Bachelor of Engineering Honours H1287 (Environmental Engineering)

Academic Chair: Assoc Prof Martin Anda (m.anda@murdoch.edu.au) Start Date: Semester 1 2024

| Year 1 – 2024 | Semester 1 Units | СР | Semester 2 Units | СР |
|---------------|--|----|---|----------------|
| | MAS164 Fundamentals of Mathematics | 3 | MAS182 Applied Mathematics | 3 |
| | ENG101 Engineering Fundamentals | 3 | ENG102 Engineering Design for Sustainability | 3 |
| | ENG103 Principles of Engineering | 3 | PEN120 General Physics | 3 |
| | CHE140 Fundamentals of Chemistry | 3 | ENV102 Foundations of the Environment | 3 |
| | Total | 12 | Total | 12 |
| Year 2 - 2025 | Semester 1 Units | СР | Semester 2 Units | СР |
| | ENG109 Engineering Computing Systems | 3 | (Engineering Elective) | 3 |
| | MAS161 Calculus and Matrix Algebra | 3 | ENG221 Pollution and Its Control | 3 |
| | ENG215 Systems Engineering | 3 | ENG216 Dynamic Systems and Control | 3 |
| | ENV243 Water and Earth Science | 3 | ENG300 Environmental Technology for Sustainability | 3 |
| | Total | 12 | Total | 12 |
| Year 3 – 2026 | Semester 1 Units | СР | Semester 2 Units | СР |
| | MAS220 Mathematical Methods | 3 | BUS368 Cultures of Innovation | 3 |
| | ENG341 Water Conservation and Auditing | 3 | ENG336 Finance, Ethics and Law | 3 |
| | ENG570 Circular Economy and Innovation | 3 | ENG572 Design of Water Treatment Unit Operations | 3 |
| | ENG571 Hydrology & Water Cycle Management | 3 | (Engineering Elective) | 3 |
| (| Total | 12 | Total | 12 |
| Year 4 - 2027 | Semester 1 Units | СР | Semester 2 Units | СР |
| | ENG573 Integrated Waste Management for Resource Recovery | 3 | ICT515 Foundations of Data Science | 3 |
| | (Engineering Elective) | 3 | (Engineering Elective) | 3 |
| | ENG470 Engineering Thesis | 6 | ENG470 Engineering Thesis | <mark>6</mark> |
| | ENG100 Engineering Professional Practice | 0 | ENG100 Engineering Professional Practice | 0 |
| | Total | 12 | Total | 12 |

TOTAL CREDIT POINTS 96

| Semester 1 notes | Semester 2 notes |
|---|---|
| For MAS164, students who have achieved a final scaled score of 55% or more in ATAR Mathematics Specialist, WACE Mathematics Specialist 3C/3D or TEE Calculus may not enrol in this unit and should consult their Academic Chair. Spine - ENG100 Engineering Professional Practice (O CP); Bachelor of Engineering Honours students should complete 450 hours of approved work experience to complete the requirements of the course. | 3A/3B may not enrol in this unit and should consult their Academic Chair. 2.The elective units could be selected from: KAC102 Wandju Boodja (Welcome to Country); PEN152 Principles of Physics; ICT158 Introduction to |

Please note: This course plan is a sample only and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as outlined in the <u>Handbook</u>. Students should note that due to unit prerequisites, commencing study in Semester 2 may extend the duration of the course. This information is correct as at 23/11/23.

