ArcGIS II: Essential Workflows (3 days)

Description

In this course, you will acquire fundamental skills needed to author, share, and use geographic information and maps across the ArcGIS system. You will learn how to efficiently find, explore, manage, and analyze geographic data and create informative maps that showcase your work. The course covers a variety of techniques to effectively share GIS maps and resources with decision makers, stakeholders, and the public.

Who Should Attend

GIS professionals and others who have an introductory-level knowledge of GIS concepts and limited ArcGIS experience.

Prerequisite: ArcGIS I: Introduction to GIS

Goals

After completing this course, you will be able to

- Use ArcGIS software and content to create high-quality maps that combine data from different sources.
- Organize, create, and edit geographic data so that it is accurate and up to date.
- Manage, symbolize, and label map layers to support visualization and data exploration.
- Design an attractive page layout for maps that will be printed.
- Apply a standard workflow to analyze GIS data and solve spatial problems.
- Deliver maps and analysis results to multiple platforms so they are accessible to other ArcGIS users and to non-GIS users.

Course Outline

Authoring, sharing, and using GIS maps

- Understanding the workflow
- Creating maps that combine local data with ArcGIS Online content
- Publishing a map to the web

Organizing geographic data

- Finding data for a project
- Storing data from different sources in a file geodatabase
- Documenting data for a project
Managing map layers

- Setting scale ranges
- Definition queries
- Group layers and basemap layers

Displaying data

- Understanding quantitative and qualitative data
- Symbolizing features by attribute values
- Classification methods
- Normalizing data

Working with tabular data

- Adding fields and calculating values
- Summarizing fields
- Table joins and relates

Creating and editing data

- Editing workflow
- Feature templates
- Creating new features
- Updating feature shapes and attributes
- Editing data using an ArcGIS Online template

Labeling features

- Labeling workflow and options
- Understanding reference scale
- Automating label placement using Maplex
- Python label expressions

Designing map layouts

- Cartographic design principles
- Adding map elements
- Creating and publishing single maps and map books

Preparing data for analysis

- Evaluating data quality
- Changing a dataset's coordinate system
Solving spatial problems

- Analysis workflow
- Working with geoprocessing tools

Sharing geographic information

- Options for sharing maps and layers
- Creating models
- Geoprocessing packages