

September 2025

# Electrical engineer of coal mines other than underground mines

## Prerequisites

### 1. Prerequisites

All documents, other than the portfolio of evidence documents, **must be certified** as a true copy of the original by an authorised certifier. Refer to the [Fact sheet - Certifying documents and verifying identity](#) available on the [How to apply](#) page.

An application for examination must be accompanied by evidence that you have the following:

Prerequisite	Requirement
Tertiary or vocational qualification	<p>AQF6 (or higher) qualification in the field of electrical engineering.</p> <p>Acceptable electrical engineering qualifications include those that have one or more of the following terms in their title that are reflective of the majority of the subjects or units of competence completed that are relevant:</p> <ul style="list-style-type: none"><li>• electrical engineering</li><li>• renewable energy</li><li>• electronics</li><li>• mechatronics</li></ul> <p>Qualifications and/or providers must be listed on either:</p> <ul style="list-style-type: none"><li>• the National Register of Vocational Education and Training (training.gov.au) by a Registered Training Organisation (RTO) with it on scope OR</li><li>• National Register of Higher Education Providers and Courses (<a href="https://www.teqsa.gov.au/national-register">https://www.teqsa.gov.au/national-register</a>)</li></ul> <p>If you hold a qualification/unit of competence that is not specific as a prerequisite, refer to <a href="#">Fact sheet - Recognition of qualifications and units of competence</a>.</p> <p>The following qualifications have been recognised as of 28 February 2024:</p>

Prerequisite	Requirement
	<ul style="list-style-type: none"> <li>• Bachelor of Engineering (Electrical Engineering) issued by an Australian university, or</li> <li>• UEE62320 Advanced Diploma of Electrical Engineering – Coal Mining issued by a registered training organisation (the superseded unit number UEE62311 Advanced Diploma of Electrical Engineering – Coal Mining or other equivalent superseded unit number, is acceptable), or</li> <li>• UEE62220 Advanced Diploma of Electrical Engineering issued by a registered training organisation (the superseded unit number UEE62211 Advanced Diploma of Electrical Engineering or other equivalent superseded unit, is acceptable).</li> <li>• 52883WA - Advanced Diploma of Applied Electrical Engineering (Electrical Systems)</li> <li>• 52894WA - Advanced Diploma of Applied Electrical Engineering (Renewable Energy)</li> </ul> <p>If a potential applicant is unsure whether a qualification they have or considering completing will be accepted, then they can request a ruling from the Regulator (Chief Inspector), through submitting details to the exam panel by one or both of the following ways, as applicable:</p> <ol style="list-style-type: none"> <li>a) Name of qualification and list of subjects/units of competence, and any summary/overview, including any from the qualification provider</li> <li>b) Recognition of the equivalency of a qualification (including older ones and overseas), by referring to the <a href="#">Fact sheet - Recognition of qualifications and units of competence</a>.</li> </ol> <p>The request is to be emailed with copies of the qualification and/or transcript in full to <a href="mailto:competencies@dpird.nsw.gov.au">competencies@dpird.nsw.gov.au</a> at least one month prior to the closing date for applying for the certificate of competence.</p>
Practical experience	<p>A minimum of 4 years* practical coal mine other than underground experience, including:</p> <ul style="list-style-type: none"> <li>• a minimum 2 years involved in the installation, commissioning, maintenance and repair of electrical plant and installations (this must be included in the 4 years of experience above), and <ul style="list-style-type: none"> <li>○ within that two years' experience, one year must involve electrical plant and installations:</li> </ul> </li> </ul>

