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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: Mathematics Foundations: Specialist\*\***  pre-req: ATAR Maths Methods (or MATH1721)  – see notes on bridging | **CHEM1003: Intro Chemistry\*\***  **OR**  **PHYS1030: Bridging Physics\*\***  pre-req: ATAR Math Methods (or MATH1721) – see notes on bridging | **GENG1010: Introduction to Engineering\*\*** | **FINA1221: Introduction to Finance\*\*** |
| Semester 2,  2025 | **MATH1011: Multivariable Calculus\*\***  pre-req: ATAR Math Specialist (or MATH1722) | **PHYS1001: Physics for Scientists & Engineers\*\***  pre-req: ATAR Physics (or PHYS1030) AND ATAR Math Specialist (or MATH1722)  co-req: MATH1722 | **ENSC1004: Engineering Materials**  pre-req: ATAR Chemistry (or CHEM1003), ATAR Physics (or PHYS1030) AND ATAR Math Methods (or MATH1721)  co-req: MATH1722 | **ACCT1101: Financial Accounting**\*\* |
| **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 | **CITS2401**: **Computer Analysis & Visualisation\*\***  pre-req: ATAR Math Methods (or MATH1721) | **ENSC2004: Engineering Mechanics\*\***  pre-req: ATAR Physics (or PHYS1030) AND  ATAR Math Specialist (or MATH1722) co-req: MATH1011, APS: PHYS1001 & MATH1011 | **FINA2222: Corporate Financial Policy\*\***  pre-req: FINA1221 |
| Semester 2,  2026 | **GENG1101: Engineering Drawings** | **MECH2004: Engineering Dynamics**  pre-req: ENSC2004 & MATH1011 & MATH1012  APS: PHYS1001 | **ENSC2003: Eng. Electrical Fundamentals\*\*** pre-req: ATAR Physics (or PHYS1030)  AND MATH1011  co-req: MATH1012, APS: PHYS1001 | **ECON1101: Microeconomics:  Prices and Markets\*\*** (BCom Foundation Unit) |
| **Year 3** | | | | |
| Students must complete **GENG3000 Engineering Practice** 3 within their third year (0 points = 1 week module) | | | | |
| Semester 1,  2027 | **GENG2004: Solid Mechanics**  pre-req: ENSC2004 & MATH1011 & MATH1012 | **GENG2003: Fluid Mechanics**  pre-req: MATH1011 & MATH1012 & PHYS1001 | **MECH2002: Engineering Materials 2**  pre-req: ENSC1004 | **Level 2 Finance Option Unit**  (i.e., FINA2205 or FINA2207) |
| Semester 2,  2027 | **MECH3001: Mechanisms & Machines**  pre-req: (CITS1401 or CITS2401) & MECH2004 | **MATH3023: Adv. Mathematics Applications**  pre-req: MATH1011  co-req: MATH1012 | **MECH3024: Engineering Thermodynamics**  pre-req: CITS2401 & ENSC2004  APS: PHYS1001 | **MGMT1135: Organisational Behaviour\*\*** (BCom Foundation Unit) |
| **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 | **#MECH4426: Vibration & Sound**  pre-req: ENSC2004 & MECH2004 | **#MECH4429: Applied Eng. Thermodynamics**  pre-req: MECH3024 | **MECH2003: Manufacturing**  pre-req: ENSC1004  co-req: MECH2002 | **FINA3324: Investment Analysis**  pre-req: any Level 2 Finance unit |
| Semester 2,  2028 | **GENG3405: Numerical Methods & Modelling**  pre-req: MATH1012 & CITS2401 | **#MECH4502: Analysis and Design of Machine Components**  pre-req: CITS2401& GENG2004 & MECH2004 & MECH2003 & GENG2000 | **MECH3424: Measurement & Instrumentation**  pre-req: (CITS1401 or CITS2401) & ENSC2004 & MATH1012 & GENG2000 | **GENG3402: Control Engineering**  pre-req: MATH1011 & MATH1012 |
| **Year 5** | | | | |
| Students must undertake practical work experience to satisfy **GENG5010 Professional Engineering Portfolio** (0 points) | | | | |
| Semester 1,  2029 | **#MECH5551: Mechanical Eng Design Project 1**  pre-req: MECH4502 & GENG3000  co-req: MECH4429 | **#MECHANICAL ENG. OPTION** | **Level 3 Finance Option Unit**  (i.e., ECON3236 or FINA3304) | **MKTG1203: Introduction to Marketing\*\*** (BCom Foundation Unit) |
| Semester 2,  2029 | **#MECHANICAL ENG. OPTION** | **#MECHANICAL ENG. OPTION** | **Level 3 Finance Option Unit**  (i.e., FINA3307, FINA3326 or FINA3333) | **Level 2 Finance Option Unit**  (i.e., FINA2204 or FINA2209) |
| **Year 6** | | | | |
| Semester 1,  2030 | **#GENG5507: Risk, Reliability and Safety\*\***  pre-req: 120pts incl. MATH1011 & MATH1012 |  | | |
| 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 prerequisite. See notes on next page.

