



ArcGIS Desktop 1

Getting Started with GIS

An Official ESRI Developed Course

Instructor Led

Course Overview

This two-day course provides the foundation for understanding GIS, what it can do, and how others are using it. Students learn the basic functions of a GIS, why a GIS database is powerful, and what coordinate systems and map projections are and why they are important. In course exercises, students work with ArcMap, an application within ArcGIS Desktop, to visualize geographic data, create maps, query a GIS database, perform spatial analysis using common analysis tools, and solve geographic problems using a systematic approach. This course teaches the skills and knowledge needed to take other ArcGIS Desktop courses.

Target Audience: Beginner Level

This beginner course is for those who are new to geographic information systems (GIS) and ESRI's ArcGIS Software and that wish to learn what GIS is and the basics of what it can do.

Software Used in Course

This course is designed to work with the following software:

- ArcView 9.3 or 10
- ArcEditor 9.3 or 10
- ArcInfo 9.3 or 10

**Please note: Versions cannot be mixed during a single class

Course Goals

1. Explain what a GIS is and what it can do.
2. Work with and create GIS maps in ArcMap.
3. Access and query a GIS database.
4. Describe two common GIS data structures.
5. Explain what geographic data is, how it is made, and where to get it.
Explain what spatial analysis is and solve geographic problems using ArcGIS analysis tools.

Topics covered

- Basic functions of a GIS and real-world applications.
- Exploring GIS maps: Defining features, layers, and data frames; Exploring map scale; Understanding the relationship between features and attributes.
- Exploring a GIS database: Exploring attribute tables; identifying features; symbolizing features based on their attributes; Labeling features based on their attributes.
- Creating map layouts: Understanding data view and layout view; Using the Layout toolbar; Using map templates; Modifying map elements; Printing maps.



- Understanding location: Defining coordinate systems and map projections; Reading and finding location coordinates on a map; Measuring area and distance on a map.
- Understanding raster and vector data: Representing geography; Storing real-world locations; Symbolizing rasters; Using raster and vector data together; Understanding geodatabases.
- Acquiring geographic data: Data formats; Methods of creating geographic data; Using ArcCatalog to explore geographic data; Using metadata.
- Querying data: Understanding and performing attribute queries; Understanding and performing spatial queries.
- Analyzing spatial relationships: Understanding overlay; Understanding buffer; Accessing tools in ArcToolbox; Performing Union and Intersect; Buffering features.
- Solving problems with GIS: Applying the geographic inquiry process; Using GIS tools to solve a geographic problem; Creating a map to show results.

Prerequisites and recommendations

Students should know how to use Windows-based software for basic file management and browsing.



Cost

The fee for regularly scheduled classes is \$850.00 per student for normal classes. Discounts are available for groups or if bundled with other ArcGIS training classes. A minimum of four students are needed to constitute a class. Payment or purchase order must be received prior to the start of class. Any cancellations must be made one week in advance of the class to receive a refund.

This class may be offered on-site if requested. Keck & Wood, Inc. has a portable training lab including computers, ArcGIS software, a projector and a wireless router. If you would like a quote or more information about on-site training contact us at gistraining@keckwood.com.

Instructor:

This class is taught by one of Keck & Wood's experienced Esri Certified Trainers.

