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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  **Pre*req: Maths Methods ATAR or MATH1721 – see notes*** | **GENG1010\*\***  Introduction to Engineering | **CITS2401**\*\*  Computer Analysis & Visualisation ***Prereq: Math Methods or MATH1721*** |
| Semester 2,  2024 | **MATH1011\*\***  Multivariable Calculus  ***Prereq: Math Specialist ATAR or MATH1722*** | **MATH1012\*\***  Mathematical Theory & Methods  ***Prereq: Math Specialist ATAR or MATH1722*** | **PHYS1001\*\***  Physics for Scientists & Engineers  ***Prereq: (Physics ATAR or PHYS1030) &***  ***(Math Methods ATAR or MATH1721)***  ***Coreq: MATH1722*** | **ELEC1303**  Digital Systems |
| **Year 2** | | | | |
| Students must complete **GENG2000 Engineering Practice 2** within their second year (0 points = 1 week module) | | | | |
| Semester 1,  2025 | **ENSC2003\*\***  Eng. Electrical Fundamentals  ***Prereq: (Phys ATAR or PHYS1030) & MATH1011***  ***Coreq: MATH1012***  ***APS: PHYS1001*** | **ENSC2004\*\***  Engineering Mechanics  ***Prereq: (Phys ATAR or PHYS1030) &***  ***(Math Specialist ATAR or MATH1722)***  ***Coreq: MATH1011***  ***APS: PHYS1001 and MATH1011*** | **PHYS2003**  Physics for Electrical Engineers  ***Prereq:*** ***MATH1011 & MATH1012 & PHYS1001*** | **STAT2063**  Probabilistic Methods and their Applications  ***Prereq: MATH1011 & MATH1012*** |
| Semester 2,  2025 | **ELEC2311**  Digital System Design  ***Prereq: ELEC1303*** | **ELEC3015**  Signals and Systems  ***Prereq: CITS2401& ENSC2003 & MATH1012*** | **ELEC3016**  Power and Machines  ***Prereq:*** ***ENSC2003 & MATH1012***  ***APS: PHYS1001*** | **MATH3023**  Adv. Mathematics Applications  ***Prereq: MATH1011***  ***Coreq: MATH1012*** |
| **Year 3** | | | | |
| Students must complete **GENG3000 Engineering Practice** 3 within their third year (0 points = 1 week module) | | | | |
| Semester 1,  2026 | **ELEC3014**  Electronic Materials and Devices  ***Prereq: ENSC2003 & MATH1012 & PHYS1001*** | **ELEC4404**  Signal Processing  ***Prereq: CITS2401 & ELEC3015 & STAT2063*** | **ELEC3021**  Circuits and Electronics  ***Prereq: ENSC2003 & MATH1011***  **APS: PHYS1001** | **ELEC4505**  Power System Analysis  ***Prereq: ELEC3016*** |
| Semester 2,  2026 | **ELEC3020**  Embedded Systems  ***Prereq: (GENG2000) &***  ***(CITS2401 or CITS1001 or CITS1401)*** | **ELEC4402**  Communications Systems  ***Prereq: STAT2063 & ELEC3015 & MATH3023*** | **GENG3402**  Control Engineering  ***Prereq: MATH1011 & MATH1012*** | 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*** | **ELEC4408**  High Frequency Circuits and Systems  ***Prereq: ELEC3021 & MATH3023*** | **ELEC4407**  Engineering Electromagnetics  ***Prereq: ELEC3021& MATH3023 & PHYS2003*** | **ELEC5506**  Process Instrumentation and Control  ***Prereq: 120 pts incl. GENG3402***  ***APS: ENSC2003*** |
| Semester 2,  2027 | **GENG4412**  Engineering Research Project Pt 2  ***Prereq: GENG4411***  ***(taken in semester after GENG4411)*** | **ELEC5552**  Electrical & Electronic Engineering  Design Project 2  ***Prereq: 120pts incl. GENG3000*** | **GENG5505**  Project Management & Engineering Practice  ***Prereq: 120pts*** | Broadening |
| *Students must undertake practical work experience to satisfy* ***GENG5010 Professional Engineering Portfolio*** *(0 points)* | | | | |

**\*\*** 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)**.**