Overview

The specialisation in Renewable Energy is designed to build on the previous education of engineers who are currently being attracted to the booming renewable energy industry. Students undertake courses in renewable energy and energy efficiency, including technology, systems engineering, and assessment frameworks.

In order to fulfil the requirements of the degree students must complete a total of 48 UOC comprising of from Disciplinary Knowledge, Advanced Disciplinary Knowledge, Engineering and Technical Management (ETM) and Elective courses.

ENTRY REQUIREMENTS

A student must hold either:

- a Bachelor of Engineering or an equivalent qualification from a recognised university or tertiary institution, or
- a 3- or 4-year Bachelor of Engineering or Science in a relevant discipline (or equivalent) plus at least 3 years of relevant professional experience (exact positions and roles that will be considered relevant to be decided by program authority).

in order to be admitted to the stream. For entry details, please click here.
<table>
<thead>
<tr>
<th><strong>Faculty</strong></th>
<th>Faculty of Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School</strong></td>
<td>School of Photovoltaic and Renewable Engineering</td>
</tr>
<tr>
<td><strong>Study Level</strong></td>
<td>Postgraduate</td>
</tr>
<tr>
<td><strong>Minimum Units of Credit</strong></td>
<td>48</td>
</tr>
<tr>
<td><strong>Specialisation Type</strong></td>
<td>Specialisation</td>
</tr>
</tbody>
</table>
Available in Program(s)

Program(s) in which this specialisation is available

Graduate Diploma in Engineering Science - GradDipEngSc
5341 Engineering Science
Faculty: Faculty of Engineering
Campus: Kensington
Units of Credit: 48
Typical Duration: 1 Years
**Specialisation Structure**

Students must complete 48 UOC.

**Advanced Disciplinary Courses**

Students may take up to 48 UOC of the following courses.

- **MECH9720** | 6 UOC
  Solar Thermal Energy Design

- **SOLA9101** | 6 UOC
  Advanced Photovoltaics

- **SOLA9103** | 6 UOC
  Renewable Energy System Modelling & Analysis

- **SOLA9104** | 6 UOC
  Hybrid Renewable Energy Systems

**Disciplinary Knowledge Courses**

Students may take up to 48 UOC of the following courses.

- **MECH3610** | 6 UOC
  Advanced Thermofluids

- **SOLA3010** | 6 UOC
  Low Energy Buildings and Photovoltaics

- **SOLA4012** | 6 UOC
  Photovoltaic Systems Design

- **SOLA5052** | 6 UOC
  Biomass

- **SOLA5053** | 6 UOC
Wind Energy Converters

SOLA5057 | 6 UOC
Energy Efficiency

SOLA9001 | 6 UOC
Photovoltaics

**Engineering & Technical Management Courses**

Students may take up to a maximum 12 UOC of elective courses. Students may choose electives from the Disciplinary Knowledge list, the Advanced Disciplinary list and Engineering and the Technical Management course list below. Up to 12 UOC of foundation courses (Level 3) may be approved by the Program Authority.

**COMP9021** | 6 UOC
Principles of Programming

CVEN9888 | 6 UOC
Environmental Management

CVEN9892 | 6 UOC
Sustainability Assessment and Risk Analysis

GSOE9017 | 6 UOC
Managing Energy Efficiency

GSOE9210 | 6 UOC
Engineering Decision Structures

GSOE9360 | 6 UOC
Academic Discourse in Engineering

GSOE9445 | 6 UOC
Entrepreneurial Engineering
GSOE9510  |  6 UOC
Ethics and Leadership in Engineering

GSOE9712  |  6 UOC
Engineering Statistics and Experiment Design

GSOE9810  |  6 UOC
Process and Product Quality in Engineering

MANF6860  |  6 UOC
Strategic Manufacturing Management

MANF9400  |  6 UOC
Industrial Management

MANF9472  |  6 UOC
Production Planning and Control

MATH5165  |  6 UOC
Optimization

MATH5846  |  6 UOC
Introduction to Probability and Stochastic Processes

SOLA9004  |  6 UOC
Sustainable and Renewable Energy

SOLA9016  |  6 UOC
Sustainable Energy in Developing Countries

SOLA9103  |  6 UOC
Renewable Energy System Modelling & Analysis

One of the following:
CEIC8204  |  6 UOC
Topics in Business Management in Chemical Engineering
CVEN9701 | 6 UOC
Engineering Economics and Financial Management

GSOE9830 | 6 UOC
Economic Decision Analysis in Engineering

One of the following:
GSOE9340 | 6 UOC
Life Cycle Engineering

SOLA9015 | 6 UOC
Life Cycle Assessment

One of the following:
CVEN9731 | 6 UOC
Project Management Framework

GSOE9820 | 6 UOC
Engineering Project Management

**Enrolment Disclaimer**

Unless advised otherwise by your program authority, you should follow the rules for the handbook for the year you commenced your program. You are also responsible for ensuring you enrol in courses according to your program requirements. myUNSW enrolment checks that you have met enrolment requirements such as pre-requisites for individual courses but not that a course will count towards your program requirements.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179