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| **Year 1** | | | | | |
| Students must complete **GENG1000 Engineering Practice 1** within their first year (0 points = 1 week module) | | | | | |
| Semester 1,  2025 | **MATH1722: Math Specialist\*\* OR PHYS1030: Physics Bridging\*\* OR CHEM1003: Intro Chemistry\*\***  pre-req: ATAR Maths Methods (or MATH1721)  – see note on bridging | **MATH1011: Multivariable Calculus\*\***  pre-req: ATAR Math Specialist (or MATH1722)  **OR CHEM1001: Chemistry - Properties & Energetics\*\***  pre-req: ATAR Chemistry (or CHEM1003) | | **GENG1010: Introduction to  Engineering\*\*** | **ECON1101: Microeconomics: Prices and Markets\*\*** |
| Semester 2,  2025 | **MATH1011: Multivariable Calculus\*\***  pre-req: ATAR Math Specialist (or MATH1722)  **OR CHEM1001: Chemistry - Properties and Energetics\*\***  pre-req: ATAR Chemistry (or CHEM1003) | **ENSC1004: Engineering Materials**  pre-req: ATAR Chemistry (or CHEM1003), ATAR Physics (or PHYS1030) AND ATAR Math Methods (or MATH1721)  co-req: MATH1722 | | **CHPR1005: Mass and Energy Balances**  pre-req: ATAR Chemistry or (CHEM1003) AND  ATAR Math Methods (or MATH1721) | **ECON1102: Macroeconomics:  Money and Finance\*\*** |
| **Year 2** | | | | | |
| Students must complete **GENG2000 Engineering Practice 2** within their second year (0 points = 1 week module) | | | | | |
| Semester 1,  2026 | **MATH1012: Mathematical Theory & Methods\*\***  pre-req: ATAR Math Specialist (or MATH1722)  Replaces STAT1520 in BCOM component | **CHEM1002: Chemistry –  Structure and Reactivity\*\***  pre-req: ATAR Chemistry (or CHEM1003) | | **CHPR2006: Chemical Engineering Thermodynamics**  pre-req: CHEM1001 & CHPR1005 & MATH1011 | **PHYS1001: Physics for Scientists & Engineers\*\***  pre-req: ATAR Physics (or PHYS1030) AND ATAR Math Specialist (or MATH1722)  co-req: MATH1722 |
| Semester 2,  2026 | **CITS2401: Computer Analysis & Visualisation\*\*** pre-req: ATAR Math Methods (or MATH1721) | **CHPR2007**: **Heat and Mass Transfer**  pre-req: CHPR1005 & MATH1011 | | **CHPR2018: Process Synthesis  and Design 1**  pre-req: CHPR1005 | **ACCT1101: Financial Accounting\*\*** |
| **Year 3** | | | | | |
| Students must complete **GENG3000 Engineering Practice** 3 within their third year (0 points = 1 week module) | | | | | |
| Semester 1,  2027 | **GENG2003: Fluid Mechanics** pre-req: MATH1011 & MATH1012 | **CHPR3404: Advanced Thermodynamics  & Transfer Processes**  pre-req: CHPR2007 & CHPR2006 & MATH1012 | | **MGMT1135: Organisational  Behaviour\*\*** | **ECON2233: Microeconomics: Policy  and Applications**  pre-req: ECON1101 |
| Semester 2,  2027 | **CHPR3406: Reaction Engineering**  pre-req: CHPR2006 | **CHPR3018: Process Synthesis  and Design 2**  pre-req: GENG2000 & CHPR2018 co-req: CHPR3019 | | **CHPR3019: Unit Operations**  pre-req: GENG2003 & CHPR2006 & CHPR2007 | **ECON2234: Macroeconomics: Policy  and Applications**  pre-req: ECON1102 |
| **Year 4** | | | | | |
| *Students must achieve a WAM of at least 50 in order to progress to the fourth (Honours) year – see BE(Hons) rules* | | | | | |
| Semester 1,  2028 | **#CHPR4501: Advanced Reaction Engineering & Catalysts**  pre-req: CHPR3406 & CHPR2007 | **#Chemical Engineering Option 1** | | **CHPR3405: Particle Technology**  pre-req: GENG2003 | **Level 2 Economics Unit** |
| Semester 2,  2028 | **GENG3402: Control Engineering**  pre-req: MATH1011 & MATH1012 | **CHPR3407: Transport Phenomena**  pre-req: GENG2003 & (CHPR2007 or MECH3024) | | **#Chemical Engineering Option 2** | **Level 3 Economics Unit** |
| **Year 5** | | | | | |
| Students must undertake practical work experience during the course to satisfy **GENG5010 Professional Engineering Portfolio** (0 points) – *see notes below* | | | | | |
| Semester 1,  2029 | **#CHPR5550**: **Chemical Engineering Design Project**  **(12 pts)**  pre-req: CHPR3018 & CHPR3019 & CHPR3406 & GENG3000 | | | **#Chemical Engineering Option 3** | **MKTG1203: Introduction to Marketing\*\*** |
| Semester 2,  2029 | **#GENG4411: Engineering Research Project Pt 1\*\***  pre-req: 144 points incl. 24 points Level 3 units in major & GENG3000 | | **#GENG5507: Risk, Reliability & Safety** pre-req: 120pts incl. MATH1011 & MATH1012 | **#Chemical Engineering Option 4** | **Level 3 Economics Unit** |
| **Year 6** | | | | | |
| Semester 1,  2030 | **#GENG4412: Engineering Research Project Pt 2\*\***  pre-req: GENG4411  (taken in semester after GENG4411) | | **Level 3 Economics Unit** |  | |
| Students must pass all credit bearing and 0-pt units to be eligible to graduate | | | | | |