Prerequisite	Requirement
	<ul style="list-style-type: none"> <li>▪ with a minimum 6 months at an extraction face during production or development works and</li> <li>▪ during or other mining activities</li> </ul> <ul style="list-style-type: none"> <li>• a minimum one year in a supervisory role responsible for electrical plant and installations at a coal mine other than underground</li> </ul> <p>*In the 4 years of experience, up to one year in any other class of mine and one year working as an electrical engineer in another industry may be included.</p> <p>Your experience must be verifiable and/or signed off by your supervising manager who held an Electrical Engineer of mines other than underground mines practising certificate at the time of your employment (or an interstate equivalent or relevant). Refer to the <a href="#">Guide: Applying for a certificate of competence</a> for more details.</p>
Emergency preparedness unit	<p>RIIERR601E Establish and maintain mine emergency preparedness and response systems, issued by a registered training organisation.</p> <p>*The superseded units RIIERR601D and RIIERR601A Establish and maintain mine emergency preparedness and response systems, or other equivalent superseded unit number is acceptable.</p> <p>If you hold a qualification/unit of competence that is not specified as a prerequisite, refer to <a href="#">Fact sheet - Recognition of qualifications and units of competence</a>.</p>
Portfolio of evidence	<p>You must attach the following documents as evidence of your competence which must be relevant to the function. You may attach multiple documents to provide sufficient evidence.</p> <p>Your name must be in the document as evidence you were involved. If not, then you must have your supervisor/manager sign off the document confirming your involvement or attach another document confirming e.g. email.</p> <p>All evidence must be actioned/completed within the past 5 years:</p> <ol style="list-style-type: none"> <li>1. Risk assessment - a copy of a WHS risk assessment that you were involved in at a mine. This does not include day to day</li> </ol>

Prerequisite	Requirement
	<p>activities such as task focused risk assessments such as Take 5 or JSA.</p> <ol style="list-style-type: none"> <li>2. Workplace inspection - a copy of a WHS workplace inspection, task observation or audit, that you carried out and documented at a mine.</li> <li>3. Review of principal hazard management plan or control plan – evidence, such as a report, of your involvement in reviewing a principal hazard management plan or control plan at your mine.</li> <li>4. Shift handover report, shift work plan or compliance report - a copy of a WHS shift handover report, shift work plan or compliance report that you completed. For a shift handover report, the document must include your name and role.</li> <li>5. Developed and delivered a workplace training program - evidence of a WHS related training program in a mining or related field that you were involved in: <ul style="list-style-type: none"> <li>▪ development (e.g. toolbox talks, shift or work group briefings) with your name on the presentation as evidence that you developed it, or your supervisor/manager signing off you developed it.</li> <li>▪ delivery (e.g. completed sign on sheet of attendees with your name on it as the trainer/presenter), as evidence that you had delivered it, or your supervisor/manager signing off that you had delivered it.</li> </ul> </li> <li>6. Safe work procedure or related document for standard setting - a copy of a safe work procedure or related document for standard setting (eg. work instruction, work order job detail) that you actioned at a mine.</li> </ol> <p>For more information about portfolio requirements refer to the <a href="#">Portfolio requirements: certificate of competence examination process</a></p>
Identity verification	Refer to the <a href="#">Fact sheet: Certifying documents and verifying identity</a>

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## 2. Written and oral examination details

All written and oral examination questions are mapped to competencies in the [Competency framework](#). Candidates should be familiar with the competencies for this function to prepare for and demonstrate that they satisfy them in their question responses.

### Written exams

The written examination consists of the following paper:

Paper	Method of examination	Duration of paper
CEE3 – Legislation, Australian Standards and electrical engineering applicable to coal open - cut mining	Closed book	3 hours

#### 2.1. CEE3– Legislation, Australian Standards and electrical engineering applicable to open-cut mining

This paper will deal with the interpretation and application of mining and engineering principles and Australian Standards together with relevant aspects of mining legislation. You will be expected to have knowledge of safe working procedures and the causes and prevention of mine incidents.

- knowledge of safe working procedures and the causes and prevention of mine incidents.
- identification and management of electrical hazards for different mining operations
- maintenance and operation of electrical plant and structures regularly used at that type of mine, including explosion-protected plant.

You will be required to demonstrate a working knowledge of the *Work Health and Safety Act 2011*, *Work Health and Safety (Mines and Petroleum Sites) Act 2013*, and their supporting Regulations, as they relate to the duties of an electrical engineer of coal mines other than underground coal mines. You will also be required to:

- understand the implications and management of gazettal notices related to the electrical engineering aspects of coal mines.
- know all the legislative requirements for the role, and the specific requirements for the electrical engineering control plan for that type of mine
- demonstrate a working knowledge on key Australian Standards applicable to coal mining.

### Oral exams

The oral exam consists of questions where the candidate must achieve the minimum mark, number of items and/or specific items in their answer for each question in order to pass the exam. The competencies mapped to each question can be essential (must be satisfied) or other (in total must be satisfied). All questions must be passed.

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### 3. Other useful links

#### [Competency resources and guides](#)

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