Bachelor of Technology (Renewable Energy Systems)

Commencing in Semester 2, 2019

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.

Electrical Major

Semester 1

Year 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

Program Plan Key: ▼ = Core  ▼ = Compulsory

Information correct as of 20 June 2019 and subject to change.  Program Code: 40006  CRICOS Code: 088615G  CRICOS Provider: 00109J
# Mechanical Major

## Semester 1

### Year 1

<table>
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<th>Course Code</th>
<th>Course Name</th>
<th>Program Plan Key</th>
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<tbody>
<tr>
<td>ENGG3860</td>
<td>Carbon Accounting and Energy Auditing</td>
<td>Core</td>
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<tr>
<td>MECH3110</td>
<td>Mechanical Engineering Design 2</td>
<td>Compulsory</td>
</tr>
<tr>
<td>MECH3400</td>
<td>Materials Science and Engineering 2</td>
<td>Compulsory</td>
</tr>
<tr>
<td>MECH3760</td>
<td>Renewable Energy Conversion</td>
<td>Directed</td>
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## Semester 2

### Year 2

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<th>Course Code</th>
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<tr>
<td><em>MATH2310</em></td>
<td>Calculus of Science and Engineering</td>
<td>Core</td>
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<tr>
<td>ENGG2440</td>
<td>Modelling and Control (Replaces MCHA2000)</td>
<td>Core</td>
</tr>
<tr>
<td></td>
<td>Fluid Mechanics 1</td>
<td>Directed</td>
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<tr>
<td></td>
<td>Choose MECH2710 or MECH3720</td>
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<tr>
<td>ELEC3850</td>
<td>Electrical Engineering Design and Practice</td>
<td>Core</td>
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Program Plan Key:  
- **Core**
- **Compulsory**
- **Directed**
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 an Electrical or a Mechanical 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.
- ✔ * MATH2310 can be completed concurrently with ENGG2440 or after as the assumed knowledge is met through TAFE studies.

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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<th>UNDERSTANDING COURSES &amp; PROGRAMS</th>
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<th>CONSIDERING A BREAK?</th>
<th>MORE QUESTIONS?</th>
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| **Need help?**  
[Ask UON](#) | **First year undergraduate students usually only enrol in 1000 level courses**  
[>](#) | **Not sure what courses to study?**  
[>](#) | **Check you have met the assumed knowledge and requisites for courses before enrolling**  
[>](#) | **Need to take a break?**  
This is called a ‘leave of absence’. Check if you are eligible  
[>](#) | **We are here to answer questions about your program. Talk to us your way!**  
[Ask UON](#)  
[1300 ASK UON](#)  
[Visit Student Central](#)  
[Message us on Facebook](#)  
[or Twitter](#)  
[UONline via myUON](#) |
| **How do I use the Web Timetable?**  
[>](#) | **New Postgraduate students should only enrol in 6000 level courses**  
[>](#) | **Understanding program and course jargon**  
[>](#) | **Have you studied elsewhere or transferred programs?**  
Don’t forget to apply for credit  
[>](#) | **Planning on going overseas? Keep electives free, so it’s easier for you to receive credit for your overseas studies**  
[>](#) |
| **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  
[>](#) | **Find out all you need to know about getting started at uni**  
[>](#) | **Understanding UON Jargon**  
[>](#) | **UON offers a range of support services to assist with your health and wellbeing**  
[>](#) |  |

- [Helpful Hints](#)
- [Ask UON](#)