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| **Year 1** | | | | |
| *Students must complete* ***GENG1000 Engineering Practice 1*** *within their first year (0 points = 1 week module)* | | | | |
| Semester 1,  2024 | **MATH1011\*\***  Multivariable Calculus  ***Prereq: Math Specialist ATAR or MATH1722*** | **GENG1010\*\***  Introduction to Engineering | **PHYS1001\*\***  Physics for Scientists & Engineers  ***Prereq: (Physics ATAR or PHYS1030) &***  ***(Math Methods ATAR or MATH1721)***  ***Coreq: MATH1722*** | **CITS2401**\*\*  Computer Analysis & Visualisation  ***Prereq: Math Methods ATAR or MATH1721*** |
| Semester 2,  2024 | **MATH1012\*\***  Mathematical Theory & Methods  ***Prereq: Math Specialist ATAR or MATH1722*** | **ENSC1004**  Engineering Materials  ***Prereq: (Chem ATAR or CHEM1003) &***  ***(Maths Methods ATAR or MATH1721)***  ***& (Phys ATAR or PHYS1030)*** | **ENSC2004\*\***  Engineering Mechanics  ***Prereq: (Phys ATAR or PHYS1030) &***  ***(Math Specialist ATAR or MATH1722)***  ***Coreq: MATH1011***  ***APS: PHYS1001 and MATH1011*** | **GENG1101**  Engineering Drawings |
| **Year 2** | | | | |
| Students must complete **GENG2000 Engineering Practice 2** within their second year (0 points = 1 week module) | | | | |
| Semester 1,  2025 | **GENG2003**  Fluid Mechanics  ***Prereq: MATH1011 & MATH1012 & PHYS1001*** | **GENG2004**  Solid Mechanics  ***Prereq: ENSC2004 & MATH1011 & MATH1012*** | **MECH2002**  Engineering Materials 2  ***Prereq: ENSC1004*** | **ENSC2003\*\***  Eng. Electrical Fundamentals  ***Prereq: (Phys ATAR or PHYS1030) & MATH1011 Coreq: MATH1012 APS: PHYS1001*** |
| Semester 2,  2025 | **MATH3023**  Adv. Mathematics Applications  ***Prereq: MATH1011***  ***Coreq: MATH1012*** | **MECH2004**  Engineering Dynamics  ***Prereq: ENSC2004 & MATH1011 & MATH1012***  ***APS: PHYS1001*** | **MECH3024**  Engineering Thermodynamics  ***Prereq: CITS2401 & ENSC2004***  ***APS: PHYS1001*** | Broadening |
| **Year 3** | | | | |
| Students must complete **GENG3000 Engineering Practice** 3 within their third year (0 points = 1 week module) | | | | |
| Semester 1,  2026 | **MECH3002**  Manufacturing  ***Prereq: GENG2000 & MECH2002*** | **MECH4429**  Applied Eng. Thermodynamics  ***Prereq: MECH3024*** | Broadening | Broadening |
| Semester 2,  2026 | **GENG3405**  Numerical Methods & Modelling  ***Prereq: MATH1012 & CITS2401*** | **MECH3001** Mechanisms & Machines  ***Prereq: (CITS1401 or CITS2401) & MECH2004*** | **MECH3424**  Measurement & Instrumentation  ***Prereq: (CITS1401 or CITS2401) & ENSC2004 & MATH1012 & GENG2000*** | **MECH4502**  Analysis and Design of Machine Components  ***Prereq: CITS2401 & GENG2004 & MECH2004 & MECH3002 & GENG3000*** |
| **Year 4** | | | | |
| Students must undertake practical work experience during the course to satisfy **GENG5010 Professional Engineering Portfolio** (0 points) – *see notes below*  *Students must achieve a WAM of at least 50 in order to progress to the fourth (Honours) year – see BE(Hons) rules* | | | | |
| Semester 1,  2027 | **MECH5551**  Mechanical Eng Design Project 1  ***Prereq: MECH4502 & GENG3000*** | **MECH4426**  Dynamics, Vibration & Sound  ***Prereq: ENSC2004 & MECH2004*** | **MECHANICAL ENG. OPTION** | Broadening |
| Semester 2,  2027 | **GENG5507\*\***  Risk, Reliability and Safety  ***Prereq: 120 pts incl. MATH1011 & MATH1012*** | **GENG3402**  Control Engineering  ***Prereq: MATH1011 & MATH1012*** | **MECHANICAL ENG. OPTION** | **MECHANICAL ENG. OPTION** |
| Students must pass all credit bearing and 0-pt units to be eligible to graduate | | | | |

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

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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)  ***Prereq: 144 points incl. 24 points Level 3 units in major & GENG3000*** | **GENG5504** Petroleum Engineering (S2)  ***Prereq: 120 pts incl. GENG2003*** |
| **GENG4412** Engineering Research Project Part 2 (S1, S2)  ***Prereq: GENG4411(taken in semester after GENG4411)*** | **GENG5505** Project Management & Engineering Practice (S1, S2)  ***Prereq: 120pts*** |
| **MECH5552** Mechanical Engineering Design Project 2 (S2)  ***Prereq: MECH5551*** | **CHPR3405** Particle Technology (S1)  ***Prereq: GENG2003*** |
|  | **MECH5504** Design and Failure Analysis of Materials (S2)  ***Prereq: 120 pts incl. MECH2002 and GENG2004*** |
|  | **GENG5514** Finite Element Method (S1)  ***Prereq: 120 pts incl. (GENG2003 or GENG2010) & GENG2004 & GENG3405*** |
|  | **MECH4428** Degradation of Materials (S1)  ***Prereq: 96 pts incl. MECH2002*** |

The Rules for the BH011 Bachelor of Engineering (Honours) can be [**found here**](https://handbooks.uwa.edu.au/coursedetails?code=BH011#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 in the [**Handbook**](https://handbooks.uwa.edu.au/).

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.*

**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)**.**