Building Geodatabases I

Three days (24 hours)

Overview

This course provides an overview of the structure and capabilities of the geodatabase. Participants learn how to build a geodatabase, add data to a geodatabase, and edit and maintain data stored in a geodatabase. Advanced geodatabase functionality is covered including how to build a geodatabase topology; maintain data integrity using subtypes, attribute domains, and relationship classes; and share geodatabase schema with XML. The ArcSDE® architecture is also introduced. This course is taught using an ArcInfo license of ArcGIS since many of the advanced features of the geodatabase require an ArcEditor or ArcInfo license. This course is designed for experienced ArcGIS users who want to store data in a geodatabase and take advantage of advanced geodatabase functionality. Data managers will find this course of particular benefit. This course does not cover ArcSDE administration.

Goals

Those completing this course will be able to:

- Understand the geodatabase structure.
- Explain the difference between a personal and enterprise geodatabase.
- Understand how ArcSDE is used with an enterprise geodatabase.
- Load vector and raster data into a geodatabase.
- Create a geodatabase topology and apply topology rules.
- Create and apply attribute domains, subtypes, and relationship classes.
- Edit topological data.
- Create and edit annotation.
- Transfer geodatabase schema with XML.

Prerequisites and recommendations

Participants should have completed *Introduction to ArcGIS I,* or *Learning ArcGIS 9* and *Introduction to ArcGIS II,* or have equivalent knowledge. Participants should not take this course if they have taken the previously offered course *Creating and Managing Geodatabases (for ArcEditor 8 and ArcInfo 8).*

Building Geodatabases II

Two days (16 hours)

Overview

Building on the skills and knowledge taught in *Building Geodatabases I,* this course teaches how to model and work with linear features stored in the geodatabase, focusing on the geodatabase's geometric network and linear referencing capabilities. Participants learn the nuances of working with geometric networks as they create and edit geometric networks and perform geometric network analysis. In the linear referencing portion of the course, participants learn how to create routes and measures; edit linear features in the field using ArcPad®; migrate coverage arcs, routes, and events to the geodatabase; and

perform linear referencing analysis. This course is taught using an ArcInfo license of ArcGIS since geometric network and linear referencing functionality require an ArcEditor or ArcInfo license. This course is designed for spatial data managers who want to take advantage of the geometric network and linear referencing capabilities of the geodatabase.

Goals

Those completing this course will be able to

- Understand the components of a geometric network.
- Build a geometric network.
- Set network rules and assign network weights.
- Perform analysis on geometric networks.
- Build and edit route systems in the geodatabase.
- Dynamically locate events on route systems.

Participants should have completed *Building Geodatabases I* or have equivalent knowledge.