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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  **Prereq: Maths Methods ATAR or MATH1721 – see notes** | **CHEM1003\*\*** Intro Chemistry  **OR**  **PHYS1030\*\*** Bridging Physics  **Prereq: Math Methods ATAR or MATH1721 – see notes** | **CITS2401**\*\*  Computer Analysis & Visualisation  ***Prereq: Math Methods ATAR or MATH1721*** | **GENG1010\*\***  Introduction to Engineering |
| Semester 2,  2025 | **MATH1011\*\***  Multivariable Calculus  ***Prereq: Math Specialist ATAR or MATH1722*** | **MATH1012\*\***  Mathematical Theory & Methods  ***Prereq: Math Specialist ATAR or MATH1722*** | **GENG1014**  Earth Systems Engineering | **ENSC2004\*\***  Engineering Mechanics  ***Prereq: (Phys ATAR or PHYS1030) &***  ***(Math Specialist ATAR or MATH1722)***  ***Coreq: MATH1011***  ***APS: PHYS1001 and MATH1011*** |
| **Year 2** | | | | |
| Students must complete **GENG2000 Engineering Practice 2** within their second year (0 points = 1 week module) | | | | |
| Semester 1,  2026 | **GENG2004**  Solid Mechanics  ***Prereq: ENSC2004 & MATH1011 & MATH1012*** | **PHYS1001\*\***  Physics for Scientists & Engineers  ***Prereq: (Physics ATAR or PHYS1030) &***  ***(Math Methods ATAR or MATH1721)***  ***Coreq: MATH1722*** | **CHEM1001\*\***  Chemistry—Properties and Energetics  ***Prereqs: Chemistry ATAR or CHEM1003*** | Broadening |
| Semester 2,  2026 | **ENSC2003\*\***  Eng. Electrical Fundamentals  ***Prereq: (Phys ATAR or PHYS1030) & MATH1011 Coreq: MATH1012 APS: PHYS1001*** | **GENG2010**  Principles of Hydraulics  ***Prereq: MATH1011 & MATH1012*** | **MINE2001**  Fundamentals of Mining Engineering ***Prereqs: GENG1000*** | **EART1104**  Discovering Earth |
| **Year 3** | | | | |
| Students must complete **GENG3000 Engineering Practice** 3 within their third year (0 points = 1 week module) | | | | |
| Semester 1,  2027 | **MINE3503**  Surface Mining  ***Prereq: MINE2001*** | **MINE3405**  Mineral Resources  ***Prereq: GENG2000 & MINE2001*** | **MINE3401**  Underground Mining 1  ***Prereq: MINE2001*** | **GENG2009**  Principles of Geomechanics  ***Prereq: MATH1011 & MATH1012 & PHYS1001*** |
| Semester 2,  2027 | **MINE3404**  Rock Mechanics  ***Prereq: GENG2004 & MINE2001*** | **MINE3406**  Geotechnology of Mine Waste  ***Prereq: MINE2001 & GENG2009*** | **#MINE4502**  Underground Mining 2  ***Prereq: MINE3401 & MINE3405*** | **#GENG5505\*\***  Project Management & Engineering Practice  ***Prereq: 120 pts*** |
| **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 | **#GENG4411\*\***  Engineering Research Project 1  ***Prereq: 144 pts incl. 24 points Level 3 units in major & GENG3000*** | **#MINE5501**  Mining Management  ***Prereq: MINE3401 & MINE3503*** | **#GENG4403**  Extractive Metallurgy  ***Prereq: 96 pts incl. (ENSC1004 or MINE2001)*** | Broadening (recommended)  **#MINE5552**  Mining Engineering Design Project 2  ***Prereq: MINE3401 and MINE4502*** |
| Semester 2,  2028 | **#GENG4412\*\***  Engineering Research Project 2  ***Prereq: GENG4411***  ***(taken in semester after GENG4411)*** | **#MINE4001**  Mining Engineering Services  ***Prereq: GENG3000 & MINE3401 & MINE3503*** | **#MINE5551**  Mining Engineering Design Project 1  ***Prereq: GENG3000 & MINE3405 & MINE3503*** | **#GENG5507\*\***  Risk, Reliability and Safety  ***Prereq: 120 pts incl. MATH1011 & MATH1012*** |
| 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.

* 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.

**A Note about Bridging**

Up to 12 points of bridging can be accommodated in this course. 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.

Students who need to bridge in only one subject will have space to include three broadening units in the course.

*Students who bridge outside of the course and then transfer can only seek advanced standing for up two bridging units. You cannot claim advanced standing for MATH1721 Mathematics Foundations: Methods or equivalent.*

**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)**.**