Professional Engineers (Qualifications, Experience and Competencies) Determination 2024

Disallowable instrument DI2024-32

made under the

Professional Engineers Act 2023, s 83 (Qualifications, experience and competencies for professional engineers)

1 Name of instrument

This instrument is the *Professional Engineers* (Qualifications, Experience and Competencies) Determination 2024.

2 Commencement

This instrument commences on 6 March 2024.

3 Declaration

I declare that for an individual to be eligible to be a professional engineer, the individual must meet the qualifications, experience and competencies in schedule 1.

4 Disapplication of Legislation Act

The Legislation Act 2001, section 47 (5) does not apply to the following documents as in force on the day this instrument commences and applied by this instrument:

- (a) the Washington Accord 1989
- (b) the Migration (LIN 19/051: Specification of Occupations and Assessing Authorities) Instrument 2019 (Cth)
- (c) the Migration (LIN 19/260: Assessing Authorities for Subclass 494 Visas) Instrument 2019 (Cth)
- (d) the Migration (LIN 19/049: Specification of Occupations and Assessing Authorities—Subclass 186 Visa) Instrument 2019 (Cth)
- (e) Australian Engineering Competency Standards Stage 2
- (e) International Professional Engineers Agreement
- (f) the APEC agreement

Note The documents applied by this instrument do not need to be notified under the Legislation Act because s 47 (5) does not apply (see Legislation Act, s 47 (7)).

Engineers Australia is the Australian Signatory to the Washington Accord. The Washington Accord is accessible at www.ieagreements.org/accords/washington/.

The Commonwealth migration determinations are accessible at www.https://www.legislation.gov.au.

The Australian Engineering Competency Standards Stage are accessible at Engineers Australia (www.engineersaustralia.org.au)

The International Professional Engineers Agreement is available at www.ieagreements.org/agreements/ipea

The APEC Agreement is available at www.ieagreements.org/agreements/apec.

Rebecca Vassarotti MLA Minister for Sustainable Building and Construction 5 March 2024

Schedule 1 (see section 3)

Qualifications, experience and competencies for professional engineers

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Dictionary

TERM	MEANING
Assessment Entity	means an entity approved under section 32 of the <i>Professional Engineers Act 2023</i> to conduct an assessment scheme for an area of engineering
Assessment Scheme	means an eligible assessment scheme under subsection 32 (5) of the Professional Engineers Act 2023 operated by an assessment entity
Building and Construction industry	encompasses work for or in connection to the construction, alteration or demolition of a building (excluding disposal of waste materials generated by this activity) and work in relation to repairs of a structural nature to a building (section 7, <i>Building Act 2004</i>). Buildings include all classes of buildings under the National Construction Code (NCC), structures, temporary buildings, temporary structures and any part of a building or structure.
Professional Engineer	as defined in section 7 of the <i>Professional Engineers Act 2023</i>

Part 1 - Assessment Report

Assessment of the qualifications, experience and competencies set out in this Schedule will be undertaken by an assessment entity approved under section 32 of the *Professional Engineers Act 2023*.

This assessment will take the form of a report in accordance with section 16 (2) (e) of the *Professional Engineers Act 2023*. A report includes one or more of the following:

i. A report that states that the individual is currently included on the National Engineering Register managed by Engineers Australia in the area (s) of engineering for which

- registration is sought or has been assessed as eligible for inclusion in the last 12 months.
- ii. A report stating that the individual holds a Chartered credential issued by Engineers Australia in the area (s) of engineering for which registration is sought.
- iii. A report that states that the individual is currently included on the Australian Professional Engineers Register [APER] hosted by Professionals Australia in the area (s) of engineering for which registration is sought or has been assessed as eligible for inclusion in the last 12 months.
- iv. A report from an assessment entity that assesses the qualifications, experience and competencies set in this instrument of the individual for the area of engineering. Where applicable, this report should also include an assessment of the additional qualifications, experience and competencies requirements for providing professional engineering services to the building and construction industry. However, the provision of two separate reports is not a breach of this determination or an assessment entity's conditions of approval.
- v. If an individual has (i), (ii) or (iii) and wants to work in the building and construction industry, in addition to that report they will need a report from an assessment entity that states they meet the additional qualifications, experience and competencies requirements for providing professional engineering services to the building and construction industry.

The qualifications, experience and competencies prescribed in this Schedule are equivalent to or comparable to the standards applied by Engineers Australia and Professionals Australia for their registers and accreditations.

Part 2 – Qualifications

Area of engineering	Qualifications
Civil	A Washington Accord accredited under-graduate Bachelor of
Electrical	Engineering degree or post-graduate Master of Engineering degree in
Mechanical	the relevant area or areas of engineering in which registration is
Structural	sought.
	Explanatory notes
	→ These qualifications comprise all qualifications accredited at the level of 'Professional Engineer Washington Accord' including those that are no longer offered at that level as at the date of commencement of this instrument.
	→ For Australia, these qualifications are listed in the 'Accredited Engineering Program Directory' at https://www.engineersaustralia.org.au/About-Us/Accreditation/Accredited-Engineering-Program-Directory
	→ Overseas qualifications accredited under the Washington Accord are listed on Washington Accord signatory websites, which can be accessed from Home » International Engineering Alliance (leagreements.org)
	<u>OR</u>
	An Australian or overseas non-Washington Accord academic

Area of engineering	Qualifications
	qualification in the relevant area or areas of engineering in which registration is sought that has been assessed as substantially equivalent to an accredited Washington Accord undergraduate Bachelor of Engineering degree or post-graduate Master of Engineering degree by:
	i. the signatory to the Washington Accord 1989, as at the date of commencement of this instrument, for the country where the qualification was obtained, or
	ii. where the individual is applying for a visa under the Australian Government Skilled Migration Program, an approved assessing authority listed under the following as in force at the time of commencement of this instrument—
	 Migration (LIN 19/051: Specification of Occupations and Assessing Authorities) Instrument 2019 (Cth), or
	 Migration (LIN 19/260: Assessing Authorities for Subclass 494 Visas) Instrument 2019 (Cth), or
	 Migration (LIN 19/049: Specification of Occupations and Assessing Authorities — Subclass 186 Visa) Instrument 2019 (Cth).
Fire safety	A Washington Accord accredited under-graduate Bachelor of Engineering degree or post-graduate Master of Engineering degree in a discipline of engineering.
	AND
	An under-graduate or post-graduate level qualification specialising in fire safety engineering offered by an Australian or overseas university.
	<u>OR</u>
	An Australian or overseas non-Washington Accord academic qualification in a discipline of engineering that has been assessed as substantially equivalent to an accredited Washington Accord undergraduate Bachelor of Engineering degree or post-graduate Master of Engineering degree by:
	i. the signatory to the Washington Accord 1989, as at the date of commencement of this instrument, for the country where the qualification was obtained, or
	ii. where the individual is applying for a visa under the Australian Government Skilled Migration Program, an approved assessing authority listed under the following as in force at the time of commencement of this instrument—
	 Migration (LIN 19/051: Specification of Occupations and Assessing Authorities) Instrument 2019 (Cth), or

Area of engineering	Qualifications
	 Migration (LIN 19/260: Assessing Authorities for Subclass 494 Visas) Instrument 2019 (Cth), or
	 Migration (LIN 19/049: Specification of Occupations and Assessing Authorities — Subclass 186 Visa) Instrument 2019 (Cth).
	AND
	An under-graduate or post-graduate level qualification specialising in fire safety engineering offered by an Australian or overseas university.

Part 3 - Experience

Area of engineering	Experience requirements
All	Five years of full-time experience working in the relevant area or areas of engineering with at least four years being post-graduate gained within the last 10 years.
	OR
	The equivalent of 10 years full-time work in the relevant area or areas of engineering in the previous 15 years.

