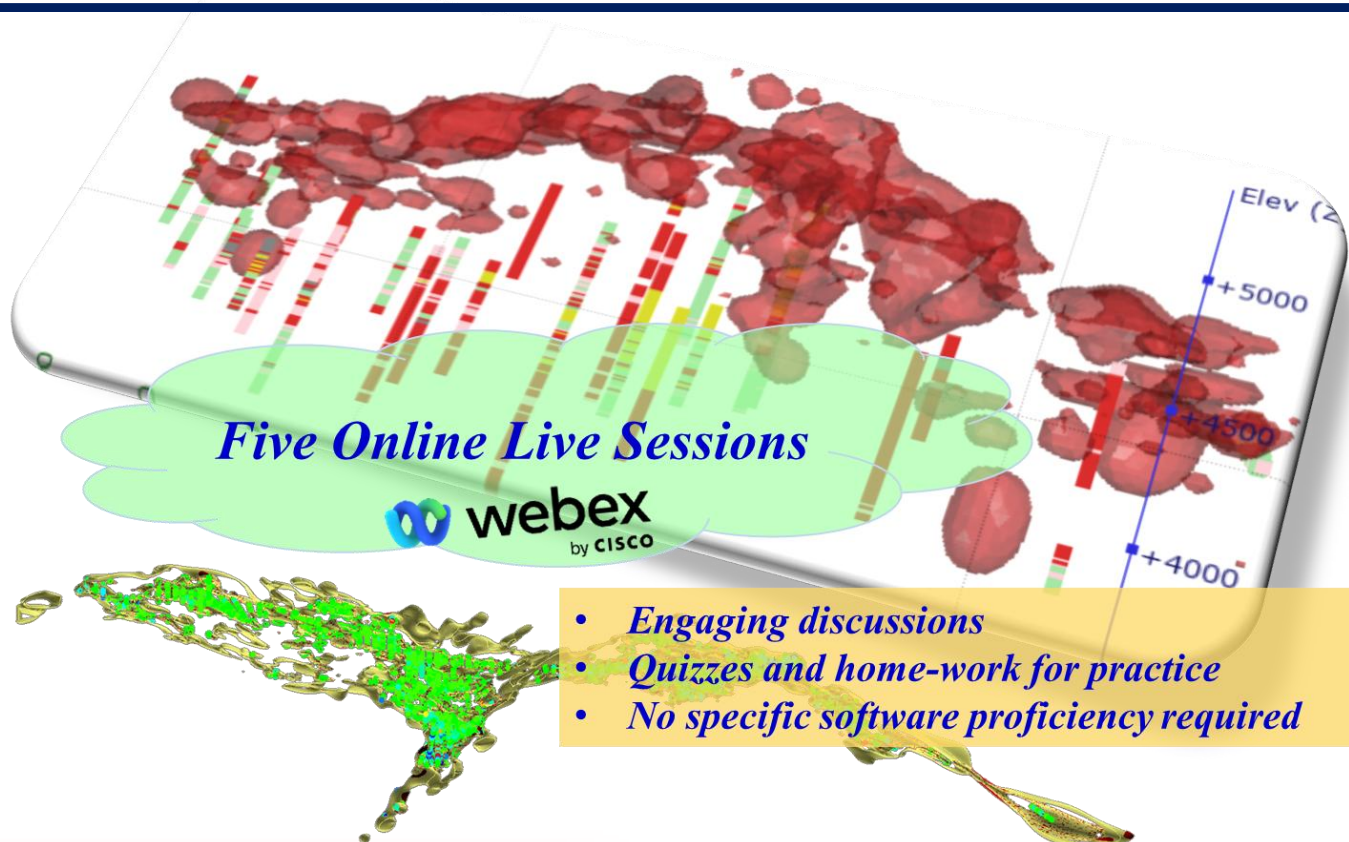


A REFRESHER COURSE ON MINERAL RESOURCE ESTIMATION AND APPLIED GEOSTATISTICS

Monday, September 8th to Friday, September 12th, 2025

9 am to 12:00 noon (Mountain Standard Time, MST, USA)

4:00 PM to 7 pm, (West Africa Time, WAT / Central European Time, CET)



**Suitable for mining industry professionals,
teaching faculties and researchers**

The program will be led by

Abani R. Samal, Ph.D.

Fellow – SME, Fellow – SEG, Fellow - MEAI, Fellow - GSI

Principal and founder: GeoGlobal LLC,

Register at: <https://geoglobal.co/mreag-refresher>

GeoGlobalTM
Geoscience. Mineral Exploration. Mining.
<https://geoglobal.co>

FROM**ABANI R. SAMAL, Ph.D.***CPG, RM- SME, Fellow – SEG, Fellow - SME***Principal, GeoGlobal LLC****3347 Corsica Drive,****Riverton, Utah 84065, USA****t: 001-618-9673679****e: arsamal@geoglobal.co****<https://geoglobal.co>**

Subject: Professional development program (refresher-course) on Mineral Resource Estimation and Applied Geostatistics (MREAG)

Location: ONLINE, Live, on Webex platform

Dates: **Monday, September 8th - Friday, September 12th 2025**

9 am to 12:00 noon (Mountain Standard Time, MST, USA)

5:00 PM to 8 pm, (West Africa Time, WAT / Central European Time, CET)

Schedule: Total 5 LIVE sessions: Each session meets daily for 3 hours
9 am to 12 noon (MST) each day + One hour of reading/take-home exercises

Target Participants:

- Geologists in exploration and mining projects
- Mining engineers
- Project managers
- And other professionals in the mining industry
- Professors
- Researchers

Participants are expected to have exposure to the mining industry and are willing to learn more about mineral resource estimation, applied geostatistics, resource classification, and reporting. *This program is not suitable for students.*

Program details and registration at: <https://geoglobal.co/mreag-refresher-usa>

Maximum number of participants: 20

Professional Development Hours (PDH): 20 professional development hours (PDH).

Explanation of Professional Development Hours: 16 contact hours (4 live sessions of 4 hours each) + 4 hours of reading assignments

Expected Outcome

The participants of this program are expected to gain knowledge and some experience on several critical aspects of resource estimation which may be useful for improving the reliability of resource/reserve estimation at the workplace. Each session will end with a Q&A session.

Contact: Dr Abani Samal (arsamal@geoglobal.co) for any further clarification.

Outline:

This is a refresher course where participants are expected to actively contribute to the discussions and enrich the learning experience.

Requirements:

- Each participant is required to have their individual computer with an uninterrupted high-speed internet connection
- Participants are expected to have the video on during class sessions.
- Group participation with one computer system is not allowed.
- This program is designed to be delivered as an in-person program to a limited number of attendees, who have some exposure to the resource estimation process and or, willing to learn the process in details.

Day 1: Fundamental concepts

- Introduction
- Geological controls and styles of mineralization
- Project development and studies in mining project development
- Quiz - 1

Day 2: Exploratory data analyses (EDA)

- Data types and data quality
- Introduction to Exploratory Data Analyses (EDA)
- Statistical analysis of drill-hole data
- Introduction to Geostatistics and variogram analyses
- Quiz - 2

Day 3: Introduction to geostatistics

- Variogram Analysis
- Omnidirectional variogram
- Interpolation and grade estimation
- Introduction to Kriging
- Quiz - 3

Day 4: Geostatistical Grade estimation and

- Kriging: Technique and parameters
- Grade estimation using Kriging: Discussion and homework
- Density data analyses and model

Day 5: Resource Classification and Reporting

- Resource Classification fundamentals
- Role of a CP / QP
- Final question and answer session

Course Materials: Digital course materials will be provided which contain a subset of PowerPoint slides and other materials (book chapters and published papers).

- These materials are digitally protected files, which can be printed out prior to each session for effective participation.
- Due to copyright related legal issues recorded videos of the live sessions cannot be provided.

Certificates of completion and Professional Development Hours (PDH) will be electronically awarded to the participants.

Lead Instructor

This program will be taught by Dr Abani Samal assisted by guest faculties.

Dr Abani R Samal – Lead Instructor

Dr Abani Samal has a wealth of knowledge and experience in the field of economic geology and valuation of mineral resources. He has extensive training (MS and PhD) in economic geology and geostatistics. He is well recognized internationally for his expertise in advanced geostatistics and mineral resource estimation. In the areas of resource estimation and geostatistics, Dr. Samal has distinguished himself as a respected authority among peers globally.



Prior to GeoGlobal, Dr Samal worked as the lead resource-geologist with RioTinto at their corporate regional HQ based at Salt Lake City, Utah, USA, where he led and contributed to various major projects. He also worked as the lead geologists and geostatistician at an international mining consulting firm, Pincock Allen and Holt (now RPM Global), based at Denver, USA.

In the last 20 years in the industry, he has gained experience in various commodities including gold-silver, base-metals such as Cu-Mo-Au and ferrous deposits around the world.

His contributions to the industry are well recognized through his publications and presentations at various national and international conferences. Dr Samal is a Registered Member of SME (RM-SME), a Certified Professional Geologist (CPG) and a Fellow of the Society for Economic Geologists (SEG). Dr Samal is a Qualified Person (QP) as per international resource reserve reporting standards such as JORC (Australia) and NI-43-101 (Canada). Dr Samal served as an honorary representative of CRIRSCO for India resulting in making India as the 14th member of the CRIRSCO.

GeoGlobal, LLC (USA)

GeoGlobal, LLC (GeoGlobal) is an international service providing company to the mineral industry based in Salt Lake City area in the state of Utah, USA. GeoGlobal provides services to mineral exploration and mining projects around the world. Dr Abani R. Samal is the Principal and owner of the company. The GeoGlobal team members work towards adding value for our business partners. The company specializes in mineral deposit evaluation for various commodities globally. The GeoGlobal retains a team of highly experienced professionals as Principal Associates with more than 20 years of experience.

The projects were conducted for various entities including Equinox Gold Corp, Nevada Copper, World Bank / Government of Nigeria, Rio Tinto, Resource Capital Funds, Orion Mining Finance and Forbes & Manhattan.

We have provided support and services to many exploration and mining projects in USA, Canada, Brazil, Mexico, Kazakhstan and most recently in Namibia and Nigeria. The types of projects include strategic project development, resource estimation, mine-mill reconciliation etc. Website: <https://geoglobal.co/>

If required, GeoGlobal LLC will work with the other associates and engineering firms on as needed basis.

Registration and fees (Follow the links)

- [Before August 15th, 2025: 490 USD per person](#)
- [540 USD per person After August 15th, 2025](#)

Pay directly to the bank account:

Bank: JPMorgan Chase Bank, N.A.

Account number: 857193517

Routing number: 124001545 (For direct deposits and ACH transactions)

Routing number: 021000021 (For wire transfers)

Beneficiary: GEOGLOBAL, LLC

Zelle Account: arsamal@geoglobal.co

Group Discounts: For groups of 6 or more participants from the same company and further clarifications, please drop an email to arsamal@geoglobal.co

ALL PAYMENTS ARE FINAL. No refunds for absences and no-shows or, any other reason for which registrants could not participate.

Abani R. Samal, PhD

CPG, RM-SME, Fellow-SME, Fellow-SEG

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