

# Economic Evaluation and Optimization of Mineral Projects

## COURSE OVERVIEW

This comprehensive course provides an exploration of economic evaluation techniques used throughout the life cycle of a mineral project from pre-feasibility to full-scale operation. It focuses on the application of discounted cash flow (DCF) methods, equipping participants with the skills to assess project viability, investment decisions, and financial risks. The course also highlights common challenges and pitfalls in economic evaluations, ensuring participants can conduct accurate, realistic, and optimized financial analyses for mineral projects.

## WHO SHOULD ATTEND?

This course is designed for mining engineers, project managers, geologists, financial analysts, investment professionals, and technical consultants involved in the planning, evaluation, and development of mineral projects. It is also valuable for government regulators, resource economists, and corporate decision-makers responsible for project approvals, budgeting, and investment analysis in the mining and natural resources sector.

## COURSE OUTCOMES

Delegates will gain the knowledge and skills to:

- Apply discounted cash flow (DCF) methods, including Net Present Value (NPV) and Internal Rate of Return (IRR), to assess the financial viability of mineral projects.
- Use DCF techniques to support optimization and strategic decision-making across different stages of project development.
- Evaluate and compare alternative project scenarios using economic criteria.
- Conduct practical financial analyses and develop robust economic models for real-world mineral project evaluations.

## KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Life cycle stages of mineral projects and economic decision points.
- Discounted Cash Flow (DCF) fundamentals and advanced techniques.
- Key financial indicators: NPV, IRR, payback period, and ROI.
- Economic optimization of mining plans and schedules.
- Sensitivity, scenario, and risk analysis for investment decisions.
- Evaluation of project alternatives and capital budgeting.
- Common errors and limitations in mineral project evaluation.
- Integration of technical and financial data for realistic assessments.
- Best practices for presenting and defending project evaluations to stakeholders.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded