# Esri Training Recommendations for ArcGIS Pro November 2016

# ArcGIS Versions 10.2 - 10.4 November 2016

## Prepared by:

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## **Esri Training Courses**

#### Overview

ArcGIS Pro reinvents desktop GIS. It is the center piece of the ArcGIS platform. This new 64-bit addition to the ArcGIS for Desktop collection of applications lets you render and process your data faster than ever. Design and edit in 2D and 3D, work with multiple displays and layouts, and publish finished web maps directly to ArcGIS Online or Portal for ArcGIS, connecting you to users throughout your organization or the world.

This guide lists many of the Instructor-led, web courses and training seminars Esri offers for ArcGIS Pro. As we continually add new content each month, please search our training site from time-to-time: <a href="https://www.esri.com/training/catalog/search/">https://www.esri.com/training/catalog/search/</a>

**Instructor-led** courses are 1-3 days in length. They may be conducted at an Esri Training facility, through a virtual classroom or at a customer site. Private classes (recommended for 9-15 students) may be arranged and can also be followed up by a day of coaching to address an organizations specific learning requirements.

## Self-paced web courses include:

- Hands-on practice with ArcGIS (local access to ArcGIS software is often required)
- Demonstrations and interactive activities
- Conceptual material
- Course exams to assess learning
- Certificate of Completion

**Training seminars** are pre-recorded presentations that include software demonstrations on various solutions. Seminars are offered live on a regular basis. You can go to: <u>Subscribe to Live Training Seminar Reminders</u> to receive email notification on upcoming events.

**Massive Open Online Courses (MOOCs)** are free online classes that offer a convenient, effective, and fun way to keep up with the fast-paced developments in the ArcGIS platform. Classes are open day and night and require only a couple of hours of study per week. A certificate is available upon completion.

As this is not a complete list of all learning options available, please refer to our full course catalog: <a href="https://www.esri.com/coursecatalog">www.esri.com/coursecatalog</a>

#### **FOUNDATION**

We currently have two instructor-led courses that focus on learning ArcGIS Pro. The first class is for staff members brand new to GIS and learning the ArcGIS desktop app for the first time using the ArcGIS Pro. The second instructor-led course is for experienced ArcGIS desktop users who moving from ArcMap to ArcGISPro and would like to learn more about the differences.

We also have many training seminars and web courses (e-Learning) available at no additional charge to agencies as part of their maintenance program. All current classes are listed in this document.

## **Learn GIS Concepts**

This course is designed to learn basic foundational knowledge in desktop using ArcGIS Pro. The course is the prerequisite for most all other advanced training in ArcGIS and should be taken by any individual new to learning Desktop GIS:

ArcGIS Pro: Essential Workflows, Instructor-led, 3-days (24 hours)

In this course, you will explore ArcGIS Pro capabilities as you become comfortable working with this new desktop application. The course emphasizes common GIS workflows and best practices to map, manage, analyze, and share GIS data and resources. You will acquire the essential skills you need to be productive with ArcGIS Pro.

**This course is designed for:** Individuals with introductory-level knowledge of GIS concepts and limited ArcGIS experience

#### Learn how to:

- Combine data from different sources to create accurate, informative maps.
- Organize, create, and edit geographic data to keep it accurate and up to date.
- Symbolize map features to support 2D and 3D visualization.
- Design an attractive page layout for maps that will be printed.
- Analyze GIS data to solve spatial problems and create new information.
- Share maps, analysis results, and geoprocessing models so they are easily accessible to colleagues, decision makers, or the public.

## **Learn ArcGIS Desktop Concepts – in ArcGIS Pro for GIS Professionals**

If you are familiar with ArcMap and need to learn how basic desktop activities are accomplished using ArcGIS Pro, this is the foundation class for you.

Introduction to ArcGIS Pro for GIS Professionals, Instructor-led, 2-days

Learn essential ArcGIS Pro terminology and get prepared to efficiently complete many different tasks related to mapping, editing, geoprocessing, and analysis. ArcGIS Pro, the newest application included with ArcGIS 10.3 for Desktop, is designed to help GIS professionals complete their projects and share their results more quickly and easily than ever before. With its modern ribbon interface and tight integration of 2D and 3D capabilities, ArcGIS Pro will streamline the way you do your GIS work.

This course is designed for: Experienced ArcGIS for Desktop (ArcMap) users

#### Learn how to:

- Create an ArcGIS Pro project and assign tasks.
- Import MXD files and work with both local and online data.
- Edit 2D and 3D data.
- Perform geoprocessing and analysis tasks.
- Create 3D data and 3D scenes, and convert a 2D map to a 3D scene.
- Create and share multiple layouts from a single map.

