Bachelor of Renewable Engineering (Honours)

Commencing in Semester 2, 2019 
Studying at 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 prior advice from your Program Advisor to ensure you remain on track.

### Year 1

#### Semester 1

- **ENGG1003** Introduction to Procedural Programming
- **FLEC2320** Electrical and Electronic Circuits
- **MATH1110** Mathematics for Engineering, Science and Technology 1
- **CHEM1010** Introductory Chemistry 1

#### Semester 2

- **MATH1110** Mathematics for Engineering, Science and Technology 1
- **ENGG1600** Sustainable Energy - The Australian Setting
- **PHYS1210** Advanced Physics 1
- **ELEC1310** Introduction to Electrical Engineering

### Year 2

#### Semester 1

- **ENGG2500** Sustainable Engineering Practice
- **ENGG1500** Introduction to Professional Engineering
- **ELECTIVE**
- **CHEE2325** Thermodynamics of Chemical Processes

#### Semester 2

- **CHEE2695** Energy Transfer and Technologies
- **DIRECTED**
- **MATH2310** Calculus of Science and Engineering
- **ELEC2132** Electric Energy Systems

### Year 3

#### Semester 1

- **ENGG3500** Managing Engineering Projects
- **ELECTIVE**
- **RENE4800A** Renewable Energy Engineering Project A
- **RENE3000** Solar and Wind

#### Semester 2

- **ELEC3251** Power Electronics and Renewable Energy Systems
- **RENE2000** Bioenergy
- **ELEC3850** Electrical Engineering Design and Practice
- **RENE3100** Geothermal, Hydro, Ocean and Hybrid Systems

### Year 4

#### Semester 1

- **ELECTIVE**
- **ENGG3860** Carbon Accounting and Energy Auditing
- **RENE4000** Energy Storage Systems
- **ELECTIVE**

#### Semester 2

- **RENE4800B** Renewable Energy Engineering Project B
- **ENGG4500** Engineering Complexity
- **ELEC3160** Principles and Design of Off-Grid Power Systems

### Year 5

#### Semester 1

- **ELECTIVE**
- **ENGG3860** Carbon Accounting and Energy Auditing
- **RENE4000** Energy Storage Systems
- **ELECTIVE**

### Program Plan Key:

- **= Core**
- **= Directed**
- **= Elective**
- **= Compulsory Program Requirement**

Information correct as of May 2019 and subject to change.
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 – 270 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.

✓ Directed course – 10 units: Choose either CHEE2315 Fluid Mechanics for Chemical Engineers OR MECH2710 Fluid Mechanics 1.

✓ 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 will count MATH1002 as one of their 10 unit elective courses. Contact ProgramAdvice@newcastle.edu.au for further advice regarding your Program Plan.

✓ 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 years full time (40 units per semester) or part time equivalent.

✓ The maximum time to complete this program is 10 years.

Some courses have assumed knowledge and/or requisites, please refer to the individual Course Handbook. The Program Handbook has valuable information on program structure and requirements, if you are intending on studying part time or varying from this program plan please seek prior advice from your Program Advisor.
# Helpful Hints & Tips

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<td>It is important to follow this Program Plan. You cannot repeat a course you've passed to try and get a better grade. You cannot enrol in any extra courses not required by your program »</td>
<td>Find out all you need to know about getting started at uni »</td>
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<td>UON offers a range of support services to assist with your health and wellbeing »</td>
<td>Visit Student Central</td>
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