


<b>SKILLS PROGRAMME DOCUMENT</b>					
The Skills Programme Doc is applicable to three (3) Skills Programmes					
Skills Programme ID Number(s)		Skills Programme Title(s)			
SP-230310		<b>Directional Driller-Underground Hardrock Operations</b>			
SP-230311		<b>Directional Driller-Underground Coal Operations</b>			
SP-230312		<b>Directional Driller-Surface Mining Operations</b>			
NQF Level	3	Credits	60	Duration in days	75 days
Skills Programme Status	APPROVED			Start Date	End Date
				25/03/2023	25/03/2028
Last date for enrolment	25/03/2029	Last date for achievement	23/03/2032		

## SKILLS PROGRAMME DETAILS

1.	<b>Title(s)</b>	<ul style="list-style-type: none"> <li>- Directional Driller-Underground Hardrock Operations</li> <li>- Directional Driller-Underground Coal Operations</li> <li>- Directional Driller-Surface Mining Operations</li> </ul>
2.	<b>Sub Title</b>	711301 Driller
3.	<b>NQF Level</b>	NQF Level 3
4.	<b>Duration</b>	75 days
5.	<b>Credits</b>	60 credits
6.	<b>Quality Assuring Body</b>	Quality Council for Trades and Occupations (QCTO)
7.	<b>Skills Programme Rationale</b>	<p>The need for this skills programme is that Directional drilling operations are an essential part of mining operations, so it is essential that Directional Drillers are trained in their duties and responsibilities. Mining legislation prescribes that Directional drillers must be qualified, by virtue of their knowledge, training, skills, and experience, before they are appointed. They must be trained, assessed, and found competent, in accordance with recognised training and development programmes.</p> <p>There is no similar skills programme recorded.</p> <p>Typical learners for this skills programme will already be employed.</p> <p>A typical learning pathway in mining production operations would be to Miner or Blaster at NQF Level 3, and Shift Supervisor at NQF Level 4.</p> <p>The benefits of this skills programme to the mining sector will be to have persons who are trained and declared competent for their specific duties and responsibilities, and to provide introductory, specialised training to enable them to advance their careers. Safe and productive mining operations are fundamental to the sector.</p> <p>The work is done in excavations that do not exist naturally but are created through rock breaking and blasting activities. This unique environment holds many hazards and risks for all personnel. The skills required to for the work require dedicated learning, application, and specialised and technical skills. Mining will remain the backbone of the South African economy for many years to come, and with the advance of technology there will, in the coming decades, be opportunities to return to and access the minerals left behind in the older mines. The mining and minerals sector will also be able to access resources that are currently too deep to mine. The</p>

		<p>development of occupational competence as set out in this skills programme is essential to maintain and advance mining in the country.</p> <p>This skills programme will benefit society in terms of skills and technical competencies since qualifying learners will improve work standards, health and safety, and effectiveness, and contribute to the growth of the country's economy.</p>	
8.	<b>Related registered qualification/s</b>	SAQA ID 120057 Intermediate Occupational Certificate: Miner	
9.	<b>Purpose</b>	<p>The purpose of this skills programme is to prepare a learner to operate as a Directional Driller.</p> <p>A Directional Driller operates a directional drilling machine to drill holes for directional drilling operations in the mining industry to probe the contents of known ore deposits and potential sites. The drilling machines may be for surface or underground use; are generally rotary hydraulically driven units; may be skid-mounted, truck-mounted, wheeled or tracked units; chip or core types, conventional or diamond bit; air or mud drilling.</p> <p>The qualifying learner will know the functioning and operating requirements for the directional drilling system and ancillary equipment, including the health, safety, and environmental requirements to be able to operate the machine productively and safely.</p> <p>A qualified learner will be able to:</p> <ul style="list-style-type: none"> <li>Operate a directional drilling machine for mining operations</li> </ul>	
10.	<b>Content</b>	<p><b><u>Knowledge component</u></b></p> <ul style="list-style-type: none"> <li>900155-000-00-KM-01 Workplace fundamentals, NQF Level 2, Credits 4</li> <li>900134-000-00-KM-01 Health, safety, and the environment, NQF Level 2, Credits 4</li> <li>900155-000-00-KM-01 Operations and machines, NQF Level 3, Credits 4</li> <li>900155-000-00-KM-02 Components, controls, and consumables, NQF Level 3, Credits 4</li> </ul>	<p><b><u>Application component</u></b></p> <p><b><u>Compulsory modules</u></b></p> <ul style="list-style-type: none"> <li>900134-000-00-PM-01 Apply, exercise, and ensure safety, health and environmental measures and procedures, NQF Level 2, Credits 4</li> <li>900155-000-00-PM-01 Perform pre-operational activities, NQF Level 3, Credits 4</li> <li>900156-000-00-PM-01 Supervise the work team, NQF Level 3, Credits 12</li> </ul> <p><u>A learner may choose any of the below electives:</u></p>