#### E-Learning for ArcGIS Desktop Concepts - ArcGIS Pro

<u>Getting Started with ArcGIS Pro</u> - This course introduces the ribbon-style interface, project-based organization, and key capabilities of ArcGIS Pro (Web Course) - *V10.2 – V10.3* 

<u>Create and Share ArcGIS Pro Tasks</u> - In this seminar, the presenters explain the basic principles and options to design tasks and share them throughout your organization (Training Seminar) - V10.3 <u>Streamline GIS Workflows with ArcGIS Pro</u> - In this seminar, you will learn about the major components of ArcGIS Pro and new features related to mapping and visualization, editing, and analysis (Training Seminar) - V10.2 - V10.3

<u>Automating Workflows Using ArcGIS Pro Tasks</u> - Create and share ArcGIS Pro tasks to save time, reduce errors, and ensure consistent results. Learn how to produce a standardized, step-by-step workflow that ArcGIS Pro users of all experience levels can efficiently complete (Web Course) –*ArcGIS Pro 1.3 (Basic)* 

#### DATA COLLECTION AND MANAGEMENT

## **Convert and Combine Data Using ArcGIS Pro**

#### E-Learning to help eliminate barriers to data use and distribution (ArcGIS Data Interoperability)

<u>Integrating Data in ArcGIS Pro</u> - In this course, you will learn about some common types of data used for GIS mapping and analysis, and practice adding data to a file geodatabase to support a planned project (Web Course) - V10.3 - V10.4

#### **MAPPING & VISUALIZATION**

## **Design Maps using ArcGIS Pro**

## **E-Learning for how to Design Maps**

<u>Labeling Features Using ArcGIS Pro</u> - This course teaches how to increase the usability of your maps by adjusting Maplex Label Engine settings (Web Course) - V10.2 - V10.3

## **Represent and Display Data**

#### **E-Learning resources:**

<u>Displaying Data in ArcGIS Pro</u> - This course introduces ArcGIS Pro tools for assigning different types of symbols to features in a layer (Web Course)

<u>Managing Map Layers in ArcGIS Pro</u> - This course introduces basic layer property settings you can manage to provide a simplified, focused user experience (Web Course) - V10.2 - V10.3

<u>Drawing Millions of Features in ArcGIS: Advanced Techniques</u> - Whether you are working in ArcMap or ArcGIS Pro or publishing an ArcGIS for Server map service, you need effective techniques to efficiently render very large GIS datasets. You will learn the advantages of rendering your datasets in advance and on demand, and when to take each approach (Training Seminar) – V10.3.1 - V10.4

## SPATIAL ANALYTICS

Analysis requires an understanding of the analytical concepts related to displaying and interpreting data to make accurate and reliable decisions.

## **Learn the Basics of Spatial Analytics**

# E-Learning courses for more information about deriving answers from your data using advanced spatial analysis (<u>ArcGIS Spatial Analyst</u>)

<u>Preparing to Perform Analysis Using ArcGIS Pro</u> - This course gets you started using ArcGIS geoprocessing tools that support spatial analysis projects (Web Course) - V10.2 - V10.3 <u>Spatial Analysis and Modeling with ArcGIS Pro</u> - This seminar is designed to teach the steps to create a geoprocessing model, then add more advanced capabilities to support modeling what-if scenarios (Training Seminar) - V10.2 - V10.3

## **Locate and Query**

#### E-Learning to help locate and query data

Querying Data Using ArcGIS Pro - This course introduces the building blocks of a query expression and shows how to assemble those blocks to quickly select features that meet one or more attribute criteria (Web Course) - V10.3 - V10.4

## **Perform Proximity Analysis**

#### **E-Learning for more about proximity analysis**

<u>Distance Analysis Using ArcGIS Pro</u> - This course teaches how to create raster surfaces that identify the shortest, straight-line distance between locations as well as cost-effective paths that take into account specific project criteria and constraints. (Web Course) - V10.2 - V10.3

<u>Finding the Closest Facilities Using ArcGIS Pro</u> - Discover the fastest way to get from here to there with ArcGIS Network Analyst. In this course, you'll learn how to find the most efficient routes between incidents and facilities (Web Course) – ArcGIS Pro 1.3 Basic – ArcGIS Network Analyst – ArcGIS Online Organizational Account – User role or equivalent.

Generating Service Areas Using ArcGIS Pro - Learn how to create data that supports informed decisions on resource allocation and facility siting. This course focuses on how to use ArcGIS Network Analyst and existing network data to easily create service areas—areas within a certain distance or travel time of a facility (Web Course) – V10.4 Network Analyst & ArcGIS Pro 1.2

#### **Find the Best Locations**

#### E-Learning courses for more information about finding the best locations:

<u>Finding the Optimal Location of Facilities Using ArcGIS Pro</u> - In this course, you will work with ArcGIS Pro to identify optimal facility locations that meet your organization's criteria, capture demand, and provide the desired level of service. This course requires the ArcGIS Network Analyst extension (Web Course) - *V10.4* 

#### **Find the Best Paths**

# E-Learning available for performing sophisticated routing, closest facility, and service area analysis (ArcGIS Network Analyst)

