



**GEOSTRAT TRAINING CC**  
**Registration NO: 2009/131724/23**

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**MQA accredited training provider (16/MQA/0848/AC4/190319)**  
**Certified to ISO 9001:2015**

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## **Geostrat Training CC is Presenting a Blasting Qualification Underground Course**

The Blasting certificate Programme is a 12-month fixed term contract with the objective to provide theoretical, and workplace experience and the opportunity to up-skill the Student. It allows one to gain valuable work experience and provides the Student with an opportunity to obtain an understanding about his/her values and work ethic.

### **Learners will train on the following syllabi:**

The syllabi for the blasting certificate for scheduled mines include all the relevant Regulations under the MSHA and the Minerals Act Regulations in force in terms of Schedule 4 of MSHA. It consists of the following sections namely:

#### **VENTILATION, DUST PREVENTION AND GASES**

##### *VENTILATION*

- ✓ Reasons why underground working places must be ventilated
- ✓ Methods of ventilating underground working places
- ✓ Corrective measures in case of ventilation deterioration/failure
- ✓ Legal requirements
- ✓ Basic ventilation lay-outs in terms of underground working places
- ✓ Measurement of thermal conditions in the working place

##### *DUST PREVENTION*

- ✓ Causes of dust in underground working places
- ✓ Measures to prevent/minimise the appearance of dust in mine air
- ✓ Legal requirements

##### *GASES*

- ✓ Hydrogen
- ✓ Nitrous Fumes
- ✓ Methane
- ✓ Carbon Dioxide
- ✓ Carbon Monoxide
- ✓ Hydrogen Sulphide
- ✓ Hydrocyanic Acid Gas
- ✓ Oxygen

## **MINING PRACTICES**

### *ROCK MECHANICS*

- ✓ Basic terminology and definitions
- ✓ Types of fracturing
- ✓ Strata Control
- ✓ Pre-conditioning

### **BREAKING OF GROUND**

- ✓ Support (Stopes and Development)
- ✓ Remnants
- ✓ Drilling (Stopes and Development)
- ✓ Cleaning (Stopes and Development)
- ✓ Emergency Procedures
- ✓ Duties of a Miner
- ✓ Duties of Competent "A" person
- ✓ Legal Requirements

## **EXPLOSIVES**

### *BLASTING*

- ✓ Explosives
- ✓ Holes to be blasted
- ✓ Sockets
- ✓ Misfires
- ✓ Obstructions in box holes

### **Cost:**

**Registration - R4 500.00**

**Monthly - R4 500.00**

**Total cost - R58 500.00**

### **Duration:**

*12 Months full time*

## **Process to be followed:**

1. Theoretical training of learners will be conducted for a period of approximately 180 days (depending on the learner's ability). The training is modular based and will be both theoretical and practical underground, upon completing each module a written assignment will be completed to show competency (100% is required for passing the written assignments).
2. Each learner will also be given practical assignment to be conducted in the underground working place, this will be evaluated by the facilitator and will form part of the learner's portfolio.
3. A logbook will be completed by the learner and signed off by the immediate supervisor, as proof that the learner has completed underground qualification shifts as required by the Minerals Act Regulations 28.40.7.1 and 28.40.7.2.
4. On completion of the above, the facilitator will prepare the learner for the Assessment and Certification of Blasting Certificate Holders for Scheduled Mines board.

## **The examination/assessment consists of two types of questions namely Compulsory questions and Choice questions**

### **COMPULSORY QUESTIONS**

- a. The score sheet to compulsory questions, must be used in preparing for, and assessing a candidate.
- b. The examiner must assess/examine all Compulsory questions in each subject.
- c. *The pass mark on compulsory questions is 100%.*
- d. Questions asked under the compulsory section relate to core knowledge that a Miner is required to have.
- e. The intention of the compulsory question is to ascertain whether the candidate has the knowledge of issues that may impact on the health and safety of employees under his/her control.
- f. The candidate must answer all questions asked that may have an impact on the health and safety of employees by demonstrating an understanding of the associated risks to the satisfaction of the examiner in the abovementioned part of the examination/assessment.
- g. The examiner must record all questions asked and complete the 'Assessor Remarks' section on the score sheet if the candidate gives an unsatisfactory answer.

### **CHOICE QUESTIONS**

- a. The score sheet for choice questions, must be used in preparing for, and assessing a candidate.
- b. The examiner must assess/examine the candidate on a minimum of five choice questions in each subject.
- c. *The pass mark on choice questions is 60%.*

## **How to Apply**

Complete [application form](#) and send it to [info@geostrat.co.za](mailto:info@geostrat.co.za),