSC1004 Engineering Materials & ENSC3004 Solid Mechanics |
| CIVL5505 Design of Offshore Energy Facilities (S2)  Prereq: ENSC3003 Fluid Mechanics | OCEN4007 Renewable Ocean Energy (S2)  Prereq: ENSC3003 Fluid Mechanics |
| ENVE4405 Ecological Engineering and Nature Based Solutions (S1) | OCEN5002 Ocean Engineering and Technology (NS) |
| ENVE5502 Wastewater Engineering (S2) | SCIE5516 Materials Characterisation for Bioengineering and Synthetic Biology (S1) |
| GENG4403 Extractive Metallurgy (S1)  Prereq: ENSC1004 Engineering Materials | SVLG5003 Wicked Problems (N/A)  Enrolment in this unit is subject to approval by the unit coordinators. |
| GENG4410 Fossil to Future – The Transition (S2) | 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.

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.