

Top Universities for Electrical Engineering in Australia

Electrical engineering is often described as a difficult but rewarding job. Tasked with designing and developing new electrical systems, an electrical engineer can expect to pull in an average gross weekly salary of AUD\$1,927. In Australia, they can be employed across many industries such as aerospace, rail, facilities management, and telecommunications. For engineers who wish to land jobs as consultants, managers, or project leaders, however, a Master's degree can be very helpful. Below are the top Australian universities that offer Master's degrees in electrical engineering.



1. Curtin University

Curtin University is a culturally diverse school in Western Australia. Founded in 1966 as the Western Australia Institute of Technology, the university is now ranked among the top 1% worldwide according to the Academic Ranking of World Universities. Additionally, engineers with postgraduate degrees from Curtin are the highest paid in Western Australia based on the 2018 Quality Indicators for Learning and Teaching (QILT) report.

Curtin offers a Master of Professional Engineering major in electrical engineering with three specializations: embedded systems engineering, emerging power systems engineering, and telecommunications and networking engineering. The completion of this course indicates that graduates have completed the Stage 1 Competency Standards for Professional Engineers as required by Engineers Australia. This Master's degree requires 400 credits and can be completed in two years.

2. Queensland University of Technology

The Queensland University of Technology (QUT) is a major Australian university with roots going all the way back to 1849 under the name Brisbane School of Arts. It officially became the Queensland University of Technology in 1989 with the passing of the Queensland University of Technology Act. Today, QUT offers more than 400 courses and extensive research opportunities at its two campuses in Gardens Post and Kelvin Grove. It ranked #244 in the 2019 QS Global World University rankings.

QUT offers a Master of Engineering degree with a specialization in electrical engineering, a program that can be completed in one year for full-time students or two years for part-time students. Students are required to complete 96 credits of course units. These break down as 60 credits from core engineering postgraduate units and 36 credits from advanced disciplines and electrical specialization. The latter can focus on power system modeling, power electronics, and power systems management with renewable and storage resources

3. RMIT University

The Royal Melbourne Institute of Technology (RMIT) is a QS 5-star-rated university founded in 1887. It is a global university with campuses in Australia and Vietnam as well as a research and industry collaboration center in Spain. RMIT is ranked 238th out of the top 1000 universities in the world according to the 2019 QS Global World University rankings. To ensure that students are updated with the most relevant education that meets industry needs, RMIT partners with global organizations like Deloitte, Adidas, and BMW.

Admission to RMIT's Master of Engineering (Electrical Engineering) program requires a GPA of at least 2.0 out of 4.0. The program is offered at the Melbourne city campus and can be completed by full-time students in two years while part-time students may take up to four. Areas of focus are renewable energy, high-voltage and protection systems, building services, and power electronic converter systems.

4. Australian National University

The Australian National University (ANU) is a national research school in Canberra. Discussions to build a national university began in 1944, and by 1946 the government enacted the bill that established ANU. The university is ranked #1 in Australia and #24 in the world according to the QS World University Rankings in 2019. It has three campuses located in the Australian Capital Territory (ACT), New South Wales, and Northern Territory.

The Master of Engineering in electrical engineering degree at ANU is a two-year program for full-time students. Students must have a minimum GPA of 5.0/7.0 in a cognate discipline to be admitted to the program. Among the acceptable cognate disciplines are electrical/electronics engineering, telecom/communication engineering, and power and information engineering. To be awarded the Master's degree, students must complete 96 units, of which 48 will come from compulsory courses and 36 from electives in electrical engineering, computing, and breadth.

5. University of Melbourne

The University of Melbourne is a public research university established in 1853. It is a public-spirited institution that consistently ranks among the top universities, standing at #39 in the world according

to the QS World University Rankings in 2019. The university has a total of seven campuses, namely: Parkville, Southbank, Burnley, Creswick, Dookie, Werribee, and Shepparton.

Its Master of Engineering (Electrical) degree is offered at the Parkville campus and can be completed by full-time students in two to three years, while part-time students are allowed to take up to six years. Students must complete a total of 300 credit points to graduate. Among the classes that students may choose are electrical network analysis and design, electrical device modeling, advanced motion control, and electronic system implementation.

6. University of New South Wales

The University of New South Wales (UNSW Sydney) is one of Australia's leading research and teaching universities. Established in 1949, it ranks 45th in the QS World University Rankings 2019. The university is also a member of a coalition of the country's leading research-intensive institutions known as the Group of Eight. UNSW has invested a total of \$250 million in research infrastructure since 2015.

The university offers Master of Engineering and Master of Engineering Science degrees with specializations in electrical engineering. Both Master's programs can be completed in two years for full-time students and are accredited by Engineers Australia. Students are required to complete a total of 96 units of credit (UOC) for both. The Master of Engineering requires

18 UOC in core courses, 36 in Level 4 electives, 30 in Level 5 electives, and 12 in engineering and technical management electives. The Master of Engineering Science, on the other hand, requires 18 UOC of inquiry-based courses, 30 of advanced disciplinary courses and 6 of engineering and technical management courses.

7. University of Queensland

The University of Queensland (UQ) is a research and teaching institution founded in 1909. It is among the world's top universities, ranking at #48 in the QS World University Rankings 2019, #32 in the CWTS Leiden Ranking 2018 and #54 in the Academic Ranking of World Universities. UQ has two campuses in Brisbane (Herston and St Lucia) as well as one in the town of Gatton in the southeast part of the state.

UQ's postgraduate programs include a Master of Engineering and a Master of Engineering Science for electrical engineering. Its Master of Engineering program requires 32 units worth of practice-focused and advanced technical courses, professional experiences, and research projects. The program can be completed in three years at the St Lucia campus. The Master of Engineering Science program, on the other hand, can be completed in one year for full-time students, requiring only 16 units for those who have an Honors degree or 24 units for students who want to do both project work and general engineering courses.

8. University of Sydney

Founded in 1850, the University of Sydney was Australia's first university. It regularly places among the top 50 universities, ranking #3 in Australia and #42 in the world according to the QS World University Ranking 2019. The university's graduates are ranked #1 in the country and #4 in the world for employability based on QS World Rankings. The University of Sydney has a total of 11 campuses and research locations including Cumberland, Camden, Surry Hills, and Westmead.

Its Master of Engineering (Electrical Engineering) is offered at the Camperdown/Darlington location, the university's largest and most diverse campus. The program requires students to complete 72 credit points. Full-time students can complete the program in one and a half years, while part-time students can expect to take two to three years. Among the available subjects are high-voltage engineering, power system dynamics and control, model-based software engineering, and the Internet of Things for critical infrastructures.