

Registration of professional engineers – an overview for student engineers

August 2024



Why is registration of engineers important?

Professional engineers plan, design, construct, test, commission, maintain, operate and decommission safety critical systems whose performance can have significant consequences for public health and safety and economic implications for businesses and the community.

Most engineers provide their services competently, ethically and with diligence. However, in the absence of regulation for engineering, anyone could claim to be an engineer and provide engineering services without appropriate qualifications, experience or competencies and with disregard to professional standards and ethical conduct.

Registration of engineers enhances public confidence that engineering services have been delivered by qualified, experienced and competent professionals who practice ethically, develop safe and sustainable solutions, apply local engineering knowledge and manage risks effectively.



Registration of engineers in Australia

The concept of <u>state registration</u> for professional engineers has been around for many years and is slightly different in each state and territory. The information presented here is accurate at the time of publication. It's your responsibility to investigate, understand and comply with the registration requirements in the state or territories you may be working in. Contact EA if you have any queries.

The Registration Landscape July 2024

Queensland	Registration in place since 193019 areas of engineeringAll industry sectors
New South Wales	Registration in place since 20216 areas of engineeringBuilding sector only
Australian Capital Territory	 Registration started 6 March 2024 5 areas of engineering All industry sectors Building Industry Endorsement – if working in the building and construction industry
Victoria	 Registration in place since 2021 5 areas of engineering All industry sectors Building Industry Endorsement – if working in the building and construction industry
Western Australia	 Registration started 1 July 2024 4 areas of engineering Building sector only Individuals and Companies need to register 2 additional Occupational Levels: Technologists and Associates Building Industry Endorsement – if working in the building and construction industry
South Australia	 Start date for registration TBC Phase 1 – structural and fire safety engineers working on medium, high and very high complexity buildings as specified in the NCC
Tasmania	Some certifying engineer requirements
Northern Territory	Limited licensing of engineers in the building sector

How does the registration process work?

Some states have implemented a co-regulatory model of registration. Assessment entities such as Engineers Australia assess the qualifications, experience and competency of applicants, while statutory regulators such as Department of Fair Trading in NSW or Consumer Affairs Victoria manage their state's register, investigate complaints and impose sanctions.



About engineering education and standards

The <u>International Engineering Alliance</u> (IEA) is a global not-for-profit organisation with members from 31 countries. It facilitates multi-lateral agreements to establish standards of engineering education and practice for the engineering profession. Engineers Australia is the Australian signatory to the IEA education accords and the Australian authorised member of the IEA mobility agreements.

As the recognised Australian representative to the IEA, our competency standards are internationally recognised as the Australian National Competency Standard (NCS). The NCS align with the IEA Graduate Attributes and Professional Competencies for entry to practice qualifications and independent practice competency. Engineers Australia accredits Australian engineering programs to these standards.

Minimum Australian requirements for registration

The minimum requirements for registration as a professional engineer in Australia are:

- 1. An IEA Washington Accord recognised qualification (or assessed equivalent).
- 2. At least five years of full-time experience working in the relevant area or areas of engineering with at least four years being post-graduation, gained within the last 10 years.
- 3. Assessment against at least the following five of the 16 NCS independent practice competencies:
 - i. Deal with ethical issues
 - ii. Practise competently
 - iii. Develop safe and sustainable solutions
 - iv. Identify, assess and manage risks
 - v. Local engineering knowledge
- 4. A commitment to ethical practice. For example, Engineers Australia Code of Ethics, and if applicable, a jurisdiction's Code of Conduct.
- 5. A demonstrated commitment to undertaking at least 150 hours of continuing professional development (CPD) every three years while registered.

Some states have additional requirements such as knowledge of the National Construction Code and relevant standards if applying to work in the building sector.



FAQs

Can I be registered as soon as I graduate from university?

Most registration schemes in Australia require you to have five years of engineering experience in the relevant area/s of engineering, of which at least four years must be postgraduate experience.

Graduates with less than five years' experience at the professional engineer level are not eligible to apply for state registration and must work under direct supervision of a registered professional engineer.

What is direct supervision?

Direct supervision allows an unregistered person to perform professional engineering services while working under the direction of a registered professional engineer.

The registered professional engineer can only supervise unregistered engineers within their area of competence and must be registered in that state, have sufficient control over any work completed and take responsibility for engineering services that are carried out by the unregistered engineer.

