|  |
| --- |
| **Year 1** |
| Students must complete **GENG1000 Engineering Practice 1** within their first year (0 points = 1 week module) |
| Semester 1,2025 | **MATH1722: Math Specialist\*\*OR PHYS1030: Physics Bridging\*\*OR CHEM1003: Intro Chemistry\*\***pre-req: ATAR Maths Methods (or MATH1721) – see note on bridging | **CITS2401**: **Computer Analysis & Visualisation\*\***pre-req: ATAR Math Methods (or MATH1721) | **GENG1010\*\*** Introduction to Engineering | **MGMT1135: Organisational Behaviour\*\*** |
| Semester 2,2025 | **MATH1011: Multivariable Calculus\*\***pre-req: ATAR Math Specialist (or MATH1722) | **PHYS1001: Physics for Scientists & Engineers\*\***pre-req: ATAR Physics (or PHYS1030) AND ATAR Math Specialist (or MATH1722)co-req: MATH1722 | **ELEC1303: Digital Systems** | **MGMT1136: Management and Organisations\*\*** |
| **Year 2** |
| Students must complete **GENG2000 Engineering Practice 2** within their second year (0 points = 1 week module) |
| Semester 1,2026 | **MATH1012: Mathematical Theory & Methods\*\***pre-req: ATAR Math Specialist (or MATH1722) | **ENSC2003: Eng. Electrical Fundamentals\*\***pre-req: ATAR Physics (or PHYS1030) AND MATH1011co-req: MATH1012, APS: PHYS1001 | **ENSC2004: Engineering Mechanics\*\***pre-req: ATAR Physics (or PHYS1030) AND ATAR Math Specialist (or MATH1722)co-req: MATH1011APS: PHYS1001 & MATH1011 | **MGMT2302: Leadership**pre-req: MGMT1135 |
| Semester 2,2026 | **ELEC2311: Digital System Design** pre-req: ELEC1303 | **MATH3023: Adv. Mathematics Applications**pre-req: MATH1011 co-req: MATH1012 | **ELEC3015: Signals and Systems**pre-req: CITS2401& ENSC2003 & MATH1012 | **Level 2 Management Option Unit**(e.g., INMT2232 or MGMT2311,OR swap semester for HRMT2237 or MGMT2341) |
| **Year 3** |
| Students must complete **GENG3000 Engineering Practice** 3 within their third year (0 points = 1 week module) |
| Semester 1,2027 | **PHYS2003: Physics for Electrical Engineers** pre-req: MATH1011 & MATH1012 & PHYS1001 | **STAT2063: Probabilistic Methods and their Applications** pre-req: MATH1011 & MATH1012 | **ELEC3021: Circuits and Electronics**pre-req: ENSC2003 & MATH1011APS: PHYS1001 | **Level 3 Management Option Unit 1**(i.e., EMPL2307, MGMT3335, MGMT3342 |
| Semester 2,2027 | **ELEC3020: Embedded Systems**pre-req: (GENG2000) & (CITS2401 or CITS1001 or CITS1401) | **ELEC3016: Power and Machines**pre-req: ENSC2003 & MATH1012 APS: PHYS1001 | **ACCT1101: Financial Accounting**\*\*(BCom Foundation Unit) | **Level 3 Management Option Unit 1**(i.e., MGMT3304, MGMT3308, or MGMT3347) |
| **Year 4** |
| *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 | **ELEC3014: Electronic Materials and Devices**pre-req: ENSC2003 & MATH1012 & PHYS1001 | **#ELEC4404: Signal Processing**pre-req: CITS2401 & ELEC3015 & STAT2063 | **#ELEC4408: High Frequency Circuits and Systems**pre-req: ELEC3021 & MATH3023 | **Level 3 Management Option Unit 1**(i.e., EMPL2307, MGMT3335, MGMT3342, or MGMT3346)  |
| Semester 2,2028 | **#ELEC4402: Communications Systems**pre-req: STAT2063 & ELEC3015 & MATH3023 | **GENG3402: Control Engineering**pre-req: MATH1011 & MATH1012 | **ECON1101: Microeconomics: Prices** **and Markets\*\***(BCom Foundation Unit) | **Level 3 Management Option Unit 1**(i.e., MGMT3304, MGMT3308, or MGMT3347) |
| **Year 5** |
| Students must undertake practical work experience during the course to satisfy **GENG5010 Professional Engineering Portfolio** (0 points) – *see notes below* |
| Semester 1,2029 | **#GENG4411: Engineering Research Project Pt 1\*\***pre-req: 144 points incl. 24 points Level 3 units in major & GENG3000 | **#ELEC5506: Process Instrumentation and Control**pre-req: 120 pts incl. GENG3402APS: ENSC2003 | **#ELEC4407: Engineering Electromagnetics**pre-req: ELEC3021& MATH3023 & PHYS2003 | **#ELEC4505: Power System Analysis**pre-req: ELEC3016 |
| Semester 2,2029 | **#GENG4412: Engineering Research Project Pt 2\*\***pre-req: GENG4411(taken in semester after GENG4411) | **#ELEC5552: Electrical & Electronic Engineering Design Project**pre-req: 120pts incl. GENG3000 | **#GENG5505: Project Management & Engineering Practice\*\***pre-req: 120pts | **MKTG1203: Introduction to Marketing\*\***(BCom Foundation Unit) |
| Students must pass all credit bearing and 0-pt units to be eligible to graduate |

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

Bridging Units

Bachelor of Commerce Units

#All Level 4/5 engineering units also have a WAM pre-requisite. See notes on next page.

**1** For the Level 3 Management Option units, at least one must be MGMT3347 Strategic Management, MGMT3335 Enterprise Systems OR MGMT3304 Applied International Business Strategy.

**Bridging/ Foundation units in CB006 Combined BE (Electrical and Electronic Engineering) / BCOM**Up to 12 points of bridging is permitted. Students can count MATH1012 towards the BCOM foundation component (STAT1520) of this combined course, except for students who are seeking professional accreditation in the Accounting major (who must take STAT1520 and MATH1012). If you need two bridging units, then you will need to exceed course points. All students in this combined degree are encouraged to also pick up STAT1520 if they can accommodate it in their study plan.

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.
* The Rules for the CB006 Bachelor of Engineering (Honours) can be [**found here**](https://handbooks.uwa.edu.au/rules?code=CB006)
* 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/).
* Students can replace STAT1520 in the BCOM foundation with MATH1012, except for students who are seeking professional accreditation in the Accounting major. These students must take STAT1520 and MATH1012.
* All students must complete GENG1000, GENG2000 & GENG3000 Engineering Practice Skills modules (0 points = 3 x 1-week modules). Check Handbook for pre-requisites.
* 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)**.**