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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 | **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 2,2024 | **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*** | **GENG1014**Earth Systems Engineering | Broadening |
| **Year 2** |
| Students must complete **GENG2000 Engineering Practice 2** within their second year (0 points = 1 week module) |
| Semester 1,2025 | **GENG2004**Solid Mechanics ***Prereq: ENSC2004 & MATH1011 & MATH1012*** | **GENG2009**Principles of Geomechanics ***Prereq: MATH1011& MATH1012 & PHYS1001*** | **CIVL2551** Civil Engineering Practice***APS: MATH1011*** | Broadening  |
| Semester 2,2025 | **CIVL2008**Structural Analysis ***Prereq: ENSC2004 and MATH1011*** | **GENG2010**Principles of Hydraulics ***Prereq: MATH1011 & MATH1012*** | **GENG2012** Data Collection & Analysis***Prereq CITS2401 & MATH1012*** | Broadening |
| **Year 3** |
| Students must complete **GENG3000 Engineering Practice** 3 within their third year (0 points = 1 week module) |
| Semester 1,2026 | **CIVL3401**Applied Geomechanics***Prereq: GENG2009*** | **CIVL3402**Hydraulics for Civil Engineers***Prereq: GENG2010 or GENG2003*** | **CIVL3404**Structural Steel Design***Prereq: GENG2004*** | Broadening |
| Semester 2,2026 | **CIVL3403**Structural Concrete Design***Prereq: GENG1000 & GENG2004*** | **CIVL4430** Transportation and Pavement Engineering***Prereq: 96 pts inc. MATH1011 & CITS2401*** | **GENG3405**Numerical Methods & Modelling ***Prereq: MATH1012 & CITS2401*** | **Civil Engineering****Group B Option** |
| **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 pts incl. 24 pts Level 3 units in major & GENG3000*** | **#Group A Option CIVL5550**Civil Infrastructure Design Project***Prereq: 120 pts incl. GENG3000 and CIVL4430*** ***APS: GENG2009*****OR Civil Eng Group B Option** | **GENG5505\*\***Project Management & Engineering Practice***Prereq: 120 pts*** | **Civil Engineering****Group B Option** |
| Semester 2,2027 | **GENG4412\*\***Engineering Research Project Pt 2***Prereq: GENG4411******(taken in semester after GENG4411)*** | **#Group A Option CIVL5552** Civil Structural Design Project***Prereq: 120 pts incl. GENG3000 and CIVL3404******APS: CIVL2008*****OR Civil Eng Group B Option** | **GENG5507\*\***Risk, Reliability & Safety***Prereq: 120 pts incl. MATH1011 & MATH1012*** | **Civil Engineering****Group B Option** |
| Students must pass all credit bearing and 0-pt units to be eligible to graduate |

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

**#Group A Option:** Students take either CIVL5550 or CIVL5552 or both. Students who take only one design project from Group A must select four units from Group B~~.~~

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| **Group A Options: Take 6 – 12 pts**Students must take at least **one** unit from Group A. | **Group B Options: Take 18 – 24 pts**Students who take **one** unit from Group A must select **four** units from Group B. Student who take **both** units in Group A must select **three** units from Group B. |
|  **CIVL5550** Civil Infrastructure Design Project (S1) ***Prereq: 120 pts incl. GENG3000 & CIVL4430***  ***APS: GENG2009*** |  **CIVL5501** Structural Dynamics (S2) ***Prereq: 120 pts incl. GENG2004*** |
|  **CIVL5552** Civil Structural Design Project (S2) ***Prereq: 120 pts incl. GENG3000 & CIVL3404*** ***APS: CIVL2008*** |  **CIVL5503** Underground Construction (S1) ***Prereq: 120 pts incl. CIVL3401*** |
|  |  **CIVL5505** Design of Offshore Energy Facilities (S2) ***Prereq: 120 pts incl. GENG3000 & CIVL3404*** |
|  |  **ENVE3402** Engineering Hydrology (S1) ***Prereq: GENG1014*** |
|  |  **GENG5501** Coastal and Offshore Engineering (S1) ***Prereq: 120 pts incl. (GENG2003 or GENG2010)*** |
|  |  **GENG5502** Environmental Geotechnics(S2) ***Prereq: 120 pts incl. GENG2009*** |
|  |  **GENG5514** Finite Element Method (S1) ***Prereq: 120 pts incl. (GENG2003 or GENG2010) & GENG2004 & GENG3405*** |

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.*

**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)**.**