**Bridging/ Foundation units in CB006 Combined BE (Mechanical 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). If you need two bridging units, then you will need to exceed course points. All students in this combined degree are encouraged to also pick up STAT1520 if they can accommodate it in their study plan.

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.

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| **Group A Options: Take 6 – 18 pts**  Students must take at least one unit from Group A and may take all three units.  NOTE 1: Students who select GENG4411 must take GENG4412 in the following semester. The two units comprise a 12-point research project.  NOTE 2: Students who do not take GENG4411 and GENG4412 will not be able to graduate with an Honours classification higher than H2B. | **Group B Options: Take up to 12 pts**  NOTE 3: 18 points must be taken from Group A and Group B combined.  Students who take 6 points from Group A must take 12 points from Group B. Students who take 12 points from Group A must take 6 points from Group B. Students who take all units from Group A do not take any units from Group B. |
| **GENG4411: Engineering Research Project Part 1 (S1, S2)**  pre-req: 144 points incl. 24 points Level 3 units in major & GENG3000 | **AUTO3002: Mechatronics (S1)**  pre-req: ELEC3020 and GENG2000 |
| **GENG4412: Engineering Research Project Part 2 (S1, S2)**  pre-req: GENG4411(taken in semester after GENG4411) | **AUTO4507: Robot Manipulators**  pre-req: 96 points incl. (CITS1401 or CITS1000 or CITS2401) & (MECH3001 or ELEC3020) |
| **MECH5552: Mechanical Engineering Design Project 2 (S2)**  pre-req: MECH5551 | **GENG5501: Coastal and Offshore Engineering (S1)**  pre-req: GENG2003 |
|  | **GENG5504: Petroleum Engineering (S2)**  pre-req: 120 pts incl. GENG2003 |
|  | **GENG5505: Project Management & Engineering Practice (S1, S2)**  pre-req: 120pts |
|  | **GENG5514: Finite Element Method (S1)**  pre-req: 120 pts incl. (GENG2003 or GENG2010) & GENG2004 & GENG3405 |
|  | **MECH4428: Degradation of Materials (S1)**  pre-req: 96 pts incl. MECH2002 |
|  | **MECH5504: Design and Failure Analysis of Materials (S2)**  pre-req: 120 pts incl. MECH2002 and GENG2004 |

* 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/).
* Students can replace STAT1520 in the BCOM foundation with MATH1012, except for students who are seeking professional accreditation in the Accounting major. These students must take STAT1520 and MATH1012.
* All students must complete GENG1000, GENG2000 & GENG3000 Engineering Practice Skills modules (0 points = 3 x 1-week modules). Check Handbook for prerequisites.
* 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.

**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)**.**