

## General Education & Training Certificate: Mining and Mineral Processing NQF Level 1

**Introduction:** This qualification is aimed at persons who work or intend working within a mining and minerals context, and who seek to acquire recognition of essential knowledge regarding the Mining and Minerals Sector and related operations. This qualification would also be beneficial for community-based learners as it would afford them the opportunity to understand the environment they are living in and this in turn would be advantageous for employers in the area as this situation can lead to a supply of individuals with relevant foundational knowledge

### SAQA Qualification ID: 58267

<b>Target group:</b> New employees and or existing employees.	<b>Certification:</b> The qualification is composed of Fundamental, Core and Elective learning components:  <ul style="list-style-type: none"> <li>▪ Fundamental: 62 credits (compulsory)</li> <li>▪ Core: 36 credits (compulsory)</li> <li>▪ Elective: A minimum of 22 elective credits is required for this qualification.</li> </ul>	<b>Duration:</b>  24 Weeks
<b>Entry Level Requirements:</b>  <ul style="list-style-type: none"> <li>▪ Minimum Literacy and Numeracy ABET 4 or NQF 1 or RPL, Grade 9</li> </ul>	<b>If competent a competence certificate will be issued by MQA</b>	

### QUALIFICATION OUTLINE

	Unit standard ID	UNIT STANDARD TITLE	Credits	Duration:
Core	<a href="#">243774</a>	Demonstrate a basic understanding of occupational hygiene principles	7	24 Weeks
Core	<a href="#">243764</a>	Demonstrate an understanding of natural (Macro) environmental principles	6	
Core	<a href="#">243776</a>	Demonstrate an understanding of quality principles used in the workplace	6	
Core	<a href="#">243784</a>	Demonstrate an understanding of the South African mining and mineral sector processes	5	
Core	<a href="#">110121</a>	Demonstrate knowledge of how a business works in the Mining and Minerals Sector	2	
Core	<a href="#">116527</a>	Demonstrate knowledge pertaining to basic health and safety principles in and around a workplace	2	
Core	<a href="#">243777</a>	Understand the kinds of minerals and related products mined in the South Africa Mining & Minerals Sector and their importance to both the local stakeholders and within the global arena	2	
Core	<a href="#">243772</a>	Display understanding of the mechanical and electrical engineering discipline processes and procedures	6	
Fundamental	<a href="#">7509</a>	Apply basic concepts and principles in the natural sciences	5	
Fundamental	<a href="#">7508</a>	Conduct an investigation in the natural science	4	
Fundamental	<a href="#">14111</a>	Demonstrate an understanding of how scientific skills and knowledge could contribute to sustainable use of resources	2	
Fundamental	<a href="#">7507</a>	Demonstrate an understanding of the concept of science	2	
Fundamental	<a href="#">14664</a>	Demonstrate knowledge of diversity within different relationships in the South African society	3	
Fundamental	<a href="#">13169</a>	Describe and discuss issues relating to HIV-AIDS, TB and sexually transmitted illnesses and their impact on the workplace	4	
Fundamental	<a href="#">119373</a>	Describe and represent objects in terms of shape, space and measurement	5	
Fundamental	<a href="#">119368</a>	Describe, interpret and represent mathematical patterns, functions and algebra in different contexts	6	
Fundamental	<a href="#">119635</a>	Engage in a range of speaking/signing and listening interactions for a variety of purposes	6	

Fundamental	<a href="#">119364</a>	Evaluate and solve data handling and probability problems within given contexts	5
Fundamental	<a href="#">119631</a>	Explore and use a variety of strategies to learn	5
Fundamental	<a href="#">15091</a>	Plan to manage one's time	3
Fundamental	<a href="#">119640</a>	Read/view and respond to a range of text types	6
Fundamental	<a href="#">119636</a>	Write/Sign for a variety of different purposes	6
Elective	<a href="#">110194</a>	Demonstrate a basic knowledge and understanding of typical surface mining processes and layouts	6
Elective	<a href="#">110148</a>	Demonstrate a basic knowledge and understanding of typical underground coal mining processes and layouts	3
Elective	<a href="#">110128</a>	Demonstrate a basic understanding of small-scale mining	3
Elective	<a href="#">110140</a>	Demonstrate a basic understanding of the history of small-scale mining	1
Elective	<a href="#">110149</a>	Demonstrate a basic understanding of the statutory requirements for the establishment of a small-scale mine	2
Elective	<a href="#">110219</a>	Demonstrate a basic understanding of the use of tools and equipment used for processing diamonds	2
Elective	<a href="#">110145</a>	Demonstrate a basic understanding of where to obtain information on mineral deposit in South Africa	1
Elective	<a href="#">119965</a>	Demonstrate an understanding of the value of jewellery	2
Elective	<a href="#">119971</a>	Demonstrate an understanding of the workshop set-up for handmade jewellery	2
Elective	<a href="#">110417</a>	Demonstrate an understanding of typical basic underground hard rock mining processes and layouts	2
Elective	<a href="#">110191</a>	Demonstrate knowledge and ability to work in a surface mine	8
Elective	<a href="#">110217</a>	Demonstrate knowledge and ability to work in an underground coal mine	8
Elective	<a href="#">115602</a>	Demonstrate knowledge and understanding of the relevant terminology used in mining - range of underground coal, surface, underground hard rock	3
Elective	<a href="#">110118</a>	Demonstrate knowledge of the most common harmful gases and vapours	1
Elective	<a href="#">10009</a>	Demonstrate the ability to start and run a business and adapt to a changing business environment	3
Elective	<a href="#">110430</a>	Demonstrate understanding and knowledge of different activities related to the processing of minerals in the mining and minerals sector	14
Elective	<a href="#">119817</a>	Describe process control systems for processing diamond gemstones	2
Elective	<a href="#">110123</a>	Describe the history of the diamond processing industry	2
Elective	<a href="#">10495</a>	Describe the structure of the diamond processing industry	3
Elective	<a href="#">10499</a>	Explain the requirements for the security of diamonds	1
Elective	<a href="#">119963</a>	Identify and maintain categories of merchandise in the jewellery industry	3
Elective	<a href="#">119970</a>	Identify tools required for manufacturing hand made jewellery	1
Elective	<a href="#">10007</a>	Identify, analyse and select business opportunities	3
Elective	<a href="#">12509</a>	Manage personal finances	8
Elective	<a href="#">116932</a>	Operate a personal computer system	3
Elective	<a href="#">10008</a>	Write and present a simple business plan	7
Elective	<a href="#">10455</a>	Demonstrate a basic understanding of cement manufacturing	2
Elective	<a href="#">10472</a>	Demonstrate a basic understanding of lime manufacturing	2
Elective	<a href="#">10484</a>	Demonstrate a basic understanding of the aggregates industry	2
Elective	<a href="#">243779</a>	Demonstrate a basic understanding of the dimension stone industry	2

Elective	<a href="#">116659</a>	Demonstrate an understanding of legal terms and requirements related to rockbreaking operations	2	
Elective	<a href="#">116670</a>	Describe the basic environmental factors of ventilating an underground working place to ensure a safe and healthy working environment	3	
Elective	<a href="#">9678</a>	Follow basic health and safety practices underground	5	
Elective	<a href="#">12215</a>	Read, interpret and produce basic engineering drawings	6	
			<b>Duration</b>	24 Weeks