# Bachelor of Technology (Renewable Energy Systems)

**Commencing in 2018 and 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.

## Option 1 - Electrical Major

**Semester 1**

- **ENGG3860** Carbon Accounting and Energy Auditing
- **MATH2310** Calculus of Science and Engineering
- **ELEC3130** Electric Machines and Power Systems
- **PHYS2170** Quantum Mechanics and Semiconductor Physics

**Semester 2**

- **ELEC3850** Electrical Engineering Design and Practice
- **ENGG2440** Modelling and Control (Replaces ELEC4400 Automatic Control)
- **ELEC3160** Principles and Design of Off-Grid Power Systems
- **ELEC3251** Power Electronics and Renewable Energy Systems

## Option 2 - Mechanical Major

**Semester 1**

- **ENGG3860** Carbon Accounting and Energy Auditing
- **MATH2310** Calculus of Science and Engineering
- **MECH3400** Materials Science and Engineering 2
- **MECH3760** Renewable Energy Conversion

**Semester 2**

- **ELEC3850** Introduction to Electrical Engineering Design
- **ENGG2440** Modelling and Control (Replaces MCHA2000 Modelling and Control)
- **DIRECTED COURSE** Choose  
  - MECH2710 Fluid Mechanics 1  
  - MECH3720 Thermodynamics
- **MECH3110** Mechanical Engineering Design 2

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**Program Plan Key:**  
- ▶️ = Core  
- ▼ = Compulsory  
- ▲ = Directed

Information correct as of 8 November 2018 and subject to change.

Program Code: 40006  
CRICOS Code: 088615G  
CRICOS Provider: 00109J
To be eligible to graduate make sure you have completed 240 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- This program provides a final year of study for students who have completed the TAFE NSW Associate Degree in Engineering (Renewable Energy Technology) or approved equivalent, to take out a degree. The program consists of 240 units, however, students who have completed an Associate Degree in Engineering (Renewable Energy Technology) receive 160 units of credit, therefore 80 units of study is required in order to be awarded the degree.
- The duration of this program is 1 year full time (40 units per semester) or part time equivalent.
- Students complete either a Mechanical or Electrical Major.
- Core courses: 30 units for both majors
- Compulsory courses: Electrical Major - 50 units; Mechanical Major – 40 units
- Directed Courses – Mechanical Major only – 10 units
- The maximum time to complete this program is 4 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.
<table>
<thead>
<tr>
<th><strong>Helpful Hints &amp; Tips</strong></th>
<th><strong>ENROLMENT HELP</strong></th>
<th><strong>INFO FOR NEW STUDENTS</strong></th>
<th><strong>UNDERSTANDING COURSES &amp; PROGRAMS</strong></th>
<th><strong>PRIOR STUDY</strong></th>
<th><strong>CONSIDERING A BREAK?</strong></th>
<th><strong>MORE QUESTIONS?</strong></th>
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<td><strong>RULES</strong></td>
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<td>It is important to follow this Program Plan.</td>
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<td>First year undergraduate students usually only enrol in 1000 level courses</td>
<td>Not sure what courses to study?</td>
<td>Check you have met the assumed knowledge and requisites for courses before enrolling</td>
<td>Need to take a break? This is called 'leave of absence'. Check if you are eligible</td>
<td>We are here to answer questions about your program. Talk to us your way!</td>
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<td>Need help?</td>
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<td>You cannot repeat a course you've passed to try and get a better grade.</td>
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<td>New Postgraduate students should only enrol in 6000 level courses</td>
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<td>Have you studied elsewhere or transferred programs? Don't forget to apply for credit</td>
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<td>Planning on going overseas? Keep electives free, so it's easier for you to receive credit for your overseas studies</td>
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<td>UON offers a range of support services to assist with your health and wellbeing</td>
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**Ask UON**
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Visit a Student Hub
Message us on Facebook or Twitter
UONline via myUON