ESG Risk Assessment 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

The mining industry is undergoing a major transformation driven by ESG (Environmental, Social, and Governance) compliance, sustainability reporting frameworks, and increasing pressure from investors, regulators, and global stakeholders. ESG Risk Assessment in Mining Training Course is designed to equip professionals with advanced capabilities in identifying, analyzing, and mitigating ESG-related risks across mining operations. Participants will gain practical insights into climate risk integration, tailings dam safety, carbon footprint reduction, community impact assessment, and responsible mining governance frameworks aligned with global standards such as GRI, SASB, TCFD, and IFC Performance Standards.

The course emphasizes real-world mining scenarios, enabling learners to develop strong competencies in risk mapping, ESG data analytics, sustainability due diligence, and compliance auditing. With growing global demand for green mining practices, net-zero strategies, and responsible supply chain management, this program prepares professionals to lead ESG transformation initiatives in both surface and underground mining operations. The training blends technical, regulatory, and strategic perspectives to ensure participants can confidently support ESG decision-making, reduce operational risks, and enhance long-term stakeholder value.

Programme Curriculum

ESG Risk Assessment in Mining Training Course

Introduction

The mining industry is undergoing a major transformation driven by ESG (Environmental, Social, and Governance) compliance, sustainability reporting frameworks, and increasing pressure from investors, regulators, and global stakeholders. ESG Risk Assessment in Mining Training Course is designed to equip professionals with advanced capabilities in identifying, analyzing, and mitigating ESG-related risks across mining operations. Participants will gain practical insights into climate risk integration, tailings dam safety,

carbon footprint reduction, community impact assessment, and responsible mining governance frameworks aligned with global standards such as GRI, SASB, TCFD, and IFC Performance Standards.

The course emphasizes real-world mining scenarios, enabling learners to develop strong competencies in risk mapping, ESG data analytics, sustainability due diligence, and compliance auditing. With growing global demand for green mining practices, net-zero strategies, and responsible supply chain management, this program prepares professionals to lead ESG transformation initiatives in both surface and underground mining operations. The training blends technical, regulatory, and strategic perspectives to ensure participants can confidently support ESG decision-making, reduce operational risks, and enhance long-term stakeholder value.

Course Duration

5 days

Course Objectives

1. Understand ESG frameworks in mining operations
2. Conduct comprehensive ESG risk identification and classification
3. Apply climate change risk modeling in mining projects
4. Evaluate environmental impact assessments (EIA) and mitigation plans
5. Assess social license to operate (SLO) risks and community conflicts
6. Integrate tailings dam and waste management risk controls
7. Develop carbon accounting and emissions reduction strategies
8. Perform ESG compliance audits and regulatory gap analysis
9. Analyze biodiversity and land rehabilitation risks
10. Implement supply chain ESG due diligence in mineral sourcing
11. Use ESG data analytics and sustainability reporting tools
12. Strengthen corporate governance and anti-corruption frameworks
13. Design ESG risk mitigation and sustainability action plans

Target Audience

1. Mining engineers and operations managers
2. ESG and sustainability officers
3. Environmental scientists and geologists
4. Health, Safety & Environment (HSE) professionals
5. Risk management and compliance officers
6. Government mining regulators and inspectors
7. Corporate investors and mining analysts
8. Consultants in ESG, climate risk, and sustainability advisory

Course Modules

Module 1: Foundations of ESG in Mining

- ESG principles and mining lifecycle integration
- Global sustainability frameworks overview
- ESG materiality assessment in mining projects
- Stakeholder mapping and engagement strategies
- ESG reporting standards alignment

- **Case Study:** ESG transformation in a copper mining operation transitioning to sustainable compliance reporting.

Module 2: Environmental Risk Assessment in Mining

- Air, water, and soil contamination risks
- Acid mine drainage and mitigation strategies
- Tailings storage facility risk evaluation
- Biodiversity and ecosystem disruption analysis
- Waste rock and hazardous material management
- **Case Study:** Tailings dam failure risk assessment in a large-scale gold mining site.

Module 3: Climate Change and Carbon Risk in Mining

- Carbon footprint measurement methodologies
- Transition risk vs physical climate risk
- Renewable energy integration in mining
- Decarbonization pathways for heavy industry
- Climate scenario analysis (TCFD aligned)
- **Case Study:** Decarbonization roadmap for an iron ore mining company.

Module 4: Social Risk and Community Impact

- Social license to operate (SLO) frameworks
- Indigenous rights and land use conflicts
- Resettlement and compensation planning
- Workforce safety and labor rights
- Community grievance mechanisms
- **Case Study:** Community displacement conflict resolution in a coal mining project.

Module 5: Governance and Ethical Mining Practices

- Corporate governance in mining companies
- Anti-corruption and transparency controls
- ESG accountability structures
- Board-level sustainability oversight
- Ethical sourcing and procurement policies
- **Case Study:** Governance restructuring in a multinational mining corporation after compliance violations.

Module 6: ESG Data, Metrics & Reporting

- ESG KPIs and performance indicators
- Data collection and validation methods
- Sustainability reporting
- Digital ESG dashboards and analytics tools
- Assurance and audit readiness
- **Case Study:** ESG reporting digital transformation in a lithium mining enterprise.

Module 7: ESG Risk Mitigation & Strategy

- Risk prioritization frameworks
- ESG mitigation planning tools

- Scenario planning and resilience building
- Emergency response and risk controls
- Continuous improvement systems
- **Case Study:** Risk mitigation redesign in a deep underground mining operation.

Module 8: Sustainable Mining Transformation

- Circular economy in mining operations
- Green mining technologies adoption
- ESG investment and financing strategies
- Net-zero mining roadmap development
- Long-term sustainability governance
- **Case Study:** Transition to net-zero operations in a platinum mining company.

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:

Register Online Now

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