

Southern and Eastern African Mineral Centre (SEAMIC)



Geo-information Department

Training Course on “GIS Database Development”

Database is the fundamental component of Geographic information system (GIS) Geo-information professionals should have a proper understanding of database technology in their operations in GIS. Databases are used to organize data as well-structured data archiving mechanism for use of the data to its different purposes. This is important to GIS users in which the information gathered shall be used for its intended result in an efficient manner.

The course will enlighten the participant how the data should be stored and archived for analysis and output. This course introduces the basic principles of database and data management with the focus on thematic databases, the relational data model, and queries in the query language.

For whom is the course relevant?

The course is mainly relevant for GIS professionals and users. The course is also useful and applicable for anyone who wants to know how to work with (usually large) collections of data.

What will be achieved?

The course covers the following topics:

- What purposes do databases serve in GIS?
- Database Management Systems
- The relational database model
- Database querying
- Database maintenance
- Database implementation

The course participant can expect to improve her/his understanding, skills, and professional approach on the following matters:

- Understanding of database technology, its advantages, and its applicability
- Understanding the fundamentals of the relational database model
- Understand and use of a method to define, execute and verify queries against an existing relational database.
- Conduct simple cases of database design.

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. On completion, participants will be able to design and carry out data archiving steps for solving typical problems involving information in the chosen application domain.

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 one week Monday to Friday. The fee for the course is \$300 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:

29 September – 3 October 2008

16 – 20 March 2009