

# AFRICAN MINERALS AND GEOSCIENCES CENTRE



## Training Course on Mineral Exploration and Practical Mineral Resource Estimation

The Geo-information Department of the African Minerals and Geosciences Centre (AMGC) is pleased to announce the launching of a new training course on **Mineral Exploration and Practical Mineral Resource Estimation**. This course is organized in collaboration with a qualified Resource/Reserve Estimation consultant, EMR Mineral Resources Consulting (T) Company.

This training course is a two weeks course covering a complete mineral exploration theme from early exploration stage until resource and/or reserves are estimated ready for development of the resources. The topics covered in the course are the following:

- Introduction to Exploration, Evaluation and Extraction (Mining) of mineral resources. Mineral Exploration Methods: reconnaissance survey, Remote Sensing, Geological Mapping, Geochemical /Geophysical surveys. Data integration, analysis and interpretation of results for target areas identification.
- Practical Mineral resource estimation, which will cover **Introduction** (flow of tasks, key commercial software concepts), **Data quality** (using commercial software to perform validation checks on input data), **Geology and Domaining** (geology of a data set, geological and grade interpretations, basic wireframing techniques and validation, assigning domain codes to drill holes), **Data preparation** (compositing within domains and validating composites), **Statistics** (understanding and reporting statistical parameters, top cut techniques), **Continuity** (understanding and modelling variograms, using variogram maps to develop anisotropy ellipsoid parameters), **Estimation** (understanding different techniques like Inverse distance weight and Ordinary Krigging using commercial software to perform estimates). **Validation** (using commercial software to validate a model against input data), **Classification and reporting** (understanding the Codes, using commercial software to assess and assign classification categories), **Macro** (Commercial software to generate macros for a modelling).

This is a course for those who want/have to be specialists in applied resource estimation. It is built upon real case studies and offers practical tips to support those who have to get the job completed. There is a strong importance on hands-on assignments.

It provides attendees with some key fundamentals underpinning the estimation process, linking the importance of good geology and good quality sampling data directly to the overall quality of the resource model.

The course and manual is designed to provide participants, who have the appropriate background, with the tools that will allow them either to undertake serious resource estimation work or to be able to trouble-shoot or review resource estimates undertaken by others on projects that are inevitably subjected to intense scrutiny by investors.

The first training course on this topic is scheduled for 17 to 28 September 2018 and will be organised at the AMGC training facilities in Dar es Salaam. The fee for this training course is US\$ 1,500 per participant. The fee includes training materials, tea/coffee and lunch during the training days. The course fee does not include accommodation and transport to travel to Dar es Salaam and other related personal costs.

For inquiry and registration, please contact the Geo-information Department at [mesfin@seamic.org](mailto:mesfin@seamic.org) or [kamina@seamic.org](mailto:kamina@seamic.org).