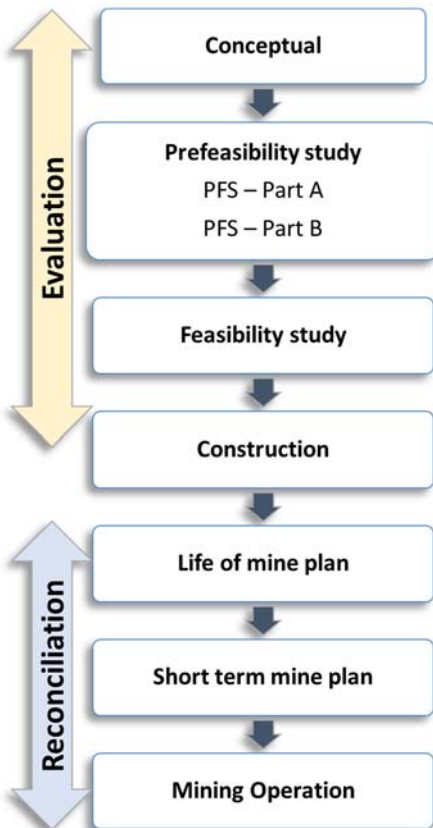


Mineral Resource Evaluation & Project Management: Resource estimation, classification, reporting & Projects

A competency building & professional development program offered jointly by

GeoGlobal & Eftex Energy



'Reliable estimates of mineral resources' is the key in successful assessment and evaluation of a mineral deposit. While, computerized resource estimation is a standard industry practice; using *justifiable parameters* and implementation of geological controls of mineralization are key in improving the reliability of mineral resource estimates. This is important for exploration projects and mining operations. The presentations, group exercises and discussions of this short course are designed to impart the best practices in mineral deposit evaluation, as it is relevant globally.

Topics: Project development and studies in mining project development, • Controls of mineralization in various mineral deposit types, • Styles of mineralization, • Essential elements of Mineral deposit evaluation, • Best practices in mineral resource estimation, Case studies (computer software

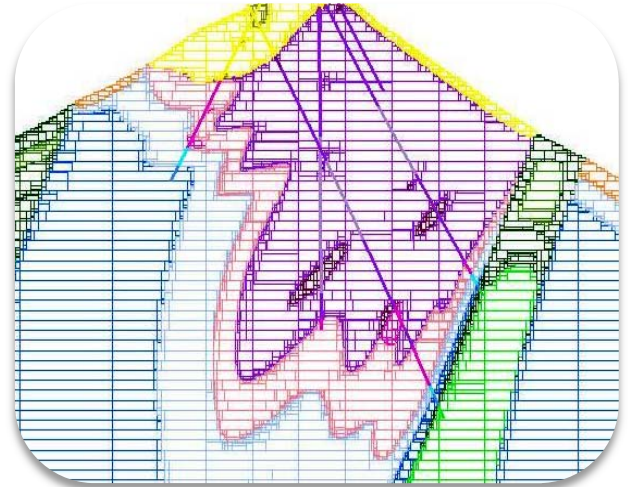
based work-shop) • Resource classification and reporting of Mineral Resources

Recognition: This course has received approval from prestigious American Institute of Professional Geologists (AIPG, www.aipg.org) for continuing education unit (CEU) credits.



Uniqueness learning experiences:

- *Interactive sessions:* Allows participants remain completely engaged
- *Hands-on group exercises:* Participants learn critical aspects of the topics
- *Q&A sessions:* Every technical session is followed by a Q&A session
- *Software application:* Case-study demonstration using Surpac software
- Early registered participants will receive pre-program reading materials (digital)
- *Participants will receive two certificates:*
 - A certificate of completion by the organizers
 - A certificate from AIPG confirming their accreditation



Who can benefit from this short course:

Geologists, Mining Engineers and professionals from related disciplines engaged in Exploration and Mining of minerals & coal, Researchers, Academicians and students. The participants will be able to take the learnings to their workplace and career, with immediate deployment.

Contacts:

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Course details and/or online requests are available via:

GeoGlobalTraining

or

EftexEnergyServicesTraining

Come, participate with us & let's take learning to a new level of excellence!

Program Schedule



First 4 days: 9:00 am – 5:00 pm

Last day: 9:00 am – 1:00 pm

One Lunch break for one hour, daily

At least two other breaks, daily

Group dinner: 4th Day

Pre course readings:

The registered participants will receive readings in pdf format prior to the short course as preparation materials. Early registration is highly recommended to avail this benefit.

Day 1:

9:00 - 10:00 am: Registration and Introduction

There will be 4 technical sessions. Each session will end with a Q&A session.

