

Southern and Eastern African Mineral Centre (SEAMIC)



Geo-information Department

Training Course on “Principles and Applications of Remote Sensing”

Remote sensing has become a major source of consistent, continuous data for atmospheric, ocean, and land studies at a variety of spatial and temporal scales. Remote sensing is used as a tool to extract information about the land surface structure, composition or subsurface, but is often combined with other data sources providing complementary measurements. The objective of this course is to create a firm basis for the successful integration of remote sensing in any field of application.

For whom is the course relevant?

The course introduces participants to the basic concepts and the operational skills necessary for remote sensing data manipulation and analysis. The course is useful to new, as well as to those experienced in some aspects of remote sensing but lacking a complete overview of the conceptual foundation.

What will be achieved?

The course introduces remote sensing as a technique for acquiring different types of information and includes the following topics:

- What is remote sensing?
- Electromagnetic energy and remote sensing
- Remote sensing sensors and platforms
- Remote sensing data processing and correction
- Image enhancement and visualization
- Visual and digital image interpretation
- Some applications of remote sensing in geology and mineral exploration

The participant of this course will acquire a good basis of remote sensing principles and applications. S/he will have appropriate knowledge to facilitate the efficient selection of remote sensing data, the careful consideration of required pre-processing, and the optimal analysis of image data for purposes of obtaining necessary geo-information.

The course covers both theory and practice. It aims to develop conceptual understanding, and offers practical applications to develop hands-on skills in the use of relevant tools and techniques.

Admission requirements

Applicants should have a good understanding of English and good command of operating desktop computers.

Course duration and fee

The course is conducted for duration of two weeks Monday to Friday. The fee for the course is \$500 per person payable before the start date of the course upon registration to the course.

Registration information can be found from:

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During 2008/09, the course is scheduled for the following dates:

20 – 31 October 2008

27 April – 8 May 2009