Occupational Health in Mining Training Course

Professional Development Training Course Outline

Category	General Training	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Occupational Health in Mining Training Course is designed to enhance Health, Safety and Environment (HSE) performance, with a strong focus on gender-responsive safety systems, mining risk management, and inclusive workplace protection standards. The mining industry presents high-risk environments such as underground mining hazards, surface pit instability, heavy machinery exposure, dust inhalation, noise-induced hearing loss, heat stress, and chemical exposure, requiring advanced safety awareness and strict compliance with ISO 45001 Occupational Health & Safety Management Systems and global ESG standards.

This course empowers women in mining with practical, field-ready skills in hazard identification, risk assessment (HIRA), PPE optimization, emergency response, psychosocial safety, and leadership in safety compliance systems. It integrates modern industry trends such as digital safety monitoring, smart PPE, behavioral-based safety (BBS), climate stress adaptation, and gender-inclusive mining operations, ensuring participants are equipped to operate safely and confidently in both underground and surface mining environments.

Programme Curriculum

Occupational Health in Mining Training Course

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Course Duration

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Course Objectives

1. Master Mining Occupational Health & Safety (OHS) principles and global standards
2. Apply Hazard Identification and Risk Assessment (HIRA) in mining environments
3. Implement ISO 45001 compliant safety systems in operational sites
4. Use appropriate Personal Protective Equipment (PPE) for women in mining
5. Identify and control underground mining hazards and surface mining risks
6. Manage dust, silica exposure, and occupational respiratory diseases
7. Reduce exposure to noise-induced hearing loss and vibration hazards
8. Improve ergonomics and musculoskeletal injury prevention for female workers
9. Respond effectively to emergency evacuation and mine rescue operations
10. Address heat stress, dehydration, and climate-related mining risks
11. Strengthen psychosocial safety, harassment prevention, and workplace dignity
12. Promote safety leadership and behavioral-based safety (BBS) culture
13. Integrate digital safety technologies and real-time risk monitoring systems

Target Audience

1. Women entering the mining industry
2. Female machine operators and equipment handlers
3. Underground and surface mine technicians
4. Health, Safety & Environment (HSE) officers
5. Mining engineers and site supervisors
6. Drill and blast personnel
7. Occupational health practitioners in mining
8. Mining contractors and subcontractor workforce

Course Modules

Module 1: Mining Safety Fundamentals & Regulatory Compliance

- Overview of mining safety laws and regulations
- Introduction to **ISO 45001 & OHS systems**
- Roles and responsibilities in mine safety
- Incident reporting procedures and compliance culture
- Safety documentation and audit readiness
- **Case Study:** Analysis of a mining fatality due to non-compliance with safety permits and corrective actions applied.

Module 2: Hazard Identification & Risk Assessment (HIRA)

- Identifying workplace hazards in mining operations
- Risk matrix development and evaluation techniques
- Control measures: engineering, administrative, PPE
- Field-based hazard reporting systems
- Behavioral observation in risk detection
- **Case Study:** Near-miss incident in underground tunnel collapse and preventive risk controls implemented.

Module 3: PPE Selection & Women-Specific Ergonomics

- Gender-appropriate PPE fitting and standards
- Ergonomic risks in repetitive mining tasks
- Manual handling and load management
- PPE maintenance and inspection routines
- Comfort vs protection balance in PPE design
- **Case Study:** Reduction of musculoskeletal injuries after redesigning PPE for female haul truck operators.

Module 4: Underground & Surface Mining Hazards

- Rock falls, cave-ins, and slope instability risks
- Heavy machinery interaction hazards
- Ventilation and confined space dangers
- Explosives and blasting safety controls
- Traffic management in open-pit mining
- **Case Study:** Surface mine collision incident prevented through improved haul road traffic system redesign.

Module 5: Emergency Response & Mine Rescue Operations

- Emergency evacuation procedures
- Fire response and explosion preparedness
- First aid and trauma management in mines
- Communication systems during emergencies
- Mine rescue team coordination
- **Case Study:** Successful evacuation during underground fire using improved alarm and rescue coordination system.

Module 6: Occupational Health Hazards & Disease Prevention

- Dust, silica, and respiratory protection
- Noise exposure and hearing conservation
- Heat stress monitoring and hydration strategies
- Chemical exposure risks in mining operations
- Occupational disease reporting systems
- **Case Study:** Reduction in silicosis cases after implementation of dust suppression systems.

Module 7: Psychosocial Safety & Gender Inclusion

- Workplace harassment prevention systems
- Mental health and stress management in mining

- Gender equality and inclusion policies
- Fatigue management in shift work
- Reporting unsafe social behaviors
- **Case Study:** Improved retention of female miners after introduction of anti-harassment reporting framework.

Module 8: Safety Leadership, Audits & Digital Safety Systems

- Safety leadership and accountability culture
- Behavioral-Based Safety (BBS) implementation
- Safety audits and inspection techniques
- Digital monitoring systems and wearable tech
- Continuous improvement in HSE performance
- **Case Study:** Accident rate reduction after introduction of real-time digital safety tracking system.

Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com