

## Further Education & Training Certificate: Mining Operations NQF Level 4

**Introduction** The Production Supervisor plays a critical role in the mining industry. Mining activities are often conducted under dangerous 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. The Production Supervisor must adapt continually to changing physical conditions in his or her area of responsibility e.g. geology and blast damage. He/she is accountable for the occupational health and safety of the team, as well as for achieving production targets. Learners credited with this Qualification will be able to:

- Communicate and solve problems by applying mathematical practical applications in a variety of ways.
- Adhere to Occupational Health, Safety and Environmental requirements.
- Supervise the extraction of minerals to meet production targets, taking into account the Occupational Health, Safety, Quality and Environmental requirements.
- Interact with Technical Services Departments to optimise the mining process.

**Description:** While there are many role players in the mining industry, the Production Supervisor (Pit Supervisor) can arguably be considered one of the most important role players in the mining process.

**SAQA Qualification ID: 74490**

<p><b>Target group:</b></p> <p>New employees and or existing employees.</p>	<p><b>Certification:</b></p> <p><b>If competent a competence certificate will be issued by MQA</b></p>	<p><b>Duration:</b></p> <p>200 Days Days can be reduced depending on RPL</p>
<p><b>Entry Level Requirements:</b></p> <p>It is assumed that learners embarking on learning towards this Qualification are already competent in the following:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Communication and Mathematical Literacy at NQF Level 3.</li> <li><input type="checkbox"/> first Aid Certificate at NQF Level 3.</li> </ul>		

**Fundamental:** (Could be RPL'd  $\pm 2$  days per unit standard)  
 All 56 credits in the Fundamental Component are compulsory.

**Core:**  
 All 54 credits in the Core Component are compulsory.

**Elective:** (Could be RPL'd  $\pm 2$  days per unit standard)  
 A minimum of 50 credits at Level 3 or above must be selected from the list of elective unit standards that meet site-specific requirements.

### Further Education & Training Certificate: Mining Operations NQF Level 4- 74990

LEVEL	TYPE	CREDITS	U/S	Description
Level 3	Core	5	<a href="#">120335</a>	Conduct an investigation into workplace incidents
Level 3	Core	3	<a href="#">120331</a>	Demonstrate knowledge pertaining to fires in working places
Level 4	Core	3	<a href="#">336945</a>	Conduct an issue-based risk assessment within a workplace
Level 4	Core	4	<a href="#">336919</a>	Demonstrate an understanding of continual improvement in the mining cycle
Level 4	Core	4	<a href="#">336908</a>	Demonstrate an understanding of essential basic engineering principles that are applicable to the mining environment
Level 4	Core	7	<a href="#">336959</a>	Demonstrate an understanding of labour supervision and production procedures for supervisors in the workplace
Level 4	Core	8	<a href="#">336943</a>	Demonstrate an understanding of mining related strata control issues impacting on mining practice
Level 4	Core	8	<a href="#">336940</a>	Demonstrate an understanding of strata control theory and terminology relevant to mining environment
Level 4	Core	4	<a href="#">336904</a>	Demonstrate knowledge of basic mining economics
Level 4	Core	3	<a href="#">336910</a>	Demonstrate knowledge of environmental awareness in the mining industry
Level 4	Core	5	<a href="#">336899</a>	Demonstrate knowledge of legislation impacting on mining environment
Level 3	Fundamental	5	<a href="#">119472</a>	Accommodate audience and context needs in oral/signed communication
Level 3	Fundamental	5	<a href="#">119457</a>	Interpret and use information from texts
Level 3	Fundamental	5	<a href="#">119467</a>	Use language and communication in occupational learning programmes
Level 3	Fundamental	5	<a href="#">119465</a>	Write/present/sign texts for a range of communicative contexts
Level 4	Fundamental	6	<a href="#">9015</a>	Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems
Level 4	Fundamental	5	<a href="#">119462</a>	Engage in sustained oral/signed communication and evaluate spoken/signed texts
Level 4	Fundamental	5	<a href="#">119469</a>	Read/view, analyse and respond to a variety of texts
Level 4	Fundamental	4	<a href="#">9016</a>	Represent analyse and calculate shape and motion in 2- and 3-dimensional space in different contexts
Level 4	Fundamental	5	<a href="#">119471</a>	Use language and communication in occupational learning programmes
Level 4	Fundamental	6	<a href="#">7468</a>	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues
Level 4	Fundamental	5	<a href="#">119459</a>	Write/present/sign for a wide range of contexts
Level 3	Elective	2	<a href="#">260982</a>	Acquire authorization needed for small-scale prospecting and mining
Level 3	Elective	4	<a href="#">336980</a>	Apply a computerized management system in a production mining environment
Level 3	Elective	8	<a href="#">257095</a>	Carry out basic surveying and calculations in surface excavations
Level 3	Elective	3	<a href="#">337019</a>	Conduct mineral and ore sampling on a small-scale mine
Level 3	Elective	15	<a href="#">110125</a>	Control operations in a blasting section in an underground coal mine
Level 3	Elective	4	<a href="#">115600</a>	Demonstrate the co-ordination of a conveyor system operations in an underground coal mine
Level 3	Elective	7	<a href="#">244407</a>	Lift and move a load using mechanical lifting equipment
Level 3	Elective	3	<a href="#">336906</a>	Plan for authorisation of small-scale prospecting and mining operations

