



**NSW
Resources
Regulator**

GUIDE

EXPERIENCE PREREQUISITES EXPLAINED

Applying for a certificate of competence



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1. Introduction

This guideline explains the requirements to indicate whether your experience may satisfy the pre-requisites.

The minimum amount of time specified for each type of experience can be satisfied by adding up the various periods of your employment either where you worked:

- continuously doing activities at a mine site or
- where you worked for part of the time or shorter periods at one or more sites.

2. Clarification of practical experience

Applicants should refer to the [competencies and portfolios page](#) for guidance on the type of activities that may qualify as '*practical mine experience*'. The statutory function position descriptions describe the tasks an individual carries out to exercise the function. The competency framework identifies eight areas of competence required to exercise each statutory function and includes examples of the type of work activities that demonstrate the competency. While applicants cannot have exercised the statutory function, they can obtain practical mine experience for the competencies.

Further to this, applicants should refer to the [sample of practical experience](#) supplied in support of an application. This sample shows an example of an application that was rejected (including the reasons why the experience was not acceptable, and an example of how practical experience should be supplied in support of an application.

The breakdown of total practical experience prerequisites for each exam are as follows:

EXAM	TOTAL PRACTICAL EXPERIENCE YEARS FOR CLASS OF MINE SPECIFIED	OTHER CLASS OF MINE OR INDUSTRY EXPERIENCE ALLOWED (MAXIMUM)
Supervisors (deputies, open cut examiners, and underground supervisors)	3 years	Zero
Middle managers (undermanagers and quarry managers)	4 years	Undermanager – zero

Specialists (electrical engineers and mechanical engineers)		<p>Quarry manager (1 year in any other class of mine).</p> <p>Mechanical and electrical engineer (2 years – 1 year in any other class of mine and 1 year working as the type of engineer in another industry).</p>
High-level managers (mining, electrical, and mechanical)	5 years	<p>Mining engineering managers (up to 1 year in any other class of mine).</p> <p>Mechanical and electrical engineering managers (2 years - up to 1 year in any other class of mine and up to 1 year working as the type of engineer in another industry).</p>

3. Extraction experience

All applications require extraction experience as a pre-requisite. This experience will enable a person to sufficiently obtain and maintain an understanding of hazards and risks from processes and the environment. They will know how they are controlled within the development, implementation and/or application of the safety management system, as relevant to the statutory function. By possessing the required experience applicants should be ready to undertake the examination process and potentially be assessed as competent. Refer to the section above on what is ‘practical mine experience’ which extraction forms part of.

The extraction experience requirements are summarised in the table below for each certificate with types explained.

CERTIFICATES	EXTRACTION REQUIREMENTS AS PART OF PRACTICAL MINE EXPERIENCE
Mining managers and supervisors	<p>At least the specified number of years being present:</p> <ul style="list-style-type: none"> ■ for a minimum period specified at an extraction face during production or development works, and ■ during other mining activities.

Electrical engineering	<p>At least the specified number of years involved in the installation, commissioning, maintenance and repair of electrical plant and installations; and within the specified number of years' experience, one year must involve electrical plant and installations:</p> <ul style="list-style-type: none">■ with a minimum period specified at an extraction face during production or development works, and■ during other mining activities.
Mechanical engineering	<p>At least the specified number of years involved in the installation, commissioning, maintenance and repair of mechanical plant; and within the specified number of years' experience, one year must involve mechanical plant:</p> <ul style="list-style-type: none">■ for a minimum period specified at an extraction face during production or development works, and■ during other mining activities.

3.1. Types of extraction experience

3.1.1. Extraction face during production or development:

Physically participating in work where material is being excavated to access or mine the mineral.

Examples of experience that may be suitable to provide are:

- Where a continuous miner or longwall are operating.
- Where a jumbo or production drill are operating.
- Where explosives are being used to blast the material.
- Where plant is being used to remove the overburden or the excavated material such as the open cut pit or at the stope.
- Development of a tunnel/drive to access the mineral to be mined.

3.1.2. During other mining activities:

This is all other experience that relates directly to the extraction face/mining activities but may not require you to be physically present. Examples that may be suitable are:

Works underground

- The installation, commissioning, inspection and maintenance of plant, installations and structures such as:
 - conveyors
 - pumping
 - ventilation
 - water and air reticulation
 - sand fill/paste fill infrastructure and reticulation
 - workshops
 - materials handling and beneficiation plants (such as CHPP)
 - electrical reticulation or gas drainage systems.
- The installation and inspection of ground support.
- Construction, inspection and maintenance of roads and drainage systems.

3.1.3. Surface works:

- The installation, commissioning, inspection and maintenance of plant, installations and structures such as crushers, conveyors, pumping, workshops, materials handling and beneficiation plants (such as CHPP), electrical reticulation or gas drainage systems.
- Construction, inspection and maintenance of roads and drainage systems.

3.1.4. Other related activities:

- Carrying out a risk assessment or developing principal hazard management plans/control plans related to the processes at the extraction face.
- Developing plans or drawings for plant and workers to establish, implement or apply at the extraction face.
- Co-ordinating and planning production-related activities.

3.2. Ratio of types

The ratio of experience required for **at the extraction face during production or development works** versus **during other mining activities** to make up the minimum total years of extraction requirements vary according to the relevance to the certificate type.

Note: Some of the underpinning concepts for applying ratios are drawn from the [Code of practice: Mechanical engineering control plan](#) (supervision) and the [Guide: Maintenance of competence for practising certificates](#) (types of learning ratios for formal versus non-formal/informal).

3.2.1. Supervisor examinations

Of the required two years extraction experience, applicants for supervisor examinations (deputies, open cut examiners and underground mine supervisors) must have:

- a minimum of 1 year and four months (2/3 of 2-year minimum) being present at an extraction face during production or development works, and
- the remaining required experience of 8 months, to make up the total 2 years may come from other mining activities.

3.2.2. Mining 'middle' managers

Of the required two years of extraction experience, middle managers (undermanager, quarry manager) must have:

- a minimum of 1 year (half of 2 years) being present at an extraction face during production or development works, and
- the remaining required experience of 1 year to make up the total 2 years may come from other mining activities.

3.2.3. Electrical and mechanical engineers and managers

Of the required one year of extraction experience, they must have:

- a minimum of 6 months (half of 1 year) being present at an extraction face during production or development works, and
- the remaining required experience of 6 months to make up the total 1 year may come from other mining activities.

3.2.4. Mining engineering managers

Of the required three years extraction experience, applicants for mining engineering managers examinations (mining engineering managers for underground coal, coal mines other than underground and underground mines other than coal) must have:

- a minimum of 1 year (1/3 of 3 years) being present at an extraction face during production or development works, and
- the remaining required experience of 2 years to make up the total 3 years may come from other mining activities.

4. Supervisory experience

All applications require supervisory experience as a prerequisite. Refer to the guidance on what is ‘practical mine experience’ of which supervision forms part. Applicants should also refer to the ‘Guide: Assessing associated non-technical skills (ANTS) competencies for certificates of competence’ for how supervisory competencies are assessed in the examinations and what their experience should provide.

The supervisory experience requirements are summarised in the table below for each certificate type.

CERTIFICATES	SUPERVISORY REQUIREMENTS AS PART OF PRACTICAL MINE EXPERIENCE
Mining managers/ undermanagers	A minimum period specified in a supervisory role responsible for the control and management of mining operations at the class of mine specified, with a minimum period in mining activities at the mine.
Supervisors (deputy/OCE/UG mine supervisor)	A minimum period specified in leading, supervising or coordinating workers involved in mining activities at the class of mine specified.
Electrical	A minimum specified period in a supervisory role responsible for electrical plant and installations at the class of mine specified.
Mechanical	A minimum period specified in a supervisory role responsible for the control and management of mechanical plant at the class of mine specified.

Requirements for supervisors are more specific than other types of certificates to give certainty that a broader range of activities are acceptable.

For supervisory requirements, the meaning of mining activities is given in the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* section 7(1)(a) and summarised in the [Guide: Understanding the term ‘mining operations’](#):

‘...activities carried out for the purpose of extracting minerals from the ground or exploring for minerals. Activities where the primary purpose of the activity is to inject a mineral into the ground or to return a mineral to the ground are also mining activities.’

Supervision of mining activities at the class of mine specified must include:

- at the extraction face and
- development or production works associated with the extraction face
- in support of the extraction activities e.g. longwall moves, installation of mine services, ventilation, conveyor installations, pumping, materials handling and beneficiations (such as upgrading plant).

Refer to extraction experience guidance above for more relevant information and examples.

Acceptable supervisory experience for mining activities will **not** include activities in sections 7(1)(b) to 7(1)(e) of the *WHS (Mines and Petroleum Sites) Act*.

4.1. Types of supervisory experience

The types of supervision that can satisfy total supervisory experience requirements are:

SUPERVISE	OVERSEE OR DIRECT SOME PART OF MINING OPERATIONS
Direct supervision	Verifying through direct observation that mining activities (or applicable plant and installations) at the class of mine and any contractors involved are applying the requirements of the safety management system.
General supervision	Where the individual may not always be present or directly responsible for supervising the mining activities (or applicable plant and installations) at the class of mine but will monitor to ensure that the safety management system is implemented, applied and monitored, and provide advice to supervisors and workers.

The context of 'supervision' has been extended to include 'leadership' and 'coordination' which may include*:

- coordination of mining activities, where the candidate is organising, planning and scheduling work, and/or
- showing leadership within the workgroup, where the candidate demonstrates they enlist support from others in the workgroup in achieving a common task safely, and/or
- mentoring or coaching others to develop their skills either in a specific task (as a coach in a formal setting) or in an informal setting as a mentor in developing another's knowledge and skill in an overall sense including providing support.

***Note:** for supervisor type functions, examination leadership and coordination are stated in the requirements with supervision as being accepted. For other certificate examinations, leadership and coordination experience will be considered as acceptable as part of the required supervision experience details.

A person is not required to be appointed to a position at the class of mine that contains supervisor, coordinator or leader in the title in order for the experience to be able to be claimed. It is about whether the experience in any role qualifies according to the criteria. For example, a member of a crew may list tasks they carry out that qualify.

5. Statutory function-specific guidance

5.1. Mining engineering manager underground mines other than coal

The examination panel for this statutory function recommend that applicants obtain a broad range of experience at a mine to better prepare them to undertake the exams successfully. This experience includes blasting so that applicants can manage/supervise explosive hazards, including emergencies.

The previous experience requirements for Mining engineering manager have been retained below as guidance only on what specific experience an applicant may seek out and obtain as part of fulfilling the current experience requirements:

EXPERIENCE GUIDANCE	TOTAL MINE EXPERIENCE	EXTRACTION	OTHER MINING ACTIVITIES	SUPERVISION
a) three months work at the face in production or development mining which is to have involved hands-on experience in the drilling, charging and firing of blast holes, the loading of ore or mullock, and ground control, and	√	√		
b) nine months of practical experience working in an underground metalliferous mine under the control of a certified mining engineering manager of underground mines other than coal mines, involved in the following mining operations:				
<ul style="list-style-type: none"> ■ assisting tradespersons (depends on what activities and where) 	√			
<ul style="list-style-type: none"> ■ drilling 	√	√		

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■ ground control, for example, bolting, meshing, shotcreting, timbering, scaling.	√	√		
■ mine filling	√	√		
■ mine servicing, equipment, installations and drainage	√		√	
■ ore of mullock haulage and transport	√		√	
■ plant operation (depends on what activities and where)	√			
■ roadway and track preparation, servicing and maintenance	√		√	
■ shaft, passes and chute inspection and repairs	√		√	
c) eighteen months of practical experience consisting of two or more of the following mining operations:				
■ above ground metalliferous mining (limited up to 1 year in total to claim)	√			
■ coal mining (limited up to 1 year in total to claim)	√			
■ environmental evaluations				

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■ mining investigations surveying	√	√		
■ mine planning	√			
■ mine rescue	√			√
■ mine ventilation	√		√	
■ quality control and sampling				■
■ rock mechanics	√		√	
■ supervision	√			
■ training	√			√
■ tunnelling	√	√		

d) six months practical experience involved in mining operations as follows:

■ engineering	√			
■ mine geology	√			
■ rehabilitation studies.	√			

5.2. Electrical

Includes electrical engineering manager for underground coal mines and Electrical Engineer for mines other than underground coal mines

The examination panel for this certificate of competence recommend that applicants obtain a broad range of experience at a mine to better prepare them to undertake the exams successfully. Applicants may seek out opportunities to gain experience in the tasks below that may qualify as satisfying the experience requirements:

EXPERIENCE GUIDANCE	TOTAL MINE	EXTRACTION	OTHER MINING ACTIVITIES	SUPERVISION
a) supervising workers performing electrical related tasks	√			√
b) contributing to, completing assigned actions for, and verified the effective implementation of actions for risk assessments associated with managing electrical risks or hazards at a mine (depends on what area of mine)	√			
c) facilitating or participating in a risk assessment associated with managing hazards	√			√
d) supervising or being involved in the procurement, installation, commissioning, operation, maintenance and overhaul of plant and structures	√			√
e) involved in an incident investigation	√			√

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f) involved in determining the root cause of an incident, potentially involving a third party (such as an OEM, technical expert, or contractor)	√			
g) presenting the outcomes of an investigation or root cause analysis to the site management team and workforce	√			
h) developing and implementing a maintenance strategy for electrical plant or structure	√			
i) identifying plant or structures regularly in use in that type of mine, and not experienced by the candidate, to gain further understanding to have a comprehensive mechanical knowledge	√			
j) involved in the review of competency requirements for electrical tradespersons, and their authorisation or appointment to perform work on your site	√			
k) managing a contract for performing work by an external contractor on your site	√			√

5.3. Mechanical

Includes mechanical engineering manager for underground coal mines, and Mechanical Engineer for mines other than underground coal mines

The examination panel for this certificate of competence recommend that applicants obtain a broad range of experience at mines to better prepare them to undertake the exams successfully. Applicants may seek out opportunities to gain experience in the tasks below that may qualify as satisfying the experience requirements:

EXPERIENCE GUIDANCE	TOTAL MINE	EXTRACTION	OTHER MINING ACTIVITIES	SUPERVISION
a) supervising workers performing mechanically related tasks	√			√
b) contributing to, completing assigned actions for, and verified the effective implementation of actions for risk assessments associated with managing mechanical hazards at a mine (depends on what area of mine)	√			
c) facilitating or participating in a risk assessment associated with managing hazards	√			√
d) supervising the procurement, installation, commissioning, operation, maintenance and overhaul of plant and structures	√			√
e) involved in an incident investigation	√			√
f) involved in determining the root cause of an incident, potentially	√			

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involving a third party (such as an OEM, technical expert, or contractor)				
g) presenting the outcomes of an investigation or root cause analysis to the site management team and workforce	√			
h) developing and implementing a maintenance strategy for mechanical plant or structure	√			
i) identifying plant or structures regularly in use in that type of mine, and not experienced by the candidate, to gain further understanding to have a comprehensive mechanical knowledge	√			
j) involved in the review of competency requirements for mechanical tradespersons, and their authorisation or appointment to perform work on your site	√			
k) managing a contract for performing work by an external contractor on your site	√			√

5.4. Open cut examiner

The Resources Regulator and examination panel advises for satisfying the experience prerequisites that applicants should seek and include details of:

- Extraction: being part of a production team involved in activities such as:
 - Auxiliary support activities eg: pit dewatering, haul road maintenance
 - drilling and blasting operations
 - dumping and stockpiling operations
 - managing geotechnical, vehicle and equipment interactions and general surface mining hazards
 - managing vehicle roads and equipment operating areas
 - overburden and coal removal and haulage.
- Supervision: Where a person carries out supervisory work similar to that of an OCE at a surface coal mine but does not hold a current practising certificate that authorises the exercise of a statutory function. For example, that referred to as a 'step up supervisor', production supervisor or working in leadership or coordination roles.

Applicants should have similar supervision experience to an open cut examiner such as in the activities listed above for extraction. Their experience may have come from assisting the open cut examiner or training to become one e.g. supervising hazards in activities.

5.5. Underground mine supervisor of underground mines other than coal mines

The examination panel recommend for satisfying the experience pre-requisites that applicants should seek to have and include details of the following work at the extraction face during production or development:

- assisting tradespersons
- blasting operations ie: charging and blasting of holes
- drilling
- ground control, for example, bolting, meshing, shotcreting, timbering, scaling
- mine filling
- mine servicing, equipment, installations and drainage
- mine ventilation monitoring
- ore or mullock haulage and transport
- plant operation
- roadway and track preparation, servicing and maintenance
- shaft, passes and chute inspection and repairs.

5.6. Quarry manager of mines other than underground mines or coal mines

The examination panel for this statutory function recommend that applicants obtain a broad range of experience at a quarry to better prepare them to undertake the exams successfully. This experience includes blasting so that applicants can manage/supervise explosive hazards, including emergencies.

The previous experience requirements for quarry manager have been retained below as **guidance only** on what specific experience an applicant may seek out and obtain as part of fulfilling the current experience requirements:

EXPERIENCE GUIDANCE	TOTAL MINE	EXTRACTION	OTHER MINING ACTIVITIES	SUPERVISIO N
a) three months' work involved in the handling and use of explosives (depending on where).	√	√		
b) nine months of practical experience working in an above-ground mine or quarry under the control of a certified quarry manager involved in any of the following mining operations:				
■ drainage	√		√	
■ drilling	√	√		
■ equipment maintenance	√		√	
■ open cut or quarry crushing and screening	√	√		
■ overburden removal	√	√		
■ plant operation (depends on where and for what task)	√	√	√	

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EXPERIENCE GUIDANCE	TOTAL MINE	EXTRACTION	OTHER MINING ACTIVITIES	SUPERVISION
■ road formation	√		√	
■ site rehabilitation	√			
■ stockpiling	√		√	
c) eighteen months of practical experience involved in two or more of the following mining operations:				
■ coal mining (limited to a total of one year)	√			
■ environmental evaluations				
■ equipment evaluation	√			
■ quality control and sampling				
■ slope stability investigations (depends on where and what task)	√			
■ supervision and safety	√			√
■ surveying (depends on where and what task)	√	√	√	
■ training	√			√

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EXPERIENCE GUIDANCE	TOTAL MINE	EXTRACTION	OTHER MINING ACTIVITIES	SUPERVISIO N
<ul style="list-style-type: none"> tunnelling (limited to a total of 1 year) 	√			
<ul style="list-style-type: none"> underground metalliferous mining (limited to a total of 1 year). 	√			
d) six months of practical experience involved in two or more of the following mining operations:				
<ul style="list-style-type: none"> asphalt or concrete products 				
<ul style="list-style-type: none"> mining engineering 	√			
<ul style="list-style-type: none"> geology 	√			
<ul style="list-style-type: none"> mine design 	√			
<ul style="list-style-type: none"> rehabilitation studies. 	√			