**\*\*** Offered in both semesters

Bridging Units

Bachelor of Commerce Units

#All Level 4/5 engineering units also have a WAM pre-requisite. See notes on next page.

**Bridging/Foundation units in CB006 Combined BE (Chemical Engineering) / BCOM**Up to 12 points of bridging is permitted. Students can count MATH1012 towards the BCOM foundation component (STAT1520) of this combined course, except for students who are seeking professional accreditation in the Accounting major (who must take STAT1520 and MATH1012).

All combined BE (Chemical Engineering) / BCOM students will need to exceed course points to meet the requirements of both courses. If you do not have any bridging units, then you will exceed your course points by 6 credit points. If you need one bridging unit, then you will exceed your course points by 12 credit points. If you need two bridging units, then you will need to exceed your course points by 18 credit points.

Bridging units must be successfully completed within the first 48 points of study:

* Students who have not achieved a scaled mark of at least 50 in Mathematics Specialist ATAR or equivalent are required to complete MATH1722.
* Students who have not achieved a scaled mark of at least 50 in Physics ATAR or equivalent are required to complete PHYS1030.
* Students who have not achieved a scaled mark of at least 50 in Chemistry ATAR or equivalent are required to complete CHEM1003.

**CHEMICAL ENGINEERING OPTION UNITS**

Take unit(s) to a total value of 24 points, comprising a minimum of 12 points from Group A and the balance from Group B.

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| **Group A Options** | **Group B Options** |
| **CHPR4408: Chemical and Thermal Renewable Energies** (S1)  Pre-req: 96 pts | **CITS4009 Computational Data Analysis** (S2)  Pre-req: 96 pts |
| **CHPR4409: Mineral Processing: Current and Future Technologies** (S1)  Pre-req: CHPR2018 | **ELEC5506 Process Instrumentation and Control** (S1)  Pre-req: 120 pts incl. GENG3402  APS: ENSC2003 |
| **CHPR5520 Combustion Science and Technology** (NS)  Pre-req: 120 pts incl. (CHPR2006 or MECH3024) | **ENVE4401 Transport Processes in the Environment** (S2)  Pre-req: 96 pts incl. (GENG2003 or GENG2010) |
| **CHPR5521 Gas Processing 1** (S1)  Pre-req: 120 pts incl. CHPR3404 | **GENG4403 Extractive Metallurgy** (S1)  Pre-req: 96 pts incl. (ENSC1004 or MINE2001) |
| **CHPR5522 Gas Processing 2** (S2)  Pre-req: 120 pts incl. CHPR3404 | **GENG4410 Fossil to Future – The Transition** (S2)  Pre-req: 96 pts |
| **ENVE5502 Water and Wastewater Engineering** (S2)  Pre-req: 120 pts incl. (GENG2003 or GENG2010)  Unit has a quota. Check Handbook for details. | **GENG5504 Petroleum Engineering** (S2)  Pre-req: 120 pts incl. GENG2003 |
| **GENG5516 Energy Storage Systems** (S1)  Pre-req: 120 pts incl. CHPR2006 or MECH3024 | **GENG5506 Renewable Energy** (S2)  Pre-req: 120 pts incl. ENSC2003 and MATH1012 |

* The Rules for the CB006 Bachelor of Engineering (Honours) can be [**found here**](https://handbooks.uwa.edu.au/rules?code=CB006)
* 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 in the [**Handbook**](https://handbooks.uwa.edu.au/).
* All students in this combined degree are encouraged to also pick up STAT1520 if they can accommodate it in their study plan.
* All students must complete GENG1000, GENG2000 & GENG3000 Engineering Practice Skills modules (0 points = 3 x 1-week modules). Check Handbook for pre-requisites.
* All students must complete the Professional Engineering Practicum and GENG5010 Professional Eng. Portfolio (0 points). Details are available on the *LMS Organisation EMS Student Experience.*
* Students must maintain a WAM of at least 50 in the BE(Hons). This is required to enrol in Level 4/5 BE(Hons) units.

Chem Eng students who need to bridge ATAR subjects may seek special approval via AskUWA to take CHPR1005 Mass & Energy Balances concurrently with CHEM1003 Introductory Chemistry, and to replace GENG2003 Fluid Mechanics (S1) with GENG2010 Principles of Hydraulics (S2).

**Further Help**

If you need to discuss your study plan further, please contact the [**EMS Student Office**](https://www.uwa.edu.au/students/my-course/study-areas/ems-students)**.**