It is important to review the requirements of the regulator in the jurisdiction that you are working in or providing services for.

How do I know if my degree is accredited under the Washington Accord?

You can check if your degree is accredited under the <u>Washington Accord</u> on the IEA website or the <u>Engineers Australia</u> website.

If your degree isn't listed, you might fall under the Sydney Accord as an Engineering Technologist or the Dublin Accord as an Engineering Associate. You can find out more about the <u>accords and</u> different categories of engineers and how to transfer from one category to another on our website.

Contact us if you have any questions about your qualifications.

Can my studies count as part of the five years' experience needed for registration?

Once you've completed your undergraduate degree, you'll need to work as a professional engineer under supervision for at least four years before you can register.

If you move straight to postgraduate study after completing your undergraduate degree, depending on how this is structured, your experience through your postgraduate study may not count.

If you undertake postgraduate study part-time and work in an engineering field under supervision at the same time, your experience may be considered.

If you work in an engineering field under supervision after completing your undergraduate degree and then undertake postgraduate study, the experience you gained between study may count.

Contact us if you have any questions about your work experience.

What do I do if my area of engineering does not match those required for state registration?

The areas of engineering in each state may not be as extensive as the programs offered by your education provider. In QLD for example, you can be registered in Mechatronics, Biomedical or even Aerospace Engineering, but not in other states. Instead, you would need to decide how to best match what you are doing to the areas of engineering that state offers.

If you were studying mechatronics, you could select Mechanical or Electrical engineering as your area of practice, depending on the focus of your degree. If you need help, <u>contact us</u> and we can guide you through the state registration requirements.

I want to work for myself or create a tech start-up straight out of university. Do I need to be registered?

Someone in the start-up will need to be registered if it's providing professional engineering services in that state, or for another state or territory where registration is required.

That could mean for the engineering work you do within your start-up, you'll need to work under the direct supervision of someone who is registered until you gain the experience required to be registered.

I intend to go overseas when I graduate, do I need to register to work overseas?

If you are working as a professional engineer in an international country, you will need to check if there are any possible registration requirements for that country that you will need to comply with. Registration requirements vary across Australia and across the world.

Who can I contact to find out more about the requirements in each state?

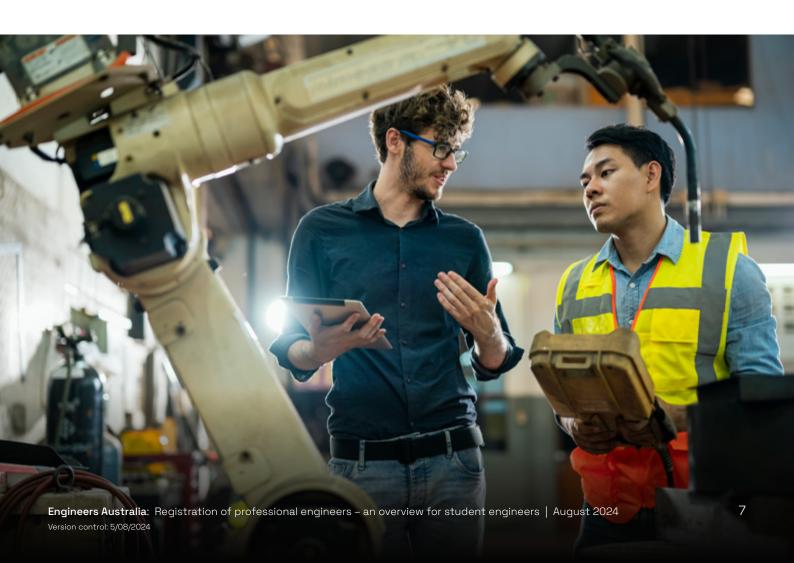
You can contact Engineers Australia or any of the state regulators below.

QLD: Board of Professional Engineers of Queensland

NSW: NSW Government Fair Trading
VIC: Consumer Affairs Victoria

ACT: ACT Planning

WA: Department of Energy, Mines, Industry Regulation and Safety





About Engineers Australia

As Australia's national body for engineering, we are the voice and champion of our 120,000-plus members. Providing them with the resources, connections, and growth they need to do ethical, competent and high-value work in our communities. We are a not-for-profit constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.