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| Year 1 |
| *Semester 1, 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 | **Elective** |
| *Semester 2, 2021* | **MATH1012**\*\*Mathematical Theory & Methods***Prereq: Math Specialist ATAR or MATH1722*** | **ENSC2004\*\***Engineering Mechanics***Prereq: (Physics ATAR or PHYS1030) & MATH1011******APS: PHYS1001*** | **CITS2002**Systems Programming***APS: CITS1001 or CITS1401 or CITS2401*** | **ENSC1003**\*\*Intro to Professional Engineering |
| Year 2 |
| *Semester 1, 2022* | **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*** | **ENSC3002** Materials & Manufacturing***Prereq: ENSC1004*** | **# ENSC3004** Solid Mechanics***Prereq: ENSC2004, MATH1011 & MATH1012*** |
| *Semester 2, 2022* | **ENSC3001** Mechanisms and Machines***Prereq: (CITS1001 or CITS2401), ENSC2004, & MATH1011*** ***APS: PHYS1001*** | **ENSC3020** Digital Embedded Systems***Prereq: CITS1001 or CITS2401*** | **ENSC3016** Power and Machines***Prereq:*** ***ENSC2003 & MATH1012******APS: PHYS1001*** | **# ENSC3024** Engineering Thermodynamics***Prereq: (CITS1001 or CITS2401), ENSC2004, MATH1011, & (PHYS1030 or Physics ATAR)*** ***APS: PHYS1001*** |
| Year 3 |
| *Semester 1, 2023* | **GENG3002** Mechatronics***Prereq: CITS2200, ENSC3001 & ENSC3020*** | **ENSC3021** Circuits and Electronics***Prereq: ENSC2003 & MATH1011*** | **GENG4404** Automation & Control***Prereq: (CITS1001 or CITS2401) & ENSC2003*** (ADVANCED UNIT) | **# ENSC3003** Fluid Mechanics***Prereq: ENSC2004 & MATH1012*** |
| *Semester 2, 2023* | **MECH4424**Measurement and Noise***Prereq: (CITS1001 or CITS2401) & ENSC3001*** (ADVANCED UNIT) | **GENG5508**Robotics***Prereq: CITS1001***(ADVANCED UNIT) | **Elective** | **# MATH3023**Advanced Mathematics Applications***Prereq: MATH1011Coreq: 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