# 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.:**

## 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
- **CHEE2825** Chemical and Renewables Engineering Laboratory  
  - **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
- **CHEE4945B** Design Project B  
  - **CORE**
- **ENGG4500** Engineering Complexity  
  - **CORE**
- **RENE4900B** Renewable Energy Engineering Project B  
  - **CORE**
- **ELECTIVE PATHWAY**

## Year 4
### Semester 1
- **CHEE4945A** Design Project A  
  - **CORE**
- **RENE4000** Energy Storage Systems  
  - **CORE**
- **RENE4900A** Renewable Energy Engineering Project A  
  - **CORE**
- **ELECTIVE PATHWAY**

### Semester 2
- **CHEE4945B** Design Project B  
  - **CORE**
- **ENGG4500** Engineering Complexity  
  - **CORE**
- **RENE4900B** Renewable Energy Engineering Project B  
  - **CORE**
- **ELECTIVE PATHWAY**

**COMPULSORY PROFESSIONAL PRACTICE:** INDUSTRIAL EXPERIENCE – 12 WEEKS

**COURSE STATUS KEY**  
C = Completed  
En = Enrolled  
NS = Not Started
BACHELOR OF RENEWABLE ENERGY ENGINEERING (HONOURS)

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.