

# Using GeoDatabases

## 1 Day Training Course

Using GeoDatabases

RIA Mobile GIS

### Using GeoDatabases

This 1 day course provides a conceptual overview and hands-on experience using the ArcGIS GeoDatabase format. The course teaches the basics of GeoDatabases and enables participants to quickly take advantage of the capabilities of this format. Participants are introduced to both Personal (MDB) and File (GDB) GeoDatabases and use them to store, manage, edit, query and analyse both vector and raster data. The practice sessions and examples cover a range of business cases to put the features of the GeoDatabase into the context.

### You will learn about

- The basics of Relational Database Management Systems (RDBMS).
- Creating and Building both Personal (MDB) and File (GDB) GeoDatabases.
- What are Feature Datasets and Feature Classes.
- Creating, Editing and Populating Feature Classes.
- Creating and Using Subtypes and Attribute Domains.
- Creating and Using GeoDatabase Annotation.
- Using Raster Data in a GeoDatabase.
- Managed versus Unmanaged Raster Data.
- Creating and Using Raster Fields and Raster Catalogs.

### Learning Methods

- Instructor presentation of topics, concepts and techniques using slides and live demonstrations.
- Practice sessions; each student receives a work book that guides them through realistic ArcGIS activities.
- Questions and discussions.

This ArcGIS GeoDatabase course is a stimulating and rewarding experience. There is a good mix of instructor presentation and practice sessions so that you can make the most out of the day. The atmosphere is informal and friendly providing the ideal learning environment.

### Made in Australia

This is not a standard ESRI course that exclusively uses data from the USA. The practice sessions were developed in Australia and adhere to the usual ESRI training standards. The practice sessions have an appeal to a broad cross section of users from Botanists to Engineers and Business or Project Managers to GIS Users.

### Trainers with at least 10 years experience

Our trainers have at least 10 years experience in working with ESRI software and are also skilled in transferring their knowledge to new users.

### Prerequisites

This course is for trainees with introductory level ArcGIS Desktop experience. Trainees should also be familiar with Microsoft Windows. The course is limited to the capabilities of the ArcGIS ArcView level of licensing.

### Added Value

Course participants will receive one month of free telephone support on the course material. In fact, we will phone you to ask how you are going building your GeoDatabases.

# Course Outline

## Session 1: Overview of a GeoDatabase

---

- Brief review of GIS data formats
- What is a GeoDatabase
- Personal GeoDatabase (MDB) versus a File GeoDatabase (GDB)
- Why use a GeoDatabase
- Capabilities of the GeoDatabase and the ArcGIS licensing

**Practice Session 1:** *Overview of GeoDatabases; exploring some Data*

## Session 2: Using a GeoDatabase – The Basics

---

- Building a GeoDatabase
- Components of a GeoDatabase
- Feature Datasets and Feature Classes
- Textual Attribute Tables
- Populating a GeoDatabase

**Practice Session 2:** *Building a Basic GeoDatabase*

## Session 3: Using a GeoDatabase – Beyond the Basics

---

- Extending a GeoDatabase
- Subtypes and Attribute Domains
- GeoDatabase Annotation
- Managed and Unmanaged Raster Data
- Raster Fields and Raster Catalogs

**Practice Session 3:** *Extending a GeoDatabase*

## Session 4: Putting it all Together

---

- Brief review of GeoDataBases

**Practice Session 4:** *Creating a File GeoDatabase (Challenge)*

## Session 5: Advanced GeoDatabase Features

---

- Toolboxes and GeoProcessing Tools in a GeoDatabase
- Topology (Brief Overview, ArcGIS ArcEditor/ArcInfo license required)
- Relationship Classes (Brief Overview, ArcGIS ArcEditor/ArcInfo license required)
- Geometric Networks (Brief Overview, ArcGIS ArcEditor/ArcInfo license required)
- Dimensioning (Brief Overview, ArcGIS ArcEditor/ArcInfo license required)

Courses are run either as a RIA Mobile GIS Scheduled Course, or as a Client Requested Onsite Course.

