|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year 1 | | | | |
| *Semester 2, 2021* | **MATH1011**\*\*  Multivariable Calculus  ***Prereq: Math Specialist ATAR or MATH1722*** | **ENSC1004**\*\*  Engineering Materials  ***Prereq: (Chem ATAR or CHEM1003) & (Phys ATAR or PHYS1030)*** | **CITS1001\*\***  Software Engineering with Java | **ENSC1003**\*\*  Intro to Professional Engineering |
| Year 2 |  |  |  |  |
| *Semester 1, 2022* | **MATH1012**\*\*  Mathematical Theory & Methods  ***Prereq: Math Specialist ATAR or MATH1722*** | **CITS2200**  Data Structures & Algorithms  ***Prereq: CITS1001***  ***APS: An additional programming unit*** | **ENSC2003\*\***  Eng. Electrical Fundamentals  ***Prereq: (Phys ATAR or PHYS1030) & MATH1011; Co-req: MATH1012***  ***APS: PHYS1001*** | **ENSC2004\*\***  Engineering Mechanics  ***Prereq: (Physics ATAR or PHYS1030) & MATH1011***  ***APS: PHYS1001*** |
| *Semester 2, 2022* | **CITS2002**  Systems Programming  ***APS: CITS1001 or CITS1401 or CITS2401*** | **ENSC3001**  Mechanisms and Machines  ***Prereq: (CITS1001 or CITS2401), ENSC2004, & MATH1011; APS: PHYS1001*** | **ENSC3020**  Digital Embedded Systems  ***Prereq: CITS1001 or CITS2401*** | **# ENSC3024**  Engineering Thermodynamics  ***Prereq: (CITS1001 or CITS2401), ENSC2004, MATH1011 & (PHYS1030 or Physics ATAR) APS: PHYS1001*** |
| Year 3 | | | | |
| *Semester 1, 2023* | **ENSC3002**  Materials & Manufacturing  ***Prereq: ENSC1004*** | **ENSC3021**  Circuits and Electronics  ***Prereq: ENSC2003 & MATH1011*** | **Elective** | **# ENSC3004**  Solid Mechanics  ***Prereq: ENSC2004, MATH1011 & MATH1012*** |
| *Semester 2, 2023* | **ENSC3016**  Power and Machines  ***Prereq:*** ***ENSC2003 & MATH1012***  ***APS: PHYS1001*** | **MECH4424**  Measurement and Noise  ***Prereq: (CITS1001 or CITS2401) & ENSC3001***  (ADVANCED UNIT) | **GENG5508**  Robotics  ***Prereq: CITS1001***  (ADVANCED UNIT) | **# MATH3023**  Advanced Mathematics Applications  ***Prereq: MATH1011 Coreq: MATH1012*** |
| Year 4 | | | | |
| *Semester 1, 2024* | **GENG3002**  Mechatronics  ***Prereq: CITS2200, ENSC3001 & ENSC3020*** | **GENG4404**  **Automation & Control**  ***Prereq: (CITS1001 or CITS2401) & ENSC2003***  (ADVANCED UNIT) | **Elective** | **# ENSC3003**  Fluid Mechanics  ***Prereq: ENSC2004 & MATH1012*** |
| *\*\*Unit is available in Semester 1 and Semester 2* | |  |  |

Notes

# Students wishing to proceed to MPE (Mechanical) complete the following units from the Mechanical Systems stream: ENSC3003, ENSC3004, ENSC3024 and MATH3023.

If students are not intending to proceed to the MPE, take four electives instead. Alternatively, electives may be used to complete a minor, noting that any four units taken outside the double major in Automation and Robotics meets broadening requirements.

The Rules for the Bachelor of Automation and Robotics/Automation and Robotics double major can be found at: [####](https://handbooks.uwa.edu.au/undergraduate#bp007)

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 at: [timetable.uwa.edu.au](http://www.timetable.uwa.edu.au/) or [Handbooks](https://handbooks.uwa.edu.au/).

Further Help!

Refer to the UniStart website for your step-by-step guide on planning your enrolment: [uwa.edu.au/unistart](https://www.uwa.edu.au/unistart).

If you need to discuss your study plan further, please contact the EMS Student Service and Engagement Office: [enquiries-ems@uwa.edu.au](mailto:enquiries-ems@uwa.edu.au)