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Mining Essentials for Non-Technical Professionals Training Course

29 March – 2 April 2027
Singapore

Mining Essentials for Non-Technical Professionals Training Course

Ref: 1721_63109 **Date:** 29 March – 2 April 2027 **Location:** Singapore **Fees:** 6900 GBP

Mining Essentials for Non-Technical Professionals is a 1-week training course for finance, legal, people and commercial specialists in mining companies, built around a Mine Life-Cycle Briefing Pack that maps each stage of an operation to the decisions those functions support. As ore grades fall and investors scrutinise environmental and social performance, staff outside engineering need fluency in how a mine creates value. Jupiter Prime Training delivers this Mining Essentials course.

Why Mining Essentials Matters Now

Three forces shape mining today: declining ore grades that push costs upward, investor and community scrutiny of tailings, water and rehabilitation, and automation that changes the skills a site needs. When finance, legal and commercial staff can question a reserve statement or a mine plan, organisations avoid costly surprises; when they cannot, weak assumptions pass unchallenged. The course draws on the Committee for Mineral Reserves International Reporting Standards CRIRSCO template for resource classification and on the Global Industry Standard on Tailings Management GISTM.

Who Gains Most from Mining Essentials

- Finance specialists responsible for capital budgets, cost forecasts and asset valuations of mining operations
- Legal advisers who draft mineral tenements, contractor agreements and joint venture terms
- People and workforce specialists planning site rosters, skills pipelines and camp arrangements
- Commercial staff negotiating concentrate sales, logistics and supplier contracts

Corporate support teams that partner closely with a site operations group gain most when several members attend together and share one vocabulary.

Mining Essentials Capabilities

Participants leave able to read the technical documents that drive spending, contracts and staffing on a mine site.

- Interpret a resource and reserve statement and its confidence categories — investment and impairment decisions
- Trace ore from the pit or stope through the processing plant to saleable product — offtake and logistics contracts
- Calculate how grade, recovery and strip ratio shape unit cost — budget and forecast reviews
- Assess the safety and tailings controls a site depends on — insurance, contractor and liability terms
- Weigh closure and rehabilitation obligations against asset life — provisioning and community commitments
- Communicate technical constraints in plain terms — boards, lenders and internal stakeholders

Key Mining Essentials Terms

- Mineral Resource — a concentration of material with reasonable prospects for eventual economic extraction, classed as inferred, indicated or measured.
- Ore Reserve — the economically mineable part of a measured or indicated resource after mining, processing and other modifying factors.
- Cut-Off Grade — the lowest grade at which material is worth processing rather than sending to waste.
- Strip Ratio — the tonnes of waste rock moved for each tonne of ore in an open pit.
- Metallurgical Recovery — the share of valuable metal in plant feed that ends up in the final concentrate or product.
- Tailings — the fine waste left after processing, stored in engineered facilities that need long-term monitoring.

Mining Essentials Day by Day

Day 1: The Mine Value Chain

- Mine Life-Cycle Stages — Where Each Function Enters the Value Chain
- Commodity Price Cycles — Timing of Expansion and Deferral Choices
- Ore Grade Decline Trends — Rising Unit Costs and Capital Intensity
- Social Licence to Operate — Community Expectations and Access to Land
- Mining Glossary Map — Shared Language Between Site and Head Office

Day 2: From Exploration to Reserves

- Exploration Drilling and Sampling — Confidence Behind Early Investment Approvals
- CRIRSCO Resource Classification — Reading Inferred, Indicated and Measured Categories
- Modifying Factors — Converting Resources Into Reported Ore Reserves
- Competent Person Reports — Reliance by Lenders and Acquirers
- Feasibility Study Stages — Gate Decisions From Scoping to Final Approval

Day 3: Extraction and Processing

- Open Pit Versus Underground Methods — Cost, Safety and Footprint Trade-Offs
- Drill, Blast, Load and Haul Cycle — Equipment Fleet and Contractor Scope
- Comminution and Flotation Circuits — Energy Use and Recovery Targets
- Grade Control and Reconciliation — Gaps Between Planned and Mined Tonnes
- Concentrate Specifications and Smelter Terms — Payable Metal and Penalty Elements

Day 4: Economics, Safety and Stewardship

- All-In Sustaining Cost Measure — Comparing Operations and Setting Budgets
- Net Present Value Sensitivity — Price, Grade and Recovery Assumptions
- Critical Control Management — Fatal Hazard Prevention and Contractor Oversight
- GISTM Tailings Governance — Accountability, Monitoring and Liability Exposure
- Closure and Rehabilitation Planning — Provisions, Bonds and Post-Mining Land Use

Day 5: Practising the Mine Life-Cycle Briefing

- Reserve Statement Interrogation Exercise — Questions for an Acquisition Review
- Unit Cost Driver Simulation — Linking Haul Distance and Recovery to Budgets
- Tailings and Closure Risk Case — Contract and Provision Implications
- Technical-to-Board Translation Drill — Plain Explanations for Directors and Lenders
- Mine Life-Cycle Briefing Pack — Completing the Function-Specific Decision Map

Applying Mining Essentials After the Course

- Review the latest reserve statement with colleagues, listing the modifying factors that most affect the asset valuation.
- Run a session with site planners to reconcile budgeted strip ratio, grade and recovery against actual results for the quarter.

Mining Essentials Questions FAQ

What are Mining Essentials for non-technical professionals and why do they matter now?

Mining Essentials is the working knowledge of how a mine finds, extracts, processes and closes an orebody. It matters now because falling grades, tailings scrutiny and automation mean finance, legal and commercial decisions depend increasingly on technical assumptions you should be able to question.

Which roles gain most from Mining Essentials training?

Finance, legal, people and commercial specialists in mining companies gain most. Contract managers and analysts supporting site operations also benefit.

How does Mining Essentials differ from a mining engineering or geology course?

It explains the technical chain without teaching design calculations. Engineering and geology courses train specialists to build mine plans and resource models; this course trains the people who fund, contract, staff and sell from those plans to read and challenge them.

What do you bring back from Mining Essentials for non-technical professionals?

You bring back a decision map linking each mine life-cycle stage to your function, a working glossary and questions on reserves, unit costs, tailings and closure for your next review.

Mining Essentials: The Way Forward

The Mine Life-Cycle Briefing Pack first informs how a function reviews its next budget, contract or acquisition file against reserve and cost assumptions. Finance, legal and commercial colleagues use it alongside site planners. After its first use, revisit the closure and tailings perspective, since those obligations grow as the operation ages.