# PROGRAM PLAN

# BACHELOR OF RENEWABLE ENERGY ENGINEERING (HONOURS)

**PROGRAM OPTION:**
Full time and Part Time

**START DATE:**
Semester 1, 2021

**LOCATION:**
Callaghan

This Program Plan is an enrolment guide to ensure you are on track to graduate. If at any time you wish to vary from this program plan seek advice from your Academic Program Advisor to ensure you remain on track.

PROGRAM HANDBOOK
COURSE HANDBOOK

**NAME:**

**STUDENT NO.:**

**COURSE STATUS KEY**
**C** = Completed
**En** = Enrolled
**NS** = Not Started

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|---|---|---|---|---|---|
| YEAR 1 | SEMESTER 1 | CHEM1010 Introductory Chemistry 1 CORE | ENGG1003 Introduction to Procedural Programming CORE | ENGG1500 Introduction to Professional Engineering CORE | MATH1110 Mathematics for Engineering, Science and Technology 1 CORE |
| | SEMESTER 2 | CHEE1000 Process Engineering Principals CORE | ELEC1310 Introduction to Electrical Engineering CORE | MATH1120 Mathematics for Engineering, Science and Technology 2 CORE | PHYS1210 Advanced Physics 1 CORE |
| YEAR 2 | SEMESTER 1 | CHEE2325 Thermodynamics of Chemical Processes CORE | CHEE2695 Energy Transfer and Technologies CORE | ELEC2320 Electrical and Electronic Circuits CORE | MATH2310 Calculus of Science and Engineering CORE |
| | SEMESTER 2 | ELEC2132 Electric Energy Systems CORE | ENGG2300 Engineering Fluid Mechanics CORE | ENGG2500 Sustainable Engineering Practice CORE | RENE2000 Bioenergy CORE |
| YEAR 3 | SEMESTER 1 | ENGG3500 Managing Engineering Projects CORE | RENE3000 Solar and Wind CORE | ELECTIVE PATHWAY | ELECTIVE PATHWAY |
| | SEMESTER 2 | ELEC3160 Principles and Design of Off-Grid Power Systems CORE | ELEC3251 Power Electronics and Renewable Energy Systems CORE | CHEE2825 Chemical and Renewables Engineering Laboratory CORE | RENE3100 Geothermal, Hydro, Ocean and Hybrid Systems CORE |
| YEAR 4 | SEMESTER 1 | CHEE4945A Design Project A CORE | RENE4000 Energy Storage Systems CORE *First Offering in 2022* | RENE4900A Renewable Energy Engineering Project A CORE *First Offering in 2022* | ELECTIVE PATHWAY |
| | SEMESTER 2 | CHEE4945B Design Project B CORE | ENGG4500 Engineering Complexity CORE | RENE4900B Renewable Energy Engineering Project B CORE *First Offering in 2022* | ELECTIVE PATHWAY |

COMPULSORY PROFESSIONAL PRACTICE: INDUSTRIAL EXPERIENCE – 12 WEEKS

PROGRAM PLAN

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**To be eligible to graduate make sure you have completed 320 units (10 units = 1 course unless otherwise specified) which meet the following criteria:**

- **Core courses** – 280 units

  **Enrolment in MATH courses is based on your assumed knowledge.** To find out which MATH courses you should enrol in please see the **Enrolling in Maths information**. More information in your **Program Handbook**.

  **Please also note the following regarding the multi-term sequence courses research courses:**
  - CHEE4945A Design Project A (10 units) and CHEE4945B Design Project B (10 units) must be completed in consecutive terms.
  - RENE4900A Renewable Energy Engineering Project A (10 units) and RENE4900B Renewable Energy Engineering Project B (10 units) must be completed in consecutive terms.

- **Elective Pathway** – 40 units, visit the **Program Handbook** for more information. Students who do not meet the enrolment requisite for MATH1110 and must take MATH1002 and will count MATH1002 as one of their 10 unit elective courses with 30 units total remaining. Contact **Programadvice@newcastle.edu.au** for further advice regarding your Program Plan if you need MATH1002.

- **Students must not exceed 120 units at 1000 level in this program.**

- **It is also a requirement that students complete a total of 12 weeks of** industrial experience**.**

- **The duration of this program is 4 year full-time (40 units per semester) or part-time equivalent.**

Some courses have assumed knowledge and/or requisites, please refer to the individual **Course Handbook**. Please refer to the **Program Handbook** for specific information on program structure. If you are intending varying from this program plan please seek advice from your **Academic Program Advisor**.