		<ul style="list-style-type: none"> <li>• 900156-000-00-KM-01 Work team supervision, NQF Level 3, Credits 4</li> <li>• 900156-000-00-00-KM-02 Directional drilling concepts, NQF Level 3, Credits 8</li> </ul>	<p>Elective module 1: Underground hardrock operations</p> <ul style="list-style-type: none"> <li>• 900156-000-00-PM-02 Operate a directional drilling machine in an Underground Hardrock operation, NQF Level 3, Credits 12</li> </ul> <p>Elective module 2: Underground coal operations</p> <ul style="list-style-type: none"> <li>• 900157-000-00-PM-01 Operate a directional drilling machine in an Underground Coal operation, NQF Level 3, Credits 12</li> </ul> <p>Elective module 3: Surface mining operations</p> <ul style="list-style-type: none"> <li>• 900158-000-00-PM-01 Operate a directional drilling machine on a Surface mining operation, NQF Level 3, Credits 12</li> </ul> <p>Total credits:32</p>
		Total Credits: 28	
11.	<b>Minimum entry requirements</b>	Open access	
12.	<b>Exit Level Outcomes (ELO) and Associated Assessment Criteria (AAC)</b>	<p>Exit Level Outcome 1: Operate a directional drilling machine</p> <p>Associated Assessment Criteria:</p> <ul style="list-style-type: none"> <li>• Operational knowledge and understanding of occupational health, safety and environmental requirements and directional drilling operations is applied.</li> <li>• Directional drilling operations are carried out and completed, in accordance with requirements.</li> </ul>	
13.	<b>Assessment</b>	<p><b>Continuous Assessment</b></p> <p>The SDP must ensure that all learners are enrolled with the QCTO at the start of training (within 5 days) in the format required by the QCTO.</p> <p>Continuous assessments are set by the SDP in accordance with the assessment criteria provided for each module for either underground hard rock, underground coal or surface mining operations</p> <p>This may consist of a variety of methods, e.g., practical, or written assessments, assignments, projects, demonstrations,</p>	

		<p>presentations, or any other form of assessment to assist the learner in the learning process.</p> <p>During training, it is mandatory for formal summative assessments to take place at the end of each module/topic. These results must be formally recorded and be available for monitoring and/or evaluation by the QCTO.</p> <p><b>Final Integrated Supervised Assessment (FISA)</b> All learners gain entrance to the Final Integrated Supervised Assessment by successfully completing all formal summative assessments conducted by the SDP.</p> <p>Format of FISA: A practical assessment integrating the relevant Exit Level outcomes, with a simultaneous verbal assessment of embedded knowledge by the assessor before, during or after the FISA.</p> <p>All FISAs must be supervised, and virtual FISAs must be recorded throughout the assessment.</p> <p>All Exit Level Outcomes must be covered in the FISA. In the FISA, the learner must demonstrate applied knowledge and skills for either underground hard rock, underground coal or surface mining operations to prove that the competencies of the Skills Programme have been achieved.</p> <p>The FISA may not contain any assessments used in the "Continuous Assessment" process (thus no re-assessment).</p> <p>Special considerations should be made for candidates with special learning needs.</p> <p><b>Standards for Final Integrated Supervised Assessment (FISA):</b></p> <p>The learner should be provided with a brief/job card/task to demonstrate what the learner should show, know, or produce in a product, relevant to the Exit Level Outcomes and the purpose of the Skills Programme. This is the section where the learner must show applied competency (what the learner must be able to do, and to what expected standard)</p> <p>The FISA INSTRUMENT (Written case study, scenario, or brief/task [similar to a job card]) must be developed and moderated by the SDP and conducted in a supervised environment. It is assessed by means of a RUBRIC developed by the SDP for this purpose:</p> <p>A Competent Candidate must be able to carry out and conduct directional drilling operations, interpreting, applying, and exercising policies, procedures, performance parameters, controls, and operating standards.</p> <p>Given a simulated or actual Underground Hardrock, Underground Coal, or Surface mining context, the candidate</p>
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14.	<b>Recognition of Prior Learning (RPL)</b>	<ul style="list-style-type: none"> <li>Learners will gain access to the skills programme through RPL for access as provided for in the QCTO RPL Policy. RPL for access is conducted by an accredited institution, skills development provider or workplace accredited to offer that specific skills programme.</li> <li>Learners who have already acquired competencies of modules of a skills programme will be exempted from modules through RPL. Such learners will be awarded credits towards the skills programme.</li> <li>Learners who complete this skills programme will accumulate credits towards the relevant full or part qualification. The Credit Accumulation and Transfer (CAT) Policy shall apply to these learners</li> </ul>
15.	<b>Work Opportunities and further learning</b>	<p>This skills programme will enable qualifying learners to access Drilling occupations in the Mining and Minerals Sector. A typical learning pathway in mining production operations would be to Blaster or Miner at NQF Level 3, and Shift Supervisor at NQF Level 4.</p>
16.	<b>Skills Development Provider Accreditation Requirements</b>	<p><i>Physical Requirements:</i></p> <ul style="list-style-type: none"> <li>Occupational Health, Safety and Environment (OSHE) and operational facilities, plant equipment and resources</li> <li>OSHE and operational related consumables</li> </ul> <p><i>Human Resource Requirements:</i></p> <ul style="list-style-type: none"> <li>Experienced Facilitators/trainers with a minimum NQF Level 3 ETDP qualification</li> <li>A minimum of 1-year OHS and operational expertise and directional drilling experience</li> </ul> <p><i>Legal Requirements:</i></p> <ul style="list-style-type: none"> <li>Facilitators and personnel /trainers conform to all statutory, regulatory, and organisational requirements.</li> </ul> <p><i>Safety requirements:</i></p> <ul style="list-style-type: none"> <li>Facilitators and personnel /trainers conform to all statutory, regulatory, and organisational requirements</li> </ul>