<u>Creating Optimized Routes Using ArcGIS Pro</u> - Learn how to identify the optimal route based on your criteria. This course shows how to use ArcGIS Network Analyst and a network dataset to create routes that incorporate cost values such as distance or time, a set of stops, and barriers that must be avoided (Web Course) – V10.4

#### **Automate Workflows**

#### **E-Learning for automating workflows**

<u>Building Geoprocessing Models Using ArcGIS Pro</u> - This course introduces geoprocessing models and the steps required to create, validate, and run models that automate ArcGIS analysis workflows (Web Course) - V10.2 - V10.3

#### **Create and Analyze Surfaces**

#### E-Learning in spatial analysis for creating and analyzing surface data

Introduction to Regression Analysis Using ArcGIS Pro - This course introduces fundamental regression analysis concepts and teaches how to create a properly specified regression model (Web Course) - V10.3

<u>Terrain Analysis Using ArcGIS Pro</u> - This course teaches how to use ArcGIS Pro and ArcGIS Spatial Analyst tools to derive new raster data from an elevation raster. (Web Course) - *V10.3 – V10.4*<u>Performing Viewshed Analysis in ArcGIS Pro</u> - The Viewshed tool visualizes visible areas from a vantage point. This tool has many practical uses, including how to locate guard towers, fire watch towers, or event surveillance. In this course, you'll learn how to adjust the tool for your analysis (Web Course) – *ArcGIS Pro 1.2 or 1.3; 3D Analyst, Spatial Analyst* 

#### **Create and Visualize Data in 3D**

## **E-Learning using ArcGIS 3D Analyst**

#### Analyze your data in a realistic perspective (ArcGIS 3D Analyst)

<u>3D Visualization Using ArcGIS Pro</u> - In this course, you will get familiar with the ArcGIS Pro 3D environment and learn a variety of techniques to create 3D scenes and enhance them to meet your project needs (Web Course) - V10.2 - V10.3

Editing 3D Features Using ArcGIS Pro - This course presents basic 3D editing concepts (Web Course) - V10.3

#### **Perform 3D Visibility Analysis**

<u>Performing Line of Sight Analysis</u> - Some geographic questions can only be answered in 3D. In this course, you will perform line of sight analysis to solve problems and create information that cannot be obtained in 2D (Web Course) – You will need ArcGIS Pro 1.3 & ArcGIS 3D Analyst

## **Imagery and Remote Sensing**

Basic knowledge of raster data and how to interpolate and work with it may be necessary for various analysis projects:

#### **Learn the Basics of Imagery and Remote Sensing**

#### E-Learning for working with imagery and remote sensing

<u>Displaying Raster Data Using ArcGIS Pro</u> - Learn to appropriately symbolize raster's based on their attributes and intended use, modify raster properties to support better visualization and interpretation, and apply out-of-the-box appearance functions to enhance the viewing experience (Web Course) – *V10.4 & ArcGIS Pro 1.2 (Standard or Advanced)* 

<u>Streamline Imagery Workflows with Drone2Map for ArcGIS</u> - Drone technology is transforming traditional field data collection and imagery-production workflows. In this seminar, learn how Drone2Map for ArcGIS helps organizations save time, reduce costs, and increase speed of operations (Training seminar) – *ArcGIS Pro 1.3 (advanced), ArcGIS Online & Drone2 Map for ArcGIS* 

## **Process and Analyze Imagery**

#### E-Learning for processing and analyzing imagery:

<u>Processing Raster Data Using ArcGIS Pro</u> - Learn to use efficient solutions to process raster data and extract information products on-the-fly using raster functions in ArcGIS Pro (Web Course) – ArcGIS Pro 1.2 or 1.3 (Standard) & ArcGIS 10.4 Spatial Analyst

<u>Change Detection Using Imagery</u> – Using ArcGIS Pro and Spatial Analyst - You will work with multispectral Landsat satellite imagery and learn how to visualize, detect, and monitor differences in surface vegetation over time (Web Course) – V10.4

## **Collaboration and Sharing**

## **Share Maps, Layers and Scenes**

#### E-Learning for sharing maps, layers and scenes using the platform

<u>Sharing Maps and Layers with ArcGIS Pro</u> - You will learn how to choose an appropriate sharing option for a given audience, type of content, and intended use (Web Course) - V10.2 - V10.3

## **Share Imagery**

<u>Using Multidimensional Scientific Data with ArcGIS</u> - This seminar presents an overview of ArcGIS tools and workflows that simplify management of scientific data. You will learn how to easily visualize and process multivariate, multidimensional datasets, and how to use a raster model to dynamically generate analysis results that can be easily shared (Training Seminar) – V10.4

## **Developer**

## **Script and Automate**

The following e-Learning options use Python with ArcGIS for Desktop or ArcGIS for Server to automate work to perform analysis, manage or convert data with scripts:

<u>Creating Python Scripts for Raster Analysis</u> - This course discusses creating a raster object, accessing its properties, and using them in your Python scripting (Web Course) – *ArcGIS Pro 1.3*