

Chartered Professional Guideline 3: Areas of Practice

1. Areas of Practice: Mining Engineering

A mining engineer is a professional who investigates, plans, designs or directly controls the process of extracting naturally occurring minerals containing useful commodities from the earth's crust.

The following areas of practice are offered as examples of experience that is required for registration as a Chartered Professional (Mining Engineering). Professional experience need not be limited to those listed and applications will be considered for appropriate areas of practice in addition to those listed below.

1. Coal mining open pit: Extensive experience in Coal Reserve estimation, planning, design, mining operations, scheduling, budget preparation, risk management, operations coordination and management of open pit coal mines.
2. Coal mining underground: Extensive experience in Coal Reserve estimation, planning, design, mining operations, scheduling, budget preparation, risk management, operations coordination and management of underground coal mines.
3. Coal project technical, technical auditing and technical due diligence: A well-rounded understanding of Coal Reserve estimation, planning, design, operations, scheduling, budget preparation, risk management, supporting infrastructure requirements, construction and operations coordination and management of coal mines.
4. Metalliferous mining open pit: Extensive experience in Ore Reserve estimation, planning, design, mining operations, scheduling, budget preparation, risk management, operations coordination and management of metalliferous open pit mines.
5. Metalliferous mining underground: Extensive experience in Ore Reserve estimation, planning, design, mining operations, scheduling, budget preparation, risk management, operations coordination and management of underground metalliferous mines.
6. Metalliferous project technical, technical auditing and technical due diligence: A well-rounded understanding of Ore Reserve estimation, planning, design, scheduling, budget preparation, risk management, supporting requirements, construction and operations coordination, and management of metalliferous mines.
7. Alluvial mining, dredging: A well-rounded understanding of Ore Reserve estimation, planning, design, mining operations scheduling, budget preparation, risk management, supporting infrastructure requirements, construction and operations coordination and management of alluvial mines.
8. Quarrying: A well-rounded understanding of Ore Reserve estimation, planning, design, mining operations, scheduling, budget preparation, risk management, supporting infrastructure requirements, construction and operations coordination and management of quarries.
9. Mine services: A well-rounded understanding of mining construction and operations and the required supporting infrastructure including ventilation, backfill, de-watering, haulage, utilities and maintenance to service the operations.
10. Geotechnical services: A well-rounded understanding of rock mechanics, slopes stability and water management during mining construction and mining operations, experience in assessing ground conditions and associated risks.
11. Safety, health and risk. Implementation of workplace health and safety systems that provide for:
 - 11.1. hazard identification
 - 11.2. risk assessment
 - 11.3. implementation of controls
 - 11.4. effective monitoring
 - 11.5. comprehensive review.