# 2 Year Course Study Plan – Commencing Semester 2

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.

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| **Year 1** | | | | |
| Semester 2 | CHPR4406  Reaction Engineering  Prereq: ENSC3006 Chemical Process Thermodynamics | CHPR4407#  Transport Phenomena  Prereq: ENSC3003 Fluid Mechanics | GENG4402  Control Engineering | OPTION |
| *It is recommended students undertake some practical work experience during the summer break to satisfy the GENG5010 Professional Engineering Portfolio* | | | | |
| Semester 1 | CHPR4404  Advanced Thermodynamics and Mass Transfer Process  Prereq: ENSC3006 Chemical Process Thermodynamics &  ENSC3007 Heat and Mass Transfer | CHPR5550  Chemical Eng. Design Project  Prereq: CHPR4406 | | OPTION |
| **Year 2** | | | | |
| Semester 2 | GENG5511 ****  Engineering Research Project  Part 1  Prereq: 24 points of L4/L5 units | CHPR4405  Particle Technology  Prereq: ENSC3003 Fluid Mechanics | GENG5505 ****  Project Management and Engineering Practice | OPTION |
| *It is recommended students undertake some practical work experience during the summer break to satisfy the GENG5010 Professional Engineering Portfolio* | | | | |
| Semester 1 | GENG5512 ****  Engineering Research Project  Part 2  Prereq: GENG5511  [taken in semester after GENG5511] | CHPR5501  Advanced Reaction Engineering and Catalysts  Prereq: CHPR4406 | GENG5507 ****  Risk, Reliability and Safety | OPTION |
| *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

# Students are strongly advised to complete CHPR4407 *before* enrolling in the Design Project (due to large volume of work associated with both subjects).

Refer to Table of Options overleaf.

**OPTION UNITS**

**Take units to a total value of 12 points from Group A and 12 points from Group B or take units to a total value of 18 points from Group A and 6 points from Group B:**

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| **GROUP A:** | |
| CHPR5520 Combustion Science and Technology (NS)  Prereq: ENSC3006 Chemical Process Thermodynamics | CHPR4408 Chemical and Thermal Renewable Energies (S1) |
| CHPR5521 Gas Processing 1—Flow Assurance and Gathering (S1)  Coreq: CHPR4404 | ELEC5506 Process Instrumentation and Control (S1)  Prereq: ENSC2003 Electrical Engineering Fundamentals |
| CHPR5522 Gas Processing 2—Treating and LNG Production (S2)  Prereq: CHPR4404 | GENG5516 Energy Storage Systems (S1)  Prereq: ENSC3006 Chemical Process Thermodynamics |

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| **GROUP B:** | |
| BMEG4002 Biomaterials (S1)  Prereq: ENSC1004 Engineering Materials or MECH2002 Engineering Materials | GENG5503 Modern Control Systems (S2) |
| BMEG4003: Biomechanics (S2)  Prereq: ENSC2004 Engineering Mechanics | GENG5504 Petroleum Engineering (N/A)  Prereq: ENSC3003 Fluid Mechanics |
| CITS4009 Computational Data Analysis (S2) | GENG5506 Renewable Energy (S2)  Prereq: ENSC2003 Electrical Engineering Fundamentals |
| ENVE4401 Contaminant Fate and Transport (S2)  Prereq: ENSC3003 Fluid Mechanics | SVLG5003 Wicked Problems (N/A)  Enrolment in this unit is subject to approval by the unit coordinators. |
| GENG4403 Extractive Metallurgy (S1)  Prereq: ENSC1004 Engineering Materials | BUSN5100 Applied Professional Business Communications (S1, S2)  Note: only to be taken in first 48 points |
| GENG4410 Fossil to Future – The Transition (S2) |  |

*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.