



ENGINEERS
AUSTRALIA

Minimum requirements for registration for independent practice as a professional engineer in Australia

Consistent registration requirements in Australia

Engineers Australia advocates for nationally consistent registration of professional engineers in Australia.

Consistency of regulation and its application across state and territory borders provides benefits such as legislative efficiency, automatic mutual recognition of professional engineers across states and territories and reduced administrative burden for industry so that navigating different systems does not impact productivity.

All registration systems should have the same characteristics in that standards must be set, including qualification requirements, applicants assessed against specified competencies, and a register maintained.

International benchmarks

The International Engineering Alliance (IEA¹) is a global not-for-profit organisation, which comprises members from 29 countries and facilitates multi-lateral agreements to establish standards of engineering education and practice for the engineering profession. Engineers Australia is Australia's signatory to the IEA education accords, and Australia's authorised member of the IEA mobility agreements. Through the educational accords and mobility agreements, members of the IEA establish and promote internationally benchmarked standards for engineering education and expected competence for independent engineering practice.

Engineers Australia competency standards

The IEA recognises that within each participating jurisdiction, the profession will have qualifications and registration requirements for practice. As the recognised Australian representative to the IEA, Engineers Australia's competency standards are internationally recognised as the Australian National Competency Standards (NCS).

The NCS align with the IEA Graduate Attributes and Professional Competencies (GAPC)² for entry to practice qualifications and independent practice competency. Alignment to the IEA GAPC is important, especially for entry to practice as this is the recognised international standard for foundational engineering qualifications. In addition to competence, other elements such as years of experience, commitment to ethical practice, and continuing professional development must also be considered to ensure that an engineer is suitable for continuing independent practice.

Minimum Australian requirements for independent practice registration

The following requirements are considered the minimum requirements for registration for independent practice as a professional engineer in Australia. The Engineers Australia voluntary National Engineering Register (NER) for all disciplines is consistent with these requirements.

1. An IEA Washington Accord recognised qualification (or assessed equivalent).
2. At least five years of relevant experience in the last ten years in the Area of Engineering being sought for registration.
3. Assessment against at least the following five of the sixteen NCS independent practice competencies³.
 - 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's Code of Ethics) and (if applicable, a jurisdiction's Code of Conduct).
5. A demonstrated commitment to undertaking Continuing Professional Development (CPD) while registered of at least 150 hours every three years.
6. Other requirements for a given jurisdiction (for example, for practice in the building sector, knowledge of the National Construction Code and relevant standards). These should be kept to a minimum.

Competent and ethical engineers also have access to an appropriate level of Professional Indemnity Insurance (PII) for their engineering services while registered.

Chartered credentialled professionals and international recognition

Professional engineers that are credentialled as a Chartered Professional Engineer (CPEng) have been assessed against the full suite of NCS competencies for independent practice (Stage 2). Chartered Professional Engineers are eligible to register on the Engineers Australia section of the International Professional Engineer Register, and APEC Engineer Register after they have seven years engineering experience, with at least two years being responsible for significant engineering work.

About Engineers Australia

Engineers Australia was established in 1919 and is Australia's peak body for the engineering profession.

We are a not-for-profit organisation, constituted by Royal Charter, to advance the science and practice of engineering for the benefit of the community.

Our 115,000 individual members represent all disciplines and branches of engineering and all three of the profession's occupational categories (Professional Engineer, Engineering Technologist, Engineering Associate).

¹ <https://www.ieagrements.org/>

² <https://www.ieagrements.org/assets/Uploads/IEA-Graduate-Attributes-and-Professional-Competencies-2021.1-Sept-2021.pdf>

³ <https://www.engineersaustralia.org.au/publications/stage-2-competency-standard-professional-engineers>