Level 3	Elective	3	<a href="#">336960</a>	Plan logistics and services for a small-scale mine
Level 3	Elective	4	<a href="#">253016</a>	Read and understand a mine plan and transfer recorded information onto mine plans
Level 4	Elective	7	<a href="#">336909</a>	Apply strata control techniques and processes in surface excavation
Level 4	Elective	6	<a href="#">230017</a>	Carry out blasting environmental testing
Level 4	Elective	9	<a href="#">336941</a>	Compile an integrated environmental impact management plan for a small-scale mine
Level 4	Elective	6	<a href="#">336962</a>	Conduct over and underground coal mine inspection in a production section
Level 4	Elective	10	<a href="#">336963</a>	Conduct prospecting relevant to small-scale mining
Level 4	Elective	7	<a href="#">336961</a>	Construct and maintain roads in surface excavations
Level 4	Elective	4	<a href="#">336979</a>	Control stonework operations in an underground coal mine
Level 4	Elective	5	<a href="#">336944</a>	Coordinate loading operations in an underground coal mine
Level 4	Elective	10	<a href="#">336903</a>	Coordinate surface excavation operation
Level 4	Elective	7	<a href="#">336999</a>	Coordinate the development of surface excavation operations
Level 4	Elective	5	<a href="#">337039</a>	Coordinate transportation operations in an underground coal mine
Level 4	Elective	8	<a href="#">336907</a>	Demonstrate an understanding of development, pre- ledging equipping, ledging, equipping and stoping processes
Level 4	Elective	9	<a href="#">336966</a>	Demonstrate an understanding of extraction and the beneficiation of minerals on surface excavations
Level 4	Elective	4	<a href="#">336911</a>	Demonstrate an understanding of mine geology
Level 4	Elective	8	<a href="#">336964</a>	Demonstrate an understanding of roles and responsibilities of a production supervisor in a mining environment
Level 4	Elective	8	<a href="#">336900</a>	Demonstrate an understanding of strata control practice in an underground hard rock mine
Level 4	Elective	7	<a href="#">336965</a>	Demonstrate an understanding of surface excavation
Level 4	Elective	6	<a href="#">336939</a>	Demonstrate an understanding of the mine health and safety Act, for small-scale mining
Level 4	Elective	10	<a href="#">115608</a>	Demonstrate an understanding of ventilation systems in an underground coal mine
Level 4	Elective	4	<a href="#">336981</a>	Demonstrate an understanding to control strata conditions in an underground coal mine
Level 4	Elective	12	<a href="#">336916</a>	Demonstrate knowledge and application of ground stability for small scale mining
Level 4	Elective	4	<a href="#">336915</a>	Demonstrate knowledge and understanding of mineral valuation
Level 4	Elective	8	<a href="#">336912</a>	Demonstrate knowledge and understanding of short term mine planning
Level 4	Elective	5	<a href="#">336902</a>	Demonstrate knowledge and understanding of the starting up and closing off procedures for an underground workplace
Level 4	Elective	4	<a href="#">336905</a>	Demonstrate knowledge and understanding of underground horizontal transport operation
Level 4	Elective	24	<a href="#">257075</a>	Design blasts for surface excavations
Level 4	Elective	7	<a href="#">337000</a>	Develop a short term surface excavation scheduling
Level 4	Elective	7	<a href="#">336914</a>	Implement and maintain services and infrastructure in surface excavation

Level 4	Elective	4	<a href="#">336920</a>	Implement and monitor grade and quality control for surface excavations
Level 4	Elective	9	<a href="#">336942</a>	Plan a mineral processing plant for a small-scale mine
Level 4	Elective	6	<a href="#">336901</a>	Plan run of mine excavation process for a small-scale mining operation
Level 5	Elective	18	<a href="#">336913</a>	Compile a strategic plan for a small-scale mining