- **Project development and studies in mining project development**
In this session discussions will be held on the mining project development cycle. Various stages of deposit development and studies carried out at different stages will be presented. Participants will have an opportunity to interact with the presenter to clarify requirements of various stages.
- **Controls of mineralization in various mineral deposit types**
In this session, the presentation will focus on geology of various mineral deposits with emphasis on controls of mineralization as it relates to mineral exploration.
- **Styles of mineralization**
The presentations will focus on various styles of mineralization such as layered, vein type etc. The participants will gain knowledge about the importance of this topic on mineral exploration.
- **Mineral deposit evaluation**
*In this session, the presentation will focus on use of geological controls of mineralization in mineral deposit evaluation. The participants will be encouraged to work on a simple **group task** which is designed to provide a learning experience which can enhance the understanding of this topic.*
- **Q&A Session**
This is the final Q&A session of the day where we will review the presentations of the entire day.

Day 2:

There will be 4 technical sessions. Each session will end with a Q&A session.

- **Review of Day 1 presentations**
In this session, the faculty will review the presentations and learnings of day 1 followed by a brief Q&A session.

- **Mineral Deposit Evaluation: essential elements**
Presentations in this session will be focused on the various elements of mineral deposit evaluation with emphasis on the details of mineral resource estimation. The topics will emphasize on 'best practices'
- **Mineral Resource Estimation -1: data management and exploratory data analyses**
*In this session, the presentations will focus on data collection and exploratory data analysis (EDA) that includes compositing and statistical analyses.
The session will end with a **group exercise** on EDA.*
- **Mineral Resource Estimation -2: Grade estimation and geostatistics**
The presentations will focus on various interpolation techniques. A discussion on the application of geostatistics in resource estimation will be there.
- **Group exercise:**
This exercise will require to estimate grades using various techniques and compare them
- **Q & A session**

Day 3:

- **Review of day 2 presentations**
- **Case study presentation**
This session will focus on practical demonstration of the topics previously discussed.
- **Mineral Resource Estimation -3: Grade tonnage estimations**
*This presentations and discussions in this session will focus on grade and tonnage (GT) estimation. Various topics such as multiple variables will be discussed.
The session will end with a **group exercise** on GT curves.*
- **Group exercise:**
This exercise will require to estimate grades using various techniques and compare them
- **Mineral Resource Estimation -4: Resource classification**
In this technical session, the discussion will be about the technical aspects of resource classification.
- **Q & A session**

Day 4:

- **Review of Day 3 presentations**
- **Mineral resource reporting: Role of QP and various codes**
In this session Dr Samal will discuss the role of a qualified person in reporting mineral resources as per CRIRSCO family of international reporting standards such as JORC, NI-43-101 etc.
- **Geological risk analyses in resource estimation**
*The discussion in this session will focus on fundamentals of risks associated with resource estimation and how to quantify them.
A **group exercise** on geological risk analyses*
- **Introduction to Mining Project management**
- **Q & A**

Dinner at 7:00

Day 5:

- Review of Day 4 presentations
- Mining Projects Management Work Planning & Case Study
- What have I learned & what will I do with it?
- Course Assessment
- Presentation of Certificates

Faculty profiles



Dr Abani Samal: Dr Abani R Samal holds M. Tech degree from IIT(ISM), Dhanbad, MS and DIC from Imperial College, London and PhD from SIU-C, USA. He has 20 years of experience in the mining industry. Dr Samal is an expert in mineral deposit studies and evaluation. He is well recognized as an economic geologist, a geostatistician and a leader in mining industry. Currently he is the owner and Principal of GeoGlobal, LLC in USA. He is a life member of MEAI, MGMI, fellow of GSI (India), a Fellow of SEG, life member of member of IAMG and a member of GSA. Dr Samal practices as a qualified person (QP) globally. He maintains the Registered Membership of SME and a Certified Professional Geologist (CPG) with AIPG. He is an honorary representative of the CRIRSCO in India. More details about him can be found [here](#).

Akinlolu (Akin) Oni, CPTM, PMP, CCP: Akin Oni holds a 1st Class Honors degree in Mechanical Engineering, an executive MBA in Project Management and various global credentials. He has expertise leading the application of best practices to MA&D activities, major technical studies, field development and execution of oil, natural gas, LNG, refining, mining and infrastructure engineering projects in different cultural environments. Recognized for implementing a strong focus on Leadership, People, Process, Technology, Deliverable and Sustainability, he has held senior project and program leadership roles, with asset-intensive businesses, accountable for functional and delivery Project Management globally. More details about him can be found [here](#).