

Risk Based Decision Making in Mining and Exploration

COURSE OVERVIEW

Effective risk management is critical to the success of mining and exploration projects. This course offers practical tools to identify, assess, and manage risks across the project lifecycle. Delegates will learn how to handle geological, technical, financial, and environmental uncertainties in decision-making. It focuses on data-driven and probabilistic approaches for project evaluation and planning. Participants will gain practical experience with risk analysis tools, scenario planning, and sensitivity analysis to support better decisions and improve project outcomes.

WHO SHOULD ATTEND?

This course is ideal for exploration geologists, mining engineers, project managers, investment analysts, environmental professionals, and decision-makers involved in resource evaluation, project development, or operations in the mining industry. It is also valuable for stakeholders in regulatory, financial, or consulting roles who require a deeper understanding of risk and uncertainty in mining and exploration projects.

COURSE OUTCOMES

Delegates will gain the knowledge and skills to:

- Understand adaptive risk management approaches, including proactive vs. reactive strategies.
- Apply effective risk-based decision-making in mining operations.
- Explore valuable risk management methodologies used in the mining industry.
- Define the context and scope of risk assessments using the extended enterprise model.
- Use risk identification and evaluation techniques to support project decisions.
- Distinguish between risk owners and control owners and implement effective risk ownership practices.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Principles of risk-based thinking in mining and exploration.
- Identifying and categorizing technical, financial, and environmental risks.
- Incorporating uncertainty into resource estimation and project planning.
- Probabilistic modeling and Monte Carlo simulations.
- Scenario and sensitivity analysis for project evaluation.
- Integrating risk into investment and operational decision frameworks.
- Risk mitigation strategies and decision support tools.
- Case studies from exploration and mining projects.

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