

Introduction to ArcGIS Pro for Transportation

Course Length: 2 days

ArcGIS Version: Pro 3.x

App: ArcGIS Pro

Overview

GIS gives you an easy way to get access to the tremendous amounts of data available. At first glance, ArcGIS lets you see this data on a map. But underneath, the software has powerful tools for analyzing the data. With ArcGIS, you can quickly print a map showing construction areas for the next month, evaluate pavement conditions across a city, plan a highway expansion project, or explore a site for potential environmental issues. This course helps you understand the types of data that ArcGIS supports and how to manipulate the data. For example, you will learn how to connect to an Excel spreadsheet that has GPS location data in it. This class is the first step in learning to incorporate this valuable application into your daily workflows.

Audience

This course is for those in the transportation industry who want to create maps and explore data in ArcGIS.

Topics Covered

Day 1

- Overview of GIS – An introduction to the concepts of GIS and spatial problem solving, an overview of the ArcGIS platform, and how to get started working in a Pro project (What is ArcGIS?; Getting Started in a Project)
- ArcGIS Pro Basics – Getting familiar with the ArcGIS Pro interface, including starting a new project, navigating a map, and working with the ribbons, panes and views. Setting up basic symbology and labels on a map and getting access to the data behind the maps (Parts of the Interface; Map Tools; Layer Tools)
- Using Symbology to Analyze Data – Setting symbology and display properties to make a better, more manageable, map, and to begin analyzing the data (Applying Symbology in ArcGIS Pro; Symbology Choices; Layer Files)
- Asking Questions of Your Data – Selecting features on the map by running SQL queries on the data tables, as well as by looking at spatial relationships of the features (Making Selections; Interactive Selection; Select by Attribute; Using the Selection)

Day 2

- Understanding GIS Data – Getting familiar with GIS data formats that can be used in Pro, including the file geodatabase and the shapefile, and accessing internal and external Portal data (GIS Data Types; Accessing Portal Data)

- Adding Data and Managing a Project – Managing data in your project, fixing broken data links, and adding different types of data to a map (Understanding the ArcGIS Pro Project; Finding and Adding Data to a Map)
- Designing Your Map for Presentation – Designing map layouts to present and share your work as hardcopy or digital maps (Working with Map Frames; Working with Elements; Sharing Layouts)
- Geoprocessing – Using a variety of the geoprocessing tools in ArcGIS to manipulate and manage your GIS data and to perform spatial analysis (Geographic Analysis; Running Tools)

Format

In-person or virtual instruction with hands-on practice, and course materials you can keep.

Prerequisites and Recommendations

Students should have knowledge of Microsoft Windows® and Microsoft Office®.