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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 | **MATH1722\*\***  Mathematics Foundations: Specialist  ***Prereq: (Maths Methods ATAR or MATH1721) – see notes*** | ***CHEM1003****\*\* Intro Chemistry*  ***OR***  ***PHYS1030\*\**** *Bridging Physics*  ***Prereq: Maths Methods ATAR or MATH1721 – see notes*** | **CITS1401\*\***  Computational Thinking with Python  ***Prereq: Maths Methods ATAR or MATH1721*** | **GENG1010\*\***  Introduction to Engineering |
| Semester 2,  2024 | **MATH1011\*\***  Multivariable Calculus  ***Prereq: Math Specialist ATAR or MATH1722*** | **CITS1003\*\***  Introduction to Cybersecurity | **CITS1402\*\***  Relational Database Management Systems  ***Prereq: Maths Applications ATAR or MATH1720*** | **MATH1012\*\***  Mathematical Theory & Methods  ***Prereq: Math Specialist ATAR or MATH1722*** |
| **Year 2** | | | | |
| Students must complete **GENG2000 Engineering Practice 2** within their second year (0 points = 1 week module) | | | | |
| Semester 1,  2025 | **CITS2005**  Object Oriented Programming  ***Prereq: CITS1401&***  ***(Maths Methods ATAR or MATH1721)*** | **CITS2200**  Data Structures & Algorithms  ***Prereq: CITS1401&***  ***(Maths Methods ATAR or MATH1721)***  ***APS: 12 pts of programming-based units*** | **STAT2063**  Probabilistic Methods and their Applications  ***Prereq: MATH1011 & MATH1012*** | **PHYS1001\*\***  Physics for Scientists & Engineers  ***Prereq: (Physics ATAR or PHYS1030) &***  ***(Math Methods ATAR or MATH1721)***  ***Coreq: MATH1722*** |
| Semester 2,  2025 | **ELEC1303**  Digital Systems | **CITS2002**  Systems Programming  ***Prereq: CITS1401 or CITS2401*** | **CITS2211**  Discrete Structures  ***Prereq: (Maths Methods ATAR or MATH17) &***  ***CITS1401*** | Broadening |
| **Year 3** | | | | |
| Students must complete **GENG3000 Engineering Practice** 3 within their third year (0 points = 1 week module) | | | | |
| Semester 1,  2026 | **CITS3002**  Computer Networks ***Prereq: CITS2002*** | **CITS3301**  Software Requirements and Design  ***Prereq: CITS1001or CITS2005*** | **CITS3403**  Agile Web Development  ***Prereq: CITS1001 or CITS1401 or CITS2002*** | **CITS3007**  Secure Coding  ***Prereq: CITS2200 or CITS2002 or CITS2005*** |
| Semester 2,  2026 | **ELEC3020**  Embedded Systems ***Prereq: GENG2000 and CITS1001or CITS1001 or CITS2401*** | **CITS3200**  Professional Computing  ***Prereq: 84 points incl. CITS2002 or CITS2200 or CITS2402*** | **CITS3005**  Knowledge Representation  ***Prereq: CITS2200 & CITS2211*** | Broadening |
| **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 | **GENG4411\*\***  Engineering Research Project Pt 1  ***Prereq: 144 points incl. 24 points Level 3 units in major & GENG3000*** | **GENG5505\*\***  Project Management & Engineering Practice | **CITS4419**  Mobile and Wireless Computing  ***Prereq: 96 pts incl. CITS3002*** | **GENG5507\*\***  Risk, Reliability & Safety  ***Prereq: 120 pts incl. MATH1011 & MATH1012*** |
| Semester 2,  2027 | **GENG4412\*\***  Engineering Research Project Pt 2  ***Prereq: GENG4411***  ***(taken in semester after GENG4411)*** | **CITS5501**  Software Testing and Quality Assurance  ***Prereq: 120 pts incl. CITS3301*** | **CITS5503**  Cloud Computing  ***Prereq: 120 pts incl. 12 pts of programming-based units*** | **CITS5507**  High Performance Computing  ***Prereq: 120 pts incl. 12 pts of programming-based units*** |
| Students must pass all credit bearing and 0-pt units to be eligible to graduate | | | | |

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

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.*

**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)**.**