



UNDERGROUND MINING

National Certificate: Rock Breaking Underground Hard Rock

SAQA: 58760
NQF: 3
Duration: 12 Months

Accrediting SETA: MQA
Credits: 126
RPL: Yes

Purpose

The Rockbreaker plays a critical role in the mining industry. Blasting operations are often conducted under hazardous and difficult conditions, which have to be managed appropriately in order to preserve the lives of those working in the industry, and ensure operational efficiency. While the title 'Rockbreaker' implies activities directly related to blasting, additional competencies in mining operations and supervision, management and leadership are also required in order to direct and supervise the activities of first line supervisors.

The National Certificate Rock Breaking Underground Hard Rock (NQF Level 3) is a statutory requirement in terms of the Mine Health and Safety Act and Regulations for persons conducting blasting operations to be deemed competent in an underground hardrock mine.

Entry Criteria

- Communications and Mathematical Literacy - NQF Level 1

Qualification Rules:

This qualification is made up of fundamental, core and elective unit standards and a minimum of 126 credits is required to complete the qualification:

Fundamental:

- All 42 credits must be achieved

Core:

- All 40 credits must be achieved

Elective:

- A minimum of 44 credits at level 3 or above must be selected from the list of elective unit standards that meet site-specific requirements

Exit Level Outcomes:

- Communicate and solve problems in a variety of ways.
- Adhere to occupational health, safety, environmental and legislative requirements in the workplace.
- Conduct blasting and / or mechanized mining operations in a safe and proper manner in accordance with legislative requirements.
- Direct the supervision of the production teams.

Core Unit Standards

SAQA ID	Unit Standard Title	CREDITS
244487	Break big rocks by means of blasting	3
244464	Destroy old explosives in an underground workplace	2
244479	Mark shot holes for secondary blasting	4
244389	Treat and remove misfires	2
244458	Demonstrate an understanding of legal terms and requirements related to rockbreaking operations	5
244470	Demonstrate understanding of blasting products pertaining to blasting operations and principles of rock breaking activities in an underground hard rock environment	9
244486	Identify and deal with rock strata conditions pertaining to daily mining operations within an underground-working place	5
244460	Install an initiating system used in blasting operations underground	4
244483	Remove hazardous ground and installed support by means of blasting	6

Fundamental Unit Standards

SAQA ID	Unit Standard Title	CREDITS
119373	Describe and represent objects in terms of shape, space and measurement	5
119368	Describe, interpret and represent mathematical patterns, functions and algebra in different contexts	6
119635	Engage in a range of speaking/signing and listening interactions for a variety of purposes	6
119634	Evaluate and solve data handling and probability problems within given contexts	5
119631	Explore and use a variety of strategies to learn	5
15091	Plan to manage one`s time	3
119460	Read/view and respond to a range of text types	6
119636	Write/Sign for a variety of different purposes	6

Elective Unit Standards

SAQA ID	Unit Standard Title	CREDITS
244465	Blast a misfired hole in a development end during the shift	3
244441	Take charge of and drive a non-articulating vehicle underground	3
244476	Transfer broken rock by means of a diesel-powered load haul dumper (LHD) in an underground mine	4
244467	Transfer broken rock by means of a remote-controlled Load Haul Dumper (LHD) in an underground mine	8
244482	Transfer broken rock by means of an electrically powered load haul dumper (LHD) in an underground mine	4
244488	Connect and initiate a blast of a development end using shock tube	3
244463	Connect and initiate a blast of a stope face using shock tube	3
244466	Drill holes by means of a skid steer secondary drill rig in an underground workplace	5
244477	Drill holes by means of an electro hydraulic drill rig in an underground workplace	8
244474	Drill holes by means of an electro hydraulic long hole drill rig in an underground workplace	8
244461	Mark shot holes for primary blasting in an underground working place	10
244473	Remove an obstruction from an ore pass by means of blasting	4
244372	Support an underground workplace by means of a hydraulic roof bolter	5
244397	Take charge of and operate a remote controlled vehicle underground	4

244457	Time, connect and initiate a blast of a face	12
244489	Time, connect and initiate a number of shot holes using electric/electronic delay detonators	10
11473	Manage individual and team performance	8
7873	Manage one`s own development	3