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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 | **MATH1011\*\***Multivariable Calculus***Prereq: Math Specialist ATAR or MATH1722*** | **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*** | **GENG1010\*\***Introduction to Engineering |
| Semester 2,2025 | **MATH1012\*\***Mathematical Theory & Methods***Prereq: Math Specialist ATAR or MATH1722*** | **ENSC2004\*\***Engineering Mechanics***Prereq: (Phys ATAR or PHYS1030) &*** ***(Math Specialist ATAR or MATH1722)******Coreq: MATH1011******APS: PHYS1001 and MATH1011*** | **ENSC1004**Engineering Materials***Prereq: (Chem ATAR or CHEM1003) &******(Maths Methods ATAR or MATH1721)******& (Phys ATAR or PHYS1030)*** | **GENG1101**Engineering Drawings |
| **Year 2** |
| Students must complete **GENG2000 Engineering Practice 2** within their second year (0 points = 1 week module) |
| Semester 1,2026 | **ENSC2003\*\***Eng. Electrical Fundamentals ***Prereq: (Phys ATAR or PHYS1030) & MATH1011 Coreq: MATH1012 APS: PHYS1001*** | **GENG2003**Fluid Mechanics***Prereq: MATH1011 & MATH1012 & PHYS1001*** | **MECH2002**Engineering Materials 2***Prereq: ENSC1004*** | Broadening |
| Semester 2,2026 | **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 1,2027 | **GENG2004**Solid Mechanics***Prereq: ENSC2004 & MATH1011 & MATH1012*** | **#MECH4429**Applied Eng. Thermodynamics***Prereq: MECH3024*** | **MECH2003**Manufacturing***Prereq: ENSC1004******Coreq: MECH2002*** | Broadening |
| Semester 2,2027 | **#MECH4502**Analysis and Design of Machine Components***Prereq: CITS2401 & GENG2004 & MECH2004 & MECH2003 & GENG2000*** | **MECH3001** Mechanisms & Machines***Prereq: (CITS1401 or CITS2401) & MECH2004*** | **GENG3405**Numerical Methods & Modelling***Prereq: MATH1012 & CITS2401*** | **MECH3424**Measurement & Instrumentation***Prereq: (CITS1401 or CITS2401) & ENSC2004 & MATH1012 & GENG2000*** |
| **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 1,2028 | **#MECH5551**Mechanical Eng Design Project 1***Prereq: MECH4502 & GENG3000******Coreq: MECH4429*** | **#MECH4426**Vibration & Sound***Prereq: ENSC2004 & MECH2004*** | **#MECHANICAL ENG. OPTION** | Broadening |
| Semester 2,2028 | **#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

**#**All Level 4/5 engineering units also have a WAM prerequisite. See notes on next page.

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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*** | **AUTO3002** Mechatronics (S1)***Prereq: ELEC3020 and GENG2000*** |
| **GENG4412** Engineering Research Project Part 2 (S1, S2)***Prereq: GENG4411(taken in semester after GENG4411)*** | **AUTO4507** Robot Manipulators***Prereq: 96 points incl. (CITS1401 or CITS1000 or CITS2401) & (MECH3001 or ELEC3020)*** |
| **MECH5552** Mechanical Engineering Design Project 2 (S2)***Prereq: MECH5551*** | **GENG5501** Coastal and Offshore Engineering (S1)***Prereq: GENG2003*** |
|  | **GENG5504** Petroleum Engineering (S2)***Prereq: 120 pts incl. GENG2003*** |
|  | **GENG5505** Project Management & Engineering Practice (S1, S2)***Prereq: 120pts*** |
|  | **GENG5514** Finite Element Method (S1)***Prereq: 120 pts incl. (GENG2003 or GENG2010) & GENG2004 & GENG3405*** |
|  |  **MECH4428** Degradation of Materials (S1)***Prereq: 96 pts incl. MECH2002*** |
|  | **MECH5504** Design and Failure Analysis of Materials (S2)***Prereq: 120 pts incl. MECH2002 and GENG2004*** |

* 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.*
* 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)**.**