Part 4 - Competencies

Area of engineering	Competencies
All	The following five elements from the Australian Engineering Competency Standards Stage 2:
	1. Element 1 – Deal with ethical issues
	2. Element 2 – Practice competently
	3. Element 4 - Develop safe and sustainable solutions
	4. Element 6 – Identify, assess and manage risks
	5. Element 13 – Local Engineering knowledge, according to their area of practice including a knowledge of standards and practices.

Part 5 – Additional Qualifications and Experience for providing professional engineering services in the building and construction industry

A professional engineer who intends to provide professional engineering services in the building and construction industry must meet the following in addition to the qualifications, experience and competencies in Parts 2, 3 and 4 respectively.

Qualifications	Demonstrated knowledge and practical application of the operation and use of the National Construction Code (NCC) as it applies to the relevant area and/or areas of engineering.
Experience	 Three years' experience in the building and construction industry. The three years' experience must have been obtained in accordance with the general experience requirements for registration as a professional engineer. This three years' experience does not include: Experience obtained while performing unlawful work, including, but not limited to, work without a building approval, when a building approval is required. Experience that has not been independently verified. Quantity surveying, designing, drafting or off-site fabrication.

Part 6 - Alternative pathways deemed as meeting determined qualifications, experience and competencies

An individual who does not meet the qualifications and experience determined in Parts 2 and 3 respectively of this instrument may be assessed by an assessment entity as having the skills and knowledge to provide professional engineering services in the relevant area (s) of engineering for which registration is sought.

This alternative method of assessment is designed to support:

- those already working in the industry to continue to do so; and
- those practitioners who have taken a non-traditional university pathway to becoming an engineer (such as, later career practitioners who may have started with a technical or trade qualification but whom have over many years, through work experience, and other training developed the skills and experience that allows them to perform functions and offer services equivalent to that of a professional engineer or those who started with an undergraduate degree in Science, Management, Information Technology or Mathematics and have undertaken a post-graduate level qualification specialising in fire safety engineering).

If undertaking an assessment under this part, assessment entities must determine that the individual has appropriate qualifications and experience to meet the objectives of the registration scheme which are to:

- Protect the public by ensuring professional engineering services are carried out by, or under the direction and oversight of professional engineers;
- Maintain public confidence in the standard of services provided by professional engineers in the ACT; and
- Uphold standards of practice for professional engineers in the ACT.

Qualifications

If an individual does not meet the qualifications set out in this Schedule, an assessment entity must consider the following matters when deciding to assess someone as having relevant skills and knowledge to provide professional engineering services without direct supervision:

- 1. Has the individual been assessed by a signatory to the Washington Accord 1989, a member of the International Engineering Alliance competency agreements for professional engineers International Professional Engineers Agreement and APEC Agreement as in force at the time of commencement of this instrument or an entity licensed by a signatory to the Washington Accord 1989 as having demonstrated substantial equivalence with the competencies and outcomes of a Washington Accord undergraduate Bachelor of Engineering degree or postgraduate Master of Engineering Degree?
- 2. Does the person hold a qualification assessed as being suitable by an assessment entity as the level of qualification needed to provide a professional engineering service?
- 3. What academic qualifications, courses and training have been undertaken by the individual?
- 4. What professional memberships does the individual hold and what is the assessment process to obtain and retain these memberships?
- 5. Any other matters an assessment entity considers relevant.

Note: The above are matters that an assessment entity must consider if they are applicable to the applicant to which an assessment is being undertaken. If a matter is not applicable to an applicant it does not need to be considered and does not mean they cannot be assessed as having relevant skills and knowledge to provide professional engineering services without direct supervision.

Methods for determining these matters may include:

- Evidence reports from work experience
- Evidence of completion of top-up courses
- Interviews
- Professional referee checks
- Examinations
- Simulation and scenario exercises
- Assignments.

Experience

If an individual does not meet the experience requirements in terms of the number of years within the specified periods, an assessment entity may deem that the individual has sufficient experience to be competent to provide professional engineering services without direct supervision. In determining this, an assessment entity will give consideration to what professional engineering experience the individual has and how it was gained?

Methods for determining this may include:

- Evidence reports from work experience
- Professional referee checks