

INNOVATIVE
RESOURCES PEOPLE
FOR TOMORROW'S
WORLD.



MONASH
RENEWABLE ENERGY
ENGINEERING

eng.monash.edu/civil/resources-eng



WHAT IS RENEWABLE ENERGY ENGINEERING?

Monash is committed to reducing the global reliance on fossil fuels.

A qualification in renewable energy from Monash University provides students who have a passion for the environment to enter the growing renewable and clean energy engineering market. Students who graduate from Monash's renewable energy engineering degree will be equipped to develop and manage the most appropriate and environmentally sustainable energy solutions for businesses' needs, projects or assets.

Renewable energy engineering is an emerging discipline. Monash renewable energy engineers will focus on identifying and developing sustainable systems for electricity generation. This will include a broad knowledge of renewable energy sources and technologies; ability to assess feasibility of alternative energy options and make recommendations based on site specific resource characteristics.

Further information

eng.monash.edu/civil/resources-eng

1800 MONASH (1800 666 274)

The information in this brochure was correct at the time of publication (July 2016). Monash University reserves the right to alter this information should the need arise. You should always check with the relevant Faculty office when considering a course.

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RENEWABLE ENERGY ENGINEERING AT MONASH

Monash renewable energy engineering graduates are uniquely placed in a rapidly expanding job market and have a unique applied engineering skill set. They are also unique in their understanding of existing energy solutions through the study of conventional resources development.

Renewable energy engineering is a specialisation within the Bachelor of Engineering (Honours). After completing the common first year, renewable energy engineering students enter a level two that offers a range of units common to all four resources specialisations – geological, mining, oil and gas, and renewable energy engineering.

This structure provides students with the flexibility to easily transfer between each of the four resources specialisations up until the end of their second year. Units in third and fourth levels provide targeted study in renewable energy engineering.

LEVEL

- 1** The first level of the course has units common across engineering disciplines. At the end of the first year, you can apply to specialise in renewable energy engineering
- 2** Increases the engineering content with a mixture of core engineering units, mathematics and resources units to begin to integrate the content gained from other units.
- 3** You'll be introduced to more focused renewable energy engineering units, such as Geothermal energy, Solar energy, Biomass energy, and Wind engineering.
- 4** You will continue your renewable energy engineering specialisation. Your level four study provides high level applications for earlier studies through design and research projects, complemented by advanced technical electives and interdisciplinary units.

SPECIALISED SUBJECTS STUDENTS COMPLETE

- Natural resources engineering
- Project, risk and safety management
- Fixed plant engineering
- The deep earth
- Geomechanics
- Energy and the environment
- Applied geophysics
- Solar energy
- Rock mechanics
- Hydropower
- Geothermal energy
- Power systems
- Biomass energy
- Wind engineering.

SCHOLARSHIPS

For scholarships information visit monash.edu/study/scholarships

INDUSTRY LINKS

Students benefit from strong industry links through seminars, industry projects and summer work opportunities.

“Through this degree Monash graduates will be at the forefront of clean energy implementation in Australia.”

CHRIS JUDD
CEO and Managing Director,
Senvion Australia Pty Ltd



WIND ENERGY

Conversion of wind kinetic energy into electrical



HYDROPOWER ENERGY

Converting energy of water flow into electrical energy



BIOMASS ENERGY

Plant materials can be transformed into energy



GEOTHERMAL ENERGY

The energy contained in the ground



SOLAR ENERGY

The use of solar radiation for energy

COURSE DETAILS

Location: Clayton

Indicative ATAR: 90+

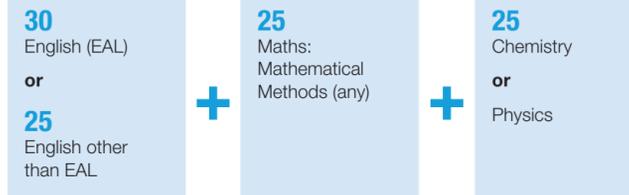
Indicative IB Score: 33+

Duration: 4 years

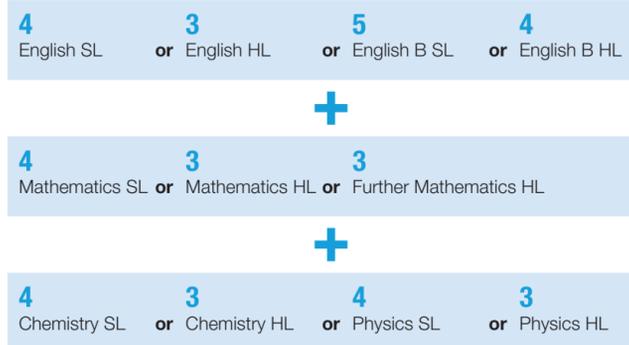
Degree awarded:

Bachelor of Renewable Energy Engineering (Honours)

VCE prerequisites (units 3 and 4)



International baccalaureate subject prerequisites



HOW TO APPLY

Domestic (Australian) and onshore international students

If you are an Australian or New Zealand citizen, an Australian permanent resident, or you are an international student studying an Australian Year 12 or IB in Australia or New Zealand, apply through the Victorian Tertiary Admission Centre (VTAC).

Visit vtac.edu.au for more information.

International students

International students should apply directly to Monash University and must have completed an equivalent qualification to the Victorian Certificate of Education (VCE) and the prerequisite subjects or equivalent.

For more information visit monash.edu/study/international

For more information

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Email: irene.sgouras@monash.edu

Web: eng.monash.edu/civil/resources-eng

WHY STUDY RENEWABLE ENERGY ENGINEERING?

Monash renewable energy engineers will be at the forefront of renewable energy implementation in Australia with the ability to transfer skills overseas.

The Bachelor of Renewable Energy Engineering (Honours) was established with significant industry support. It is the only Group of Eight renewable energy engineering degree in Victoria and Tasmania.

WHERE DO RENEWABLE ENERGY ENGINEERS WORK?

RENEWABLE ENERGY ENGINEERS WILL BE EMPLOYED TO:

- assist with the development and implementation of clean energy policy
- identify sustainable systems for power generation
- understand traditional (hydrocarbon and coal) and alternate renewable power sources and their generation, in order to assess available energy options and optimise the outcome
- provide recommendation and solutions regarding the intersection of traditional power industries and conventional energy sources with renewable energy sources (infrastructure focus)
- manage the process of developing, maintaining and optimising alternative energy assets, and maximising energy usage efficiency.