Mining Economics 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 Economics Training Course is designed to equip professionals with advanced knowledge in mineral resource valuation, cost optimization, investment decision-making, and mining project feasibility analysis. As global demand for critical minerals rises and the mining sector becomes increasingly data-driven, this course integrates modern frameworks such as cash flow modeling, commodity price forecasting, risk-adjusted valuation, and ESG-compliant economic assessment. Participants will gain practical expertise in evaluating mining projects from exploration through production, ensuring alignment with profitability, sustainability, and strategic resource management in a highly competitive global market.

This training emphasizes real-world application through case-based learning, financial modeling exercises, and scenario-driven simulations. Learners will explore how macroeconomic trends, commodity cycles, geopolitical risks, and technological advancements impact mining investments. The course is structured to support professionals in making data-backed investment decisions, optimizing mine planning economics, and enhancing operational efficiency. By the end of the program, participants will be capable of conducting full-scale mining feasibility studies, cost-benefit analysis, and economic risk assessments aligned with international mining standards and ESG frameworks.

Programme Curriculum

Mining Economics Training Course

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Course Duration

5 days

Course Objectives

1. Master Mining Project Valuation Techniques
2. Apply Discounted Cash Flow (DCF) Modeling in Mining
3. Understand Commodity Price Volatility and Forecasting
4. Develop Mine Feasibility Study Expertise
5. Evaluate CAPEX and OPEX Optimization Strategies
6. Implement Risk Analysis in Mining Investments
7. Analyze Global Mineral Supply Chain Economics
8. Assess ESG and Sustainable Mining Economics
9. Build Financial Models for Mineral Projects
10. Improve Mine Life Cycle Cost Management
11. Interpret Geological Data for Economic Decisions
12. Apply Break-even and Sensitivity Analysis Tools
13. Strengthen Strategic Investment Decision-Making in Mining

Target Audience

1. Mining Engineers and Geologists
2. Financial Analysts in Mining and Energy Sector
3. Mining Project Managers and Planners
4. Investment Analysts and Portfolio Managers
5. Government Mineral Resource Officials
6. ESG and Sustainability Consultants
7. Mining Economics Researchers and Academics
8. Graduate Students in Mining, Finance, or Earth Sciences

Course Modules

Module 1: Fundamentals of Mining Economics

- Principles of mining economic systems and resource allocation
- Understanding mineral scarcity and value creation
- Introduction to mining project life cycle economics
- Cost structures in surface vs underground mining
- **Case Study:** Economic comparison of open-pit vs underground gold mining operations

Module 2: Mineral Resource Valuation Techniques

- Resource classification
- Valuation approaches: income, cost, and market methods
- Reserve estimation and conversion economics
- Discounting future mineral revenues
- **Case Study:** Valuation of a copper deposit using income-based approach

Module 3: Financial Modeling in Mining Projects

- Building dynamic Excel-based mining models
- Revenue forecasting using commodity pricing trends
- CAPEX scheduling and depreciation analysis
- Working capital and financing assumptions
- **Case Study:** Iron ore project financial feasibility model

Module 4: Cost Analysis and Optimization

- Fixed vs variable mining costs
- Drill, blast, haulage cost modeling
- Process plant efficiency and cost reduction strategies
- Economies of scale in mining operations
- **Case Study:** Cost optimization in a coal mining operation

Module 5: Commodity Markets and Price Risk

- Global commodity trading mechanisms
- Supply-demand dynamics in metals markets
- Hedging strategies and futures contracts
- Price volatility modeling
- **Case Study:** Gold price shock impact on mining profitability

Module 6: Mine Feasibility and Investment Appraisal

- Pre-feasibility vs feasibility study frameworks
- Net Present Value (NPV), IRR, Payback analysis
- Sensitivity and scenario analysis techniques
- Investment decision thresholds
- **Case Study:** Lithium project investment appraisal under uncertain pricing

Module 7: Risk Management and ESG Economics

- Operational, financial, and geopolitical risks
- Environmental and social governance integration
- Carbon pricing impact on mining economics
- Sustainability reporting frameworks
- **Case Study:** ESG restructuring in a platinum mining operation

Module 8: Strategic Mine Planning and Decision Economics

- Life-of-mine planning and optimization
- Cut-off grade optimization techniques

- Resource depletion modeling
- Strategic expansion vs divestment decisions
- **Case Study:** Long-term mine planning in a manganese operation

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

Start Date	End Date	Location	Price
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