Course Content

Course Description:

One of the things that makes ArcGIS so useful is the tremendous amount of data available to map and analyze. In this course, you will learn to find, connect to, create, manage, and analyze that data. You will learn to search government sites for available GIS data, import non-GIS data formats, and to connect your maps to non-spatial spreadsheets, database tables, and other file formats. For example, linking parcels to scanned documents like deeds, and attaching photographs to road hazard locations. You will also learn to create, maintain, and manipulate your organizations internal data to keep the data relevant, up-to-date, and useful. Finally, this course also teaches you how to present your GIS data, by focusing on map labeling techniques and layout skills.

At Course Completion:

After competing this course, student will be able to:
- Understand where all the data come from, Who creates it and how can you access it.
- Understand the importance of making sure your data is in the right place. See real-life examples of issues inaccurate spatial locations can cause.
- Take paper maps and place them into correct spatial locations, import or export data from Google Earth, and more.
- Connect a parcel dataset to a spreadsheet of owner information that has no coordinates.
- Create your own GIS data files.
- Create your own GIS data and make changes to existing data.
- Employ some data QC techniques by ensuring that the boundaries and intersections between features that touch are accurate.
- Understand the essentials of 3D data, displaying data on a surface and at a fixed height.
- Build right-of-way polygons, find potential flood zones, and combine datasets to showcase school zones with potential hazards.
- Display important information about your features with a variety of techniques. Adjust the appearance and placement of labels for maximum effect, while still emphasizing what is most important.
- Learn additional techniques for making a clean map layout. Clip the data frame to the outline of a layer. Add a grid to show coordinates. Show how different data frames relate to one another. Create a set of multiple maps for a whole area, such as one for each parcel.

Target Student:

Those who are comfortable with the basics of ArcGIS Pro and want to learn more about how to find, connect to, create, maintain, and display GIS data.

ArcGIS Pro Intermediate

Course ID #: 1700-310-ZZ-W

Hours: 24

Prerequisites:

Attendees should have knowledge of Microsoft Windows® and be familiar with the basic use of ArcGIS, including the topics covered in the ArcGIS Level 2: Introduction to ArcGIS Pro class.

Topics:

Day 1
GIS Data Sources
- Your Company's Data;
- GIS Data on the Web;
- Sharing Maps and Data

Projection Basics
- Spatial Reference Issues;
- Spatial Reference and ArcGIS;
- Geographic Coordinate Systems;
- Projected Coordinate Systems;
- Setting the Spatial Reference of the Data

Bringing Data Into ArcGIS and Publishing Out of ArcGIS
- Importing data; Georeferencing an Image,
- Publishing Data to ArcGIS Online or Your portal

Joins and Relates
- Using Tables in ArcMap;
- Table Relationships;
- Attribute Joins;
- Relates;
- Spatial Joins

Day 2
Creating GIS Data
- GIS Data Types and File Creation;
- Setting Properties of GIS Data;
- Database Design) ▪

Intermediate Editing
- Editing Workflow;
- Feature Construction Tools;

- Construction Methods;
- Tips and Tricks

Advanced Editing
- Advanced Editing Tools;
- Map Topology

Day 3
3D Visualization in ArcGIS
- Understanding the essentials of 3D data
- Displaying data on a surface and at a fixed height.
- Exploring data in 3D

Geoprocessing Tools
- Solving Problems in GIS;
- ArcToolbox;
- Geoprocessing Options;
- Creating Tasks

▪ **Labeling Features**
- Label Basics;
- Label Styles;
- Label Expressions;
- Label Classes

Advanced Layouts
- Enhancing the Data Frame, including graphics, clipping the data frame, grids and graticules;
- Data Driven Pages;
- Export to PDF