2 Year Study Plan (90 Points) for Students with a

Mechanical Engineering Background (without thermodynamics) – Commencing Semester 1

Students must complete relevant conversion units up to the value of 24 points as advised by the School and informed by the scope of a student’s prior study. The following example study plan is for students with a Mechanical Engineering background required to take conversion units: ELEC3006 Chemical Process Thermodynamics; ENSC3016 Power and Machines; and ENSC3021 Circuits and Electronics.

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| **YEAR 1** | SEM 1 | [**ENSC3021**](https://handbooks.uwa.edu.au/unitdetails?code=ENSC3021)  Circuits and Electronics | [**ENSC3006**](https://handbooks.uwa.edu.au/unitdetails?code=ENSC3006)  Chemical Process Thermodynamics | [**GENG5517**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5517)  Renewable Energy  Case Studies |  |
| SEM 2 | [**ENSC3016**](https://handbooks.uwa.edu.au/unitdetails?code=ENSC3016)  Power and Machines | [**GENG4410**](https://handbooks.uwa.edu.au/unitdetails?code=GENG4410)  Fossil to Future – The Transition | [**OCEN4007**](https://handbooks.uwa.edu.au/unitdetails?code=OCEN4007)  Renewable Ocean Energy  *Prereq: ENSC3003 or ENSC3010* | **OPTION**  **(CITS4009 recommended)** |
| **YEAR 2** | SEM 1 | [**GENG5516**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5516)  Energy Storage Systems  *Prereq: ENSC3006* | [**CHPR4408**](https://handbooks.uwa.edu.au/unitdetails?code=CHPR4408)  Chemical and Thermal Renewable Energies  *Prereq: (ENSC3003 or ENSC3010) and ENSC3006* | **OPTION**  *or*  [**GENG5521**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5521) **★**  Renewable Energy Research Project 1  *Prereq: 24 points of L4/L5 units* | [**ELEC5510**](https://handbooks.uwa.edu.au/unitdetails?code=ELEC5510)  Design and Analysis of Smart Grids and Microgrids  Prereq: ENSC3016 |
| SEM 2 | [**ELEC4405**](https://handbooks.uwa.edu.au/unitdetails?code=ELEC4405)  Photovoltaics and its Application to Power Systems  *Prereq: ENSC3021* | [**ELEC5509**](https://handbooks.uwa.edu.au/unitdetails?code=ELEC5509)  Grid Integration of Renewable Energy  *Prereq: ENSC3016* | **OPTION**  *or*  [**GENG5522**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5522) **★**  Renewable Energy Research Project 2  *Prereq: GENG5521* | **OPTION** |

**★** by invitation only

Optional Units

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| **Students take units to the value of 24 points from this group. Note: enrolment in the Research Project is by invitation only.** | | |
| [**BUSN5100**](https://handbooks.uwa.edu.au/unitdetails?code=BUSN5100) Applied Professional Business Communications | **ELEC4505** Power Systems Analysis  *Prereq: ENSC3016* | [**LAWS5521**](https://handbooks.uwa.edu.au/unitdetails?code=LAWS5521)Climate Change Law and Emissions Trading  *Non-Standard Teaching Period. Prereq: LAWS422 is recommended* |
| [**CHPR4406**](https://handbooks.uwa.edu.au/unitdetails?code=CHPR4406) Reaction Engineering  *Prereq: ENSC3006* | [**ENVT5509**](https://handbooks.uwa.edu.au/unitdetails?code=ENVT5509) Global Ecological Challenges | [**MECH4424**](https://handbooks.uwa.edu.au/unitdetails?code=MECH4424)Measurement and Noise  *. Prereq: CITS2401 and ENSC3001* |
| [**CHPR4407**](https://handbooks.uwa.edu.au/unitdetails?code=CHPR4407)Transport Phenomena | [**GENG5503**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5503)Modern Control Systems | [**MGMT5504**](https://handbooks.uwa.edu.au/unitdetails?code=MGMT5504) Data Analysis and Decision Making |
| [**CHPR5501**](https://handbooks.uwa.edu.au/unitdetails?code=CHPR5501) Advanced Reaction Engineering & Catalysts  *Prereq: CHPR4406* | [**GENG5505**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5505)Project Management & Engineering Practice  *Prereq: ENSC1001 or ENSC1003* | [**MGMT5507**](https://handbooks.uwa.edu.au/unitdetails?code=MGMT5507)Management and Organisations |
| [**CHPR5520**](https://handbooks.uwa.edu.au/unitdetails?code=CHPR5520) Combustion Science and Technology  *Non-Standard Teaching Period*. *Prereq: ENSC3006* | [**GENG5507**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5507) Risk, Reliability and Safety  *. Prereq: MATH1011 and MATH1012* | [**MGMT5508**](https://handbooks.uwa.edu.au/unitdetails?code=MGMT5508)Organisational Behaviour and Leadership |
| [**CITS4009**](https://handbooks.uwa.edu.au/unitdetails?code=CITS4009) Computational Data Analysis | [**GENG5521**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5521)Renewable Energy Research Project Part 1  *Prereq: 24 points of L4/L5 units completed within the course.* | [**POLS5651**](https://handbooks.uwa.edu.au/unitdetails?code=POLS5651)Global Political Economy  *Non-Standard Teaching Period* |
| [**ELEC5504**](https://handbooks.uwa.edu.au/unitdetails?code=ELEC5504)Power Electronics  *Prereq: ENSC3017* | [**GENG5522**](https://handbooks.uwa.edu.au/unitdetails?code=GENG5522)Renewable Energy Research Project Part 2  *Prereq: GENG5521* |  |

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| A standard full-time study load is four units per semester. The course rules for the Master of Renewable and Future Energy can be found at [uwa.edu.au/MRFE-rules](https://handbooks.uwa.edu.au/coursedetails?id=c1454#rules). Information about unit availability should be checked at the beginning of each semester, details can be found at UWA [Timetables](https://www.timetable.uwa.edu.au/) or [Handbooks](https://handbooks.uwa.edu.au/coursedetails?id=c403). | **Further Help!**  Refer to the [UniStart](https://www.uwa.edu.au/unistart) website for you step-by-step guide on planning your enrolment. If you need to discuss your study plan further, please contact the EMS Student Services Office by emailing [enquiries-ems@uwa.edu.au](mailto:enquiries-ems@uwa.edu.au), asking a question at [askUWA](https://ipoint.uwa.edu.au/), or drop in to the EMS Student Office, located in the [EZONE North Building](https://www.web.uwa.edu.au/contact/map?id=1869). |
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