



## **2021 First Half TMGIS GIS Training from H-GAC**

### **ArcGIS Pro Quick-Start for the GIS Professional- March 29-30 8:15am-4:30pm**

#### **Overview**

With 64-bit processing, enhanced 3D capabilities, and a whole new interface, ArcGIS Pro promises a wealth of potential for experienced GIS users. This course is designed to help existing ArcMap users get up and running in Pro as quickly as possible. Become familiar with the new project structure, understand the intuitive and dynamic interface structure, and learn how to do all of your favorite tasks in a whole new way.

#### **Audience**

Those who are comfortable with ArcGIS Desktop and want to learn how to use ArcGIS Pro, in order to incorporate it as part of their overall GIS arsenal.

### **ArcGIS Dashboards Workshop- April 19 7:45p.m- 12:00pm**

#### **Overview**

ArcGIS Dashboards provides a ready-to-use app to display both real-time and static data. It enables an intuitive display of data feeds that both GIS users and non-users can understand. A variety of elements allow data displays tailored to specific purposes and can be configured to suit your needs. Detailed dashboards can be created with no coding required!

#### **Audience**

GIS users who want to display their data in an interactive dashboard.

### **Getting the Most from Your Lidar Data- April 21 8:15am-4:30pm**

#### **Overview**

Light Detection and Ranging (LiDAR) data is the new standard for digital elevation data. As the data becomes more readily available to all GIS users, it is important to understand the data structure and learn how derivative products, such as digital elevation models and building footprints, get created from the raw lidar data. This course teaches how to use ArcGIS Pro to work with LiDAR data. It also introduces the participants to a variety of government agencies sharing LiDAR data with the public.

#### **Audience**

This course is for those who are already comfortable with the basics of ArcGIS Pro and want to learn how to work with, analyze, and display LiDAR data.

### **Introduction to Mapping with ArcGIS Online and Portal - April 22-23 8:15am-4:30pm**

#### **Overview**

GIS gives you an easy way to get access to the tremendous amounts of data available, and with the advent of web-based GIS, creating and consuming maps is even simpler and more collaborative. At first glance, web GIS lets you see spatial data on a map. But underneath, it has powerful tools for analyzing the data. With ArcGIS Online® and Portal for ArcGIS®, you can quickly create a heat map showing crime rates, evaluate oil field productivity, plan shelters and triage centers for an emergency, or explore a site for potential environmental issues. The course will also introduce you to the new possibilities of a web GIS for collaboration and cooperation. This class is the first step in learning to incorporate this valuable tool into your daily workflows.

#### **Audience**

Those who want to create and share maps in ArcGIS Online and Portal for ArcGIS. No previous experience with GIS is required for this course.

**Fundamentals of ArcGIS- May 17-18 8:15am-4:30pm**

**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 bubble map showing crime rates, evaluate parcel values across a city, plan a location to open a new branch of your business, 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**

Those who want to create maps and explore data in ArcGIS.

**Introduction to ArcGIS Pro- May 24-25 8:15am-4:30pm**

**Overview**

This course introduces participants to the ArcGIS Pro software. The class begins with the basics of navigating the map and walks through the process of creating maps, optimizing the display of the data, and performing spatial analysis. At the completion of this course, those attending should have a strong foundation in the basic use of ArcGIS Pro and have an understanding of the strengths of performing spatial analysis with a GIS.

**Audience**

Anyone who wants to create maps and explore data in ArcGIS Pro.

**Scripting in Arcade- May 28 8:15am-4:30pm**

**Overview**

Arcade is a simple scripting language used across the ArcGIS Platform to customize label expressions and pop-ups, and to create sophisticated symbology by manipulating attributes on-the-fly. Arcade is a secure, cross-platform language which works in ArcGIS Pro, ArcGIS Online and Portal, and in web apps running on desktops or mobile devices. You do not have to be a programmer to incorporate Arcade scripts into your maps and apps. This course will give you a great foundation in the scripting language, and some tips and tricks for incorporating Arcade into your work.

**Audience**

ArcGIS Online and ArcGIS Desktop users who want to create better, more useful maps by improving the presentation of pop-ups and labels, and by creating symbology using on-the-fly attribute manipulation.


**Python for ArcGIS Pro- June 1-3 8:15am-4:30pm**

**Overview**

Python is a scripting language used to automate tasks and create new functionality in ArcGIS Pro. Python scripts can be used to manipulate a map, execute geoprocessing commands, and read/write files. This three-day course takes a leveled approach to writing scripts; beginning with basic Python syntax and simple scripts, ending with scripts that read files, manipulate the information, and create GIS data. The course teaches the arcpy site package, using the Spyder IDE. This class is supplemented with a second course, Getting Started with the ArcGIS API for Python and Jupyter Notebooks, which covers the ArcGIS API for Python, Jupyter Notebooks, and interacting with web GIS.

**Audience**

This course is for those who are already comfortable with the basics of ArcGIS Pro and want to learn how to write Python scripts to manipulate data, projects, and maps.

**Spatial Analysis- June 9-11 8:15am-4:30pm** 

**Overview**

The goal of this 3-day course is to teach students the techniques and tools of spatial analysis. For this class, students should be familiar with ArcGIS Pro including layer, map, and layout creation. The course will cover analysis project design principals, and then explore the several tools and methods to derive understanding from geographic data.

**Audience**

ArcGIS Pro users who want to take their analytical skills to the next level. Familiarity with spatial data types, a basic understanding of spatial relationships and data, as well as an analytical